MDSAP MEDICAL DEVICE SINGLE AUDIT PROGRAM	**Policy Title: MDSAP AUDIT APPROACH**	**Document No: MDSAP AU P0002.009**
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AUDIT APPROACH

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Foreword

The intention of the Medical Device Single Audit Program (MDSAP) is to allow competent auditors from MDSAP recognized Auditing Organisations (AOs) to conduct a single audit of a medical device organisation's quality management system that will satisfy the requirements of the medical device Regulatory Authorities (RAs) participating in the MDSAP program.

Audits performed under the MDSAP program will be process-based, focusing on several defined processes, a defined method for linking those processes, and built on a foundation of requirements for risk management.

Use of this document

This document contains specific instructions for performing audits under the MDSAP program. It incorporates an audit sequence, instructions for auditing each specific process and identifies links that highlight the interactions between the processes.

A box emphasizes the interrelationships of specific processes and the relevant risk management activities. *"Italics"* font emphasizes the integration of risk management.

This revision of the document combines the formerly separate MDSAP Audit Model and Process Companion documents into a single document containing additional detail regarding each audited process; as well as guidance for assessing the conformity of each process. In electronic form, the navigation bar facilitates quick access to relevant Tasks. The user may create their own bookmarks to quickly navigate to various sections.

Overview

The design of the Medical Device Single Audit Program (MDSAP) audit process is to ensure a single audit will provide efficient yet thorough coverage of regulatory requirements. These requirements include; Medical devices – Quality management systems – Requirements for regulatory purposes (ISO 13485:2016), the Quality Management System requirements of the Conformity Assessment Procedures of the Australian Therapeutic Goods (Medical Devices) Regulations (TG(MD)R Sch3), the Brazilian Good Manufacturing Practices (RDC ANVISA 665/2022), the Canadian Medical Devices Regulations, the Japanese Ordinance on Standards for Manufacturing Control and Quality Control of Medical Devices and In Vitro Diagnostic Reagents (MHLW Ministerial Ordinance No. 169), the Quality System Regulation (21 CFR Part 820), and specific requirements of the medical device regulatory authorities participating in the MDSAP program.

Audit Sequence

The design and development of the MDSAP audit sequence allows a logical, focused and efficient conduct of an audit. The MDSAP audit sequence follows a process approach and has four primary processes - Management process, Measurement, Analysis and Improvement process, Design and Development process and a Production and Service Controls process with links to the supporting process for Purchasing.

The definition of each process includes a purpose and an outcome that are indicators of process performance. Each participating Regulatory Authority expects that risk management to be the foundation for the five processes that are the requirements of a quality management system for medical device organisations.

The MDSAP audit process has two additional supporting processes: Device Marketing Authorization and Facility Registration and Medical Device Adverse Events and Advisory Notices Reporting. These processes are necessary to fulfill specific requirements of the participating MDSAP regulatory authorities.

The flowchart shown in Figure 1 illustrates the MDSAP audit sequence and interrelationships. The design of the MDSAP audit approach requires the audit of the primary MDSAP processes in the following sequence: (1) Management (2) Measurement, Analysis and Improvement (3) Design and Development, and (4) Production and Service Controls processes. The audit of the Purchasing process is in conjunction with the Measurement, Analysis and Improvement process, the Design and Development process, and the Production and Service Controls process.

The design and implementation of a medical device organisation's quality management system is a strategic decision of the medical device organisation. Through this system, it can meet the requirements of the participating regulatory jurisdictions in a way that is appropriate for the size of the medical device organisation, the processes employed, and the products supplied. The medical device organisation's quality management system does not need to implement certain processes (e.g., Design and Development) if regulation permits the exclusion or non-application of the process. Auditing Organisations are not required to audit such processes.

If the medical device organisation chooses to outsource any processes related to the design and/or manufacture of medical devices for which the medical device organisation has responsibility, these processes remain the responsibility of the medical device organisation. The medical device organisation's quality management system must implement controls for monitoring and maintaining the quality of product from suppliers and outsourced processes.

A medical device organisation is required to document the role(s) undertaken by the organisation under the applicable regulatory requirements[1]. For the role of a 'manufacturer', there is a legal responsibility "for ensuring compliance with all applicable regulatory requirements for the medical devices in the countries or jurisdictions where it is intended to be made available or sold, unless this responsibility is specifically imposed on another person by the Regulatory Authority

[1] ISO13485:2016 – Clause 4.1.1

(RA) within that jurisdiction" [2]. (For example, an Australian Sponsor.)The participating MDSAP jurisdictions intended to promote a single program of audits that considers all of their requirements for quality management systems. Hence, including the regulatory requirements of all MDSAP participating jurisdictions is a default requirement for a medical device organisation's participation in the program. Marketing Authorization holders may have previously used an alternative source of evidence to demonstrate compliance with the regulatory requirements of a jurisdiction. Nevertheless, the supply of a product into the jurisdiction of a participating MDSAP Regulatory Authority requires the auditor to include the relevant regulatory requirements within the scope of an MDSAP audit.

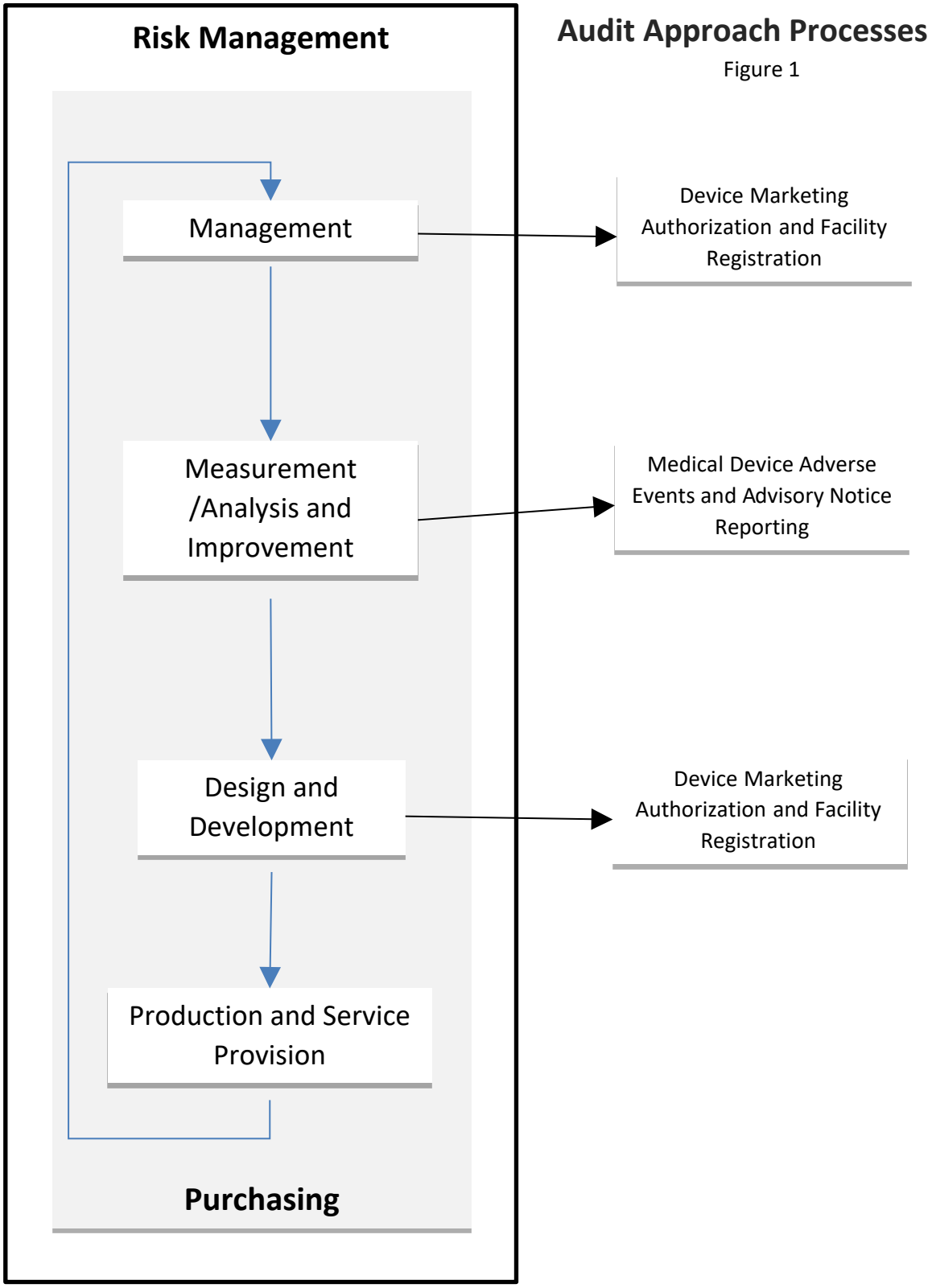
In addition to the exclusions and non-applications permitted by ISO13485, the medical device organisation may exclude the requirements of markets where the medical device organisation does not intend to supply product. The audit scope and audit criteria must consider any justified exclusions or non- applications. When a medical device organisation claims an exclusion from the requirements of a target market, the auditor should use caution when applying the guidance provided in the MDSAP processes. Some requirements may not be applicable.

Medical devices regulated for use in pre-market clinical studies under special access programs, humanitarian use exemptions, and investigational device programs are outside of the scope of a typical MDSAP audit. The manufacture and distribution of a device supplied under a special access-type program may be subject to parts of the regulatory requirements included in the MDSAP. Auditing organisations are encouraged to contact the pertinent MDSAP-participating Regulatory Authority for any questions or clarifications.

[2] ISO13485:2016 – Definition of a Manufacturer – Clause 3.10 Note 1

Audit Approach Processes

Figure 1



Note: Whist there is a prescribed audit sequence for the MDSAP *processes,* auditors may audit *tasks* within a given process in any sequence to allow for an efficient and effective audit.

The audit sequence should be followed as designed, however under certain circumstances, including the number and qualification of the auditors assigned to an audit, the inequal amount of information associated with specific client processes and the type of activity being conducted, the rigorous application of the audit sequence might prevent the efficient use of audit time and create problems with audit planning. In these cases, judicious exceptions to the audit sequence are allowed as long as there is sufficient justification and the core elements of the MDSAP Audit Approach, including linkages between processes are defined and risk-based sample selections, are respected.

Examples of reasonable exceptions:

- Auditing Measurement, Analysis and Improvement and Management at the same time to better allocate audit time for a multi-auditor activity.
- Starting the audit of a follow-on MDSAP process, such as Production or Design, when enough information had been gathered by the review of core elements in Measurement, Analysis and Improvement and Management and supporting processes, Device Marketing Authorization and Facility Registration and Medical Device Adverse Events and Advisory Notices Reporting, but prior to the full completion of these processes.
- Auditing the Production and Service Controls process following the Measurement, Analysis and Improvement followed by the Design and Development process.
- Allowing an expert, such an expert in specific sterilization techniques, to commence the review of these specific client processes and areas.

In all cases of these adjustments, proper attention should be paid to intra-audit communication so that these decisions are re-evaluated as necessary as additional information is gathered throughout the audit, and appropriate actions taken if this information alters the viability of these changes.

Audit specific adjustments to the MDSAP audit sequence should be documented in the audit report along with appropriate justification.

Conducting the Audit

During the audit of the medical device organisation's quality management system, as identified in the MDSAP processes, the audit team will be asked to be mindful of "linkages". Fora medical device organisation's quality management system to function effectively, it needs to identify and manage numerous interrelated (linked) processes in accordance with clause 4.1.2 (c) of ISO 13485:2016. The output of one process often directly forms the input of other processes, or the activities of a supporting process are relevant to other processes. The MDSAP audit sequence and audit tasks include linkages to remind the audit team of the interactions between the processes. For example, linkages assist auditors in making appropriate selections when moving to the next process (e.g., using information from the Measurement, Analysis and Improvement process to select a design project to review where appropriate).

An audit of the medical device organisation's quality management system processes is to assess the extent to which the medical device organisation is applying risk management principles when defining its activities. Implementing the risk-based approach to controls is an integral aspect of a medical device organisation's quality management system and it is the responsibility of top management to provide the necessary commitment and resources for this effort. Effective implementation of the risk-based approach usually starts in conjunction with the design and development process, proceeds through product realization, including the selection of suppliers, considers feedback from post-market monitoring and continues until the time the product is decommissioned. Risk-based decisions occur throughout the various quality management system processes, and each medical device organisation must implement the risk-based approach as well as risk management in product realization with a determination of how much residual risk is acceptable to ensure medical devices meet requirements for safety and performance and regulatory requirements.

Navigating the Audit Sequence

Each MDSAP audit process will require the audit team to accomplish audit tasks to determine if the process outcomes and the process purposes are achieved. Each audit process task includes *Clause and Regulation* references including; the applicable ISO 13485:2016 clause(s), the corresponding section(s) of the Quality Management System requirements of the Conformity Assessment Procedures of the Australian Therapeutic Goods (Medical Devices) Regulations (TG(MD)R Sch3), Brazilian Good Manufacturing Practices (RDC ANVISA 665/2022), Canadian Medical Devices Regulations, Japan Ordinance on Standards for Manufacturing Control and Quality Control of Medical Devices and In Vitro Diagnostic Reagents (MHLW Ministerial Ordinance No. 169), the Quality System Regulation (21 CFR 820), and any unique requirements that pertain to a participating MDSAP regulatory authority. These references have been provided to assist the auditors in assuring that the requirements of all MDSAP participating regulatory authorities are addressed during the audit.

Many audit tasks require verification of the availability and control of MDSAP regulator specific documentation and records. These tasks have a *Clause and Regulation* reference to ISO 13485:2016 clause 4.2.1, as the quality management system documentation is to include documentation specified by applicable regulatory requirements (regulations, administrative practices and policies) [4.2.1(e)]. Where a regulatory requirement relates to the documentation required by other, more specific, clauses of ISO 13485:2016 the auditing organisation is to reference the more specific clause when recording findings of nonconformity (refer to MDSAP AU P0037 - **Guidelines on the use of GHTF/SG3/N19:2012 for MDSAP purposes**). To be consistent with ISO 13485:2016 the audit team is also reminded to apply the concept that "when a requirement is required to be documented, it is also required to be established, implemented and maintained."[3]

The medical device organisation needs to demonstrate its ability to provide medical devices that consistently meet customer and regulatory requirements. During the audit, it is important that the auditors are mindful of any instances where the medical device organisation demonstrates failure to fulfill any of the requirements in ISO 13485:2016, or portion of the requirements listed in the audit activities and tasks, and that these nonconformities are recorded in appropriate detail. Particular attention should be paid to the potential interrelationship of the nonconformities observed. For example, audit findings in both purchasing controls and acceptance activities may indicate a significant nonconformity because control over suppliers, and the products they supply, depends on an effective mix of both these activities, and deficiencies in one or the other may affect the quality of the finished device.

Whenever a MDSAP Audit Task requires an auditor to verify the identification and documentation of a requirement in QMS documentation, this verification should be performed as part of the pre-audit preparation and documentation review, as practical, to minimize on-site audit time and to increase the auditor's familiarity with the medical device organisation's QMS.

Terminology

The term "device" is used throughout the MDSAP processes. For applying the MDSAP processes, and to accommodate nuances in the regulatory systems of the participating Regulatory Authorities, the use of the term "device" is to refer to any product that is capable of functioning as a medical device, whether or not it is packaged, labeled, or sterilized. In some jurisdictions, such a product is defined as a "finished device". In other jurisdictions, a finished device is one that is intended to be used as a medical device and is at a stage where the product is ready to be placed on the market, or put into service, by the medical device organisation whose name appears on the labelling.

[3] ISO 13485:2016 – Clause 0.2

The term medical device organisation in this document is intended to be a reference to the definition in ISO 9000:2016-Cl 3.2.1 and as used in ISO 13485:2016. A "manufacturer" is a specific kind of a medical device organisation with a regulatory role that is variously defined in the regulations of the participating regulatory authorities. (See also ISO 13485:2016 – Cl 3.10)

When the medical device organisation chooses to outsource to a supplier, any process or product (including a service), that affects product conformity to requirements, it shall monitor and ensure control over such processes[4]. Requirements, or partial requirements, related to the product that are specifically assigned to another person by a Regulatory Authority are not requirements to be fulfilled by the medical device organisation. This does not preclude a customer from requesting assistance from the medical device organisation to fulfill requirements that apply to Customer, however the accountability for those requirements cannot be transferred to the medical device organisation.

A purchased or otherwise obtained "product" or "service" [5] is an outsourced product or service. In addition, a "supplier" is anyone that is independent from the medical device organisation's quality management system and is assisting a medical device organisation to meet its responsibility of ensuring product conforms to requirements. This includes a supplier that may be part of the same corporation as the medical device organisation but operates under a separate quality management system from the audited medical device organisation. For further clarification, if a supplier is not a part of the medical device organisation's internal audit scope, then the supplier is under a separate quality management system. Corporations or companies that have corporate quality policies and procedures do not necessarily place all divisions or groups under the same quality management system. Therefore, one division or group can be a supplier to another division or group within the same corporation/company when not within the scope of the same quality management system. The control of suppliers that are part of the same corporation and not part of the QMS of the audited medical device organisation is similar to the way external suppliers are controlled. Therefore, for the purposes of MDSAP and as necessary, an Auditing Organisation has the discretion to audit external suppliers of a medical device organisation, including corporate suppliers. The medical device organisation must have proper controls over outsourced processes that provide medical devices and related services that consistently meet customer and applicable regulatory requirements.

Critical Suppliers:
For the purposes of MDSAP, "critical suppliers" include, but are not limited to:

- those entities that supply the organisation with finished devices, i.e., a device, or accessory to any device, that is suitable for use or capable of functioning, whether or not it is packaged, labeled, or sterilized,
- suppliers of products, including services, that impact design outputs that are essential for the proper functioning of the device; and
- suppliers of products and services that require process validation.

Annexes

Annex 1 contains country specific information as to the expectations for the audit of product / process related technologies (other than sterilization – See Annex 2) and the audit of technical documentation as part of the execution of the Audit Tasks.

[4] ISO 13485- Clause 4.1.5
[5] GHTF/SG3/N17:2008 - Quality Management System – Medical Devices – Guidance on the Control of Products and Services Obtained from Suppliers

Annex 2 contains information as to the expectation for the audit of requirements for sterile medical devices.

Annex 3 contains a table showing a summary of timeframes for reporting advisory notices and individual adverse event reports in the participating MDSAP jurisdictions.

Annex 4 contains table showing comparisons between ISO13485:2016 and Japan's QMS ordinance.

Annex 5 **Error! Reference source not found.Error! Reference source not found.Error! Reference source not found.**contains a table for acceptable exclusions from a manufacturer's scope of certification.

MDSAP Audit Cycle

The Medical Device Single Audit Program is based on a three (3) year audit cycle. The Initial Audit, also referred to as the "Initial Certification Audit" is a complete audit of a medical device organisation's quality management system (QMS) consisting of a Stage 1 Audit (17021-1:2015 – Cl 9.3.1.2) and a Stage 2 Audit (17021-1:2015 – Cl 9.3.1.3). The initial Audit is followed by a partial Surveillance Audit (17021-1:2015 – Cl 9.6.2.2) in each of the following two (2) years and a complete Re-audit, also referred to as a "Recertification Audit" (17021-1:2015 – Cl 9.6.3.2) in the third (3rd) year. A recertification audit may also include a Stage 1 audit if there have been significant changes to the QMS that have not been otherwise adequately assessed.

Special Audits (17021-1:2015 – Cl 9.6.4.2), Audits Conducted by Regulatory Authorities, and Unannounced Audits are potential extraordinary audits that may occur at any time within the audit cycle.

Note: Not all MDSAP participating regulatory authorities require, or make use of, certification documents that relate to a medical device organisation's QMS. The terms "certification" and "recertification" appear within this document to maintain consistency with the terminology used within ISO/IEC 17021-1:2015 Conformity assessment – Requirements for bodies providing audit and certification of management systems.

The audit cycle of a quality management system for sterile medical device should include a comprehensive assessment of the control of the device sterility, generally during the initial/recertification audit. The surveillance audit, in the absence of changes significantly affecting the control of sterility, may be limited to the verification of the appropriate implementation of the validated process parameters; control and monitoring activities; and final product release. While some auditing activities can be conducted remotely (e.g., review of the sterilization process validation report), remote activities alone cannot effectively ensure the comprehensive control of the device sterilization processes. The outcome of such remote review activities must serve as input to the on-site audit and be incorporated or attached to the MDSAP audit report. The off-site assessment of the controls of the product sterility should not prevent the on-site audit team from following audit trails, including audit trails necessitating the review of documents that had previously been assessed remotely.

During the course of the audit cycle, all product families and significant processes should be assessed when possible.

The selection of samples during audits in order to obtain evidence of conformity or nonconformity with MDSAP audit criteria can be either statistically based or judgement based. Judgement based sampling using audit trails from one task or process to inform the selection of samples in other tasks or processes is preferred. Where possible, auditors should select samples of records representing all participating MDSAP jurisdictions applicable to the audit.

Initial Audit (Initial Certification Audit)

The "Initial" also known as "Initial Certification" audit consists of a Stage 1 and a Stage 2 audit.

Stage 1 – Documentation review, evaluation of preparedness for Stage 2 audit, etc.

A Stage 1 audit shall be conducted in accordance with Clause 9.3.1.2 of ISO/IEC 17021-1:2015 and all applicable MDSAP Audit Process tasks and regulatory requirements.

From an MDSAP perspective, the primary purposes of a Stage 1 audit are (1) to determine if QMS documentation required by ISO 13485:2016 - Clauses 4.2.1 and other applicable MDSAP documentation requirements have been adequately defined, and documented; (2) to assess the medical device organisation's preparedness for a Stage 2 audit; (3) to provide a focus for planning a Stage 2 audit; and, (4) to collect information regarding the scope of the quality management system and other aspects of the medical device organisation.

Portions of a Stage 1 audit (e.g., documentation review) may be performed at a site other than the site(s) of the medical device organisation seeking initial certification.

The outcome of the Stage 1 audit will assist the MDSAP recognized Auditing Organisation in its determination of the readiness of the medical device organisation to undergo a Stage 2 audit. The Auditing Organisation shall determine how best to accomplish tasks of Stage 1 and Stage 2 with regards to off-site documentation and record review and on-site verifications. Hence portions of a Stage 1 audit (e.g., documentation review) may be performed at a site other than the site(s) of the medical device organisation seeking initial certification. In practice it is intended that the Auditing Organisation may combine elements of Stage 1 and Stage 2 to allow for a single on-site visit for the initial audit or re-audit of the medical device organisation.

Stage 2 – Evaluation of QMS Implementation and Effectiveness

A Stage 2 audit shall be conducted in accordance with Clause 9.3.1.3 of ISO/IEC 17021-1:2015 and using all applicable MDSAP Audit Process tasks.

The purpose of a Stage 2 audit is to determine if all applicable requirements of ISO 13485:2016 and the relevant regulatory requirements from participating regulatory authorities have been implemented. Stage 2 audit objectives shall specifically include an evaluation of:

- the effectiveness of the medical device organisation's QMS incorporating the applicable regulatory requirements,
- product/process related technologies (e.g., injection molding, sterilization),
- adequate product technical documentation in relation to relevant regulatory requirements; and,
- the medical device organisation's ability to comply with these requirements.

As part of achieving these objectives, the auditor is to verify that the medical device organisation maintains sufficient and reliable objective evidence to demonstrate its devices meet essential principles of safety, performance, and effectiveness and any other regulatory requirement identified in the audit tasks. This verification is to ensure that documentation and records required by the national regulations of the participating Regulatory Authorities are present, current, and complete. The auditor should expect that the documentation and records are maintained to demonstrate continued compliance with regulatory requirements during the post-market phase of the device lifecycle.

A Stage 2 audit shall be performed at all sites that will be recorded on the certificate. (Hence, any sites which are relevant to the medical device organisation's quality management system but audited off-site, should not be recorded on the certificate.)

Surveillance Audits

(1st and 2nd Surveillance Audits):

A Surveillance Audit shall be conducted in accordance with Clause 9.6.2.2 of ISO/IEC 17021-1:2015 and clause 9.6.2 of IMDRF/MDSAP WG/N3:2016 and using applicable MDSAP Audit Process tasks.

The purpose of a series of surveillance audits is to assure that all applicable requirements of ISO 13485:2016 and the relevant regulatory requirements from participating regulatory authorities are audited during the cycle of a three-year audit program for the medical device organisation. Surveillance audit objectives during the audit cycle shall specifically include evaluation of:

- the effectiveness of the medical device organisation's QMS incorporating the applicable regulatory requirements.
- the medical device organisation's ability to comply with these requirements; and
- new or changed product/process related technologies; and,
- new or amended product technical documentation in relation to relevant regulatory requirements.

In addition, surveillance audits shall include a review of issues related to medical device safety and effectiveness since the last audit such as complaints, problem reports, vigilance reports, and recalls/field corrections/advisory notices.

These objectives allow the MDSAP recognized Auditing Organisation to maintain confidence that the QMS continues to meet requirements between re-audits (re-certification audits). The auditor should again expect that the documentation and records are maintained to demonstrate continued compliance with regulatory requirements during the post-market phase of the device lifecycle.

Surveillance audits do not require a Stage 1 audit unless significant changes have occurred since the last audit. For example, where there are QMS changes associated with new legislation, or legislative changes, or if otherwise deemed necessary by the Auditing Organisation.

Each *individual* surveillance audit in the cycle need not cover all MDSAP requirements. However, as a minimum, each surveillance audit must address the following (as applicable):

a) A review of changes to the medical device organisation, their QMS, or their products, since the previous audit

Note: changes may necessitate regulatory submissions

b) The MDSAP Audit Process tasks as listed in the table in Appendix 1 of MDSAP AU P0008 – Audit Time Determination Procedure.

Note: Where there are indicators of existing or potential nonconformities in the data, or other information observed during a surveillance audit that suggest that such nonconformities have not been adequately addressed by the medical device organisation's QMS, an audit of the Design and Development Process and/or the Production and Service Controls Process should focus on those indicators of existing or potential nonconformities.

Note: If the first surveillance audit includes the Design and Development Process, the second surveillance should include the Production and Service Controls Process (or vice-versa) unless further indicators of existing or potential nonconformities dictate otherwise.

c) Confirmation that the medical device organisation has arrangements in place to maintain the currency of the technical documentation for all devices (see **Annex 1**).
d) The use of marks and references to certification.

Guidance on the selection of samples of data for the audit of the processes in a) and b) above is provided within the relevant tasks of those MDSAP Audit Processes. The selection should be limited to the data that is relevant to the processes in a) and b) above.

Re-audit (Recertification Audits)

A Re-audit (Recertification Audit) shall be conducted in accordance with Clause 9.6.3 of ISO/IEC 17021-1:2015 and using all applicable MDSAP Audit Process tasks.

The purpose of a re-audit is to confirm the continued relevance, applicability and suitability of the medical device organisation's QMS (as a whole), to satisfy all applicable requirements of ISO 13485:2016 and the relevant regulatory requirements from participating regulatory authorities, with respect to the scope of certification. Recertification audit objectives shall specifically include evaluation of:

- the effectiveness of the medical device organisation's QMS incorporating the applicable regulatory requirements
- product/process related technologies (e.g., injection molding, sterilization)
- adequate product technical documentation in relation to relevant regulatory requirements
- the medical device organisation's continued fulfillment of these requirements.

Re-audits do not require a Stage 1 audit unless significant changes have occurred since the last audit. For example, where there are QMS changes associated with new legislation or legislative changes, or if otherwise deemed necessary by the Auditing Organisation. If there have been significant changes to the QMS, Auditing Organisations shall review the documentation that implements those changes in accordance with Clause 9.6.3.1.3 of 17021-1:2015. Re-audits may be shorter than initial audits through selective and focused sampling.

As part of achieving the objectives for a Re-Audit, an auditor shall verify the requirements of ISO/IEC 17021-1:2015 Clause 9.6.3.2.1, and the following, where applicable:

- A review of the MDSAP audit reports for the current audit cycle. That is, those prepared since the initial audit or previous re-audit
- A review of changes to the medical device organisation, QMS, or products since the previous surveillance audit
- A follow-up of corrections and/or corrective actions stemming from the findings of the previous MDSAP audit, of any kind
- A review of the effectiveness and suitability of the medical device organisation's QMS over the current audit cycle
- All applicable MDSAP Audit Process tasks.

The audit of the processes and the sampling should focus on the following (based on risk):

- new or modified designs and new products
- previously identified potential and existing nonconformities
- new or modified processes
- areas not sufficiently covered during the surveillance period.

During a recertification audit, the Auditing Organisation shall audit all sites that are recorded on the certificate. (Hence any sites which are relevant to the medical device organisation's quality management system but audited off-site, should not be recorded on the certificate)

Special Audits

Special audits are extraordinary audits in that they are not part of the planned audit cycle. These audits should only be used when necessary and should focus on specific elements of the medical device organisation's QMS.

Special audits may include audits conducted in response to an application for the extension to the scope of an existing certification, to determine whether or not the extension can be granted or as short-notice audits conducted to investigate potentially significant complaints, or if specific information provides reasons to suspect serious non-conformities of the devices, or for other reasons.

Short-notice audits may be conducted at the request, and under the direction, of the MDSAP participating regulatory authorities or at the discretion of the Auditing Organisation.

Special audits should be conducted in accordance with the applicable requirements of ISO/IEC 17021-1:2015 Clause 9.6.4 as well as any additional requirements of the MDSAP recognized Auditing Organisation and/or the MDSAP participating regulatory authorities (where applicable).

Special audits should be used to address, as applicable:

- The need to extend the scope of the audit or certification of the medical device organisation to include new or modified products between regularly programmed audits
- A shortfall in oversight by the MDSAP recognized Auditing Organisation. For example, due to insufficient audit time, inappropriate audit team constitution, etc.
- To follow up on specific post-market issues. For example, for potentially significant complaint.
- To follow up on significant findings from a previous MDSAP audit
- At the request of an MDSAP participating regulatory authority (based on a specific assignment)
- To conduct supplier audits as dictated by regulatory authority or Auditing Organisation policy.

An Auditing Organisation that performs a special audit at the request of the recognizing Regulatory Authority(s) shall submit the audit report to the recognizing Regulatory Authority(s) within 15 days from the last day of the audit.

Unannounced Audits

Another type of Special Audit is the unannounced audit. The MDSAP participating regulatory authorities require Auditing Organisations to conduct unannounced audits in circumstances where high grade non-conformities have been detected. See IMDRF/MDSAP WG/N3 Final: 2016 (2nd Ed) for criteria.

Audits Conducted by Regulatory Authorities

Audits may also be conducted by MDSAP participating regulatory authorities at any time and for a range of reasons *including* (1) "For Cause" due to information obtained by the regulatory authority, (2) as follow up to the findings of a previous audit, and (3) to confirm the effective implementation of MDSAP requirements by MDSAP recognized auditing organisations.

The purpose of audits conducted by regulatory authorities is to ensure appropriate oversight of a recognized MDSAP Auditing Organisation's audit activities, as an alternative means of assessing medical device organisations that have been identified as undertaking high risk manufacturing processes and have not been adequately audited, where sufficient detail regarding audited processes has not been included in an audit report, or where there is a history of low compliance with QMS or regulatory requirements.

Chapter 1 - Management

The intent of the Management Process is to provide adequate resources for device design, manufacturing, quality assurance, distribution, installation, and servicing activities; to assure the quality management system is functioning properly and effectively; and to monitor the quality management system and make necessary adjustments. A quality management system that has been implemented effectively and is monitored to identify and address existing and potential problems is more likely to produce medical devices that function as intended.

The management representative is responsible for ensuring that the requirements of the quality management system have been effectively defined, documented, implemented, and maintained. Prior to the audit of a process, it may be helpful to interview the management representative (or designee) to obtain an overview of the process and a feel for management's knowledge and understanding of the process.

The Management process is the first process to be audited per the MDSAP audit sequence.

Auditing the Management Process

Purpose: The purpose of auditing the Management process is to verify top management ensures an adequate and effective quality management system has been established and maintained. The management processes should be re-evaluated at the end of the audit to determine whether top management has demonstrated the necessary commitment for an effective quality management system that has been communicated to personnel.

Outcomes: As a result of the audit of the Management process, objective evidence will show whether the medical device organisation has:

A) Identified processes needed for the quality management system, their application throughout the medical device organisation, and their sequence and interaction
B) Defined, documented, and implemented procedures and instructions to ensure the development and maintenance of an effective quality management system
C) Established quality objectives at relevant functions and levels within the medical device organisation consistent with the quality policy and ensured that these are periodically reviewed for continued suitability
D) Determined the criteria and methods needed to ensure the operation and control of quality management system processes, including the identification and management of interrelated processes
E) Committed the appropriate personnel and resources for infrastructure to the quality management system
F) Assigned responsibility and authority to personnel and established the organisational structure to ensure processes assuring quality are not compromised
G) Performed risk management planning and ongoing review of the effectiveness of risk management activities to ensure that policies, procedures and practices are established for analysing, evaluating and controlling risk
H) Ensured the continued effectiveness of the quality management system and its processes
I) Established a quality management system which is capable of producing devices that are safe, effective and suitable for their intended use.

Links to Other Processes:

Measurement, Analysis and Improvement; **Design and Development**; **Purchasing**; **Production and Service Controls**; **Device Marketing Authorization and Facility Registration**

Task 1 – QMS Planning, Implementation, Changes and Quality Manual

Confirm that quality management system planning is performed to ensure that all required processes are identified, documented, implemented, monitored and maintained in order to conform to the applicable requirements and meet quality objectives.

Verify that changes to the quality management system are managed to maintain the conformity of the quality management system and of the devices produced.

Verify that a quality manual has been documented.

Clause and Regulation

ISO: ISO 13485:2016: 4.1.1, 4.1.2, 4.1.3, 4.2.2, 4.1.4, 5.4.2;

TGA: TG(MD)R Sch3 P1 1.4(4);

ANVISA: RDC ANVISA 665/2022: Art. 4º, Art. 106

MHLW/PMDA: MHLW MO169: 5-1, 5-2, 5-3, 5-4, 7-1, 14

FDA: 21 CFR 820.20

Additional country-specific requirements

None

Assessing conformity

Quality management system

Medical device organisations are required to establish a quality management system (including quality system procedures and instructions) that is tailored to the regulatory roles assumed by the medical device organisation and the medical devices they are manufacturing or designing. The medical device organisation's quality management system must properly implement all applicable requirements of Medical devices – Quality management systems – Requirements for regulatory purposes (ISO 13485:2016), the Quality Management System requirements of the Conformity Assessment Procedures of the Australian Therapeutic Goods (Medical Devices) Regulations (TG(MD)R Sch3), Brazilian Good Manufacturing Practices (RDC ANVISA 665/2022), Japanese QMS Ordinance (MHLW MO 169), the Quality System Regulation (21 CFR Part 820) and specific requirements of medical device regulatory authorities participating in the MDSAP program, as well as requirements specified by the customer that receives the product or, otherwise other necessary controls determined by the manufacturer to assure its finished devices, the design and manufacturing processes, and all related activities conform to approved specifications.

Quality system procedures and instructions

The medical device organisation may refer to these as Level 1 documents. They are typically high-level, non- product and non-process specific documents and can usually be found in the Quality Manual. These procedures and instructions may contain information on the sequence and interaction of various quality management system processes. It is expected that when the standard specifies that a certain process is required to be documented, it is also required to be established, implemented and maintained. [6] The Quality Manual is to outline the structure of the documentation and to

[6] ISO13485:2016 – Clause 0.2

describe the interaction of processes (e.g., the processes for identifying nonconformities and corrections, and the processes for investigating nonconformities to determine root cause and corrective actions).

Quality Management System Planning
Quality planning is concerned with the design and implementation of the quality management system. Such planning typically occurs during the initial development and implementation of a quality system, but also occurs when there are changes in quality policy, quality objectives, QMS and regulatory requirements, or when changes are necessary to for the QMS to continue to be effective. Quality planning at this level shouldn't be confounded with quality planning as described in clause 7.1 of ISO 13485:2016.

Evidence of quality system planning should at least include documents that identify and record the inputs and outputs of quality system planning. A procedure for quality system planning may also be available.

The inputs to quality planning can include:

- quality policy
- quality objectives
- quality management system standards (e.g., ISO 13485:2016)
- regulatory requirements
- product-specific requirements (e.g., servicing, installation, etc.)
- risk mitigation strategies (e.g., user training)
- required changes (e.g., identified during audits or management review)

The outputs of quality planning can include, amongst others:

- a description of the QMS processes and their inputs, outputs, sequence, and interactions
- the quality manual and associated procedures
- a gap analysis
- identification or resources needed to implement the QMS
- identification of competences and training needed to implement the QMS
- implementation and action plans.

Quality management system planning should also be used when changes to the quality management system are contemplated or required in order to ensure the continuing conformity of the QMS.

Links

Measurement, Analysis and Improvement; **Design and Development**; **Purchasing**; **Production and Service Controls**; **Device Marketing Authorization and Facility Registration**

During the audit, whenever a change is identified, verify that the medical device organisation has implemented appropriate change controls.

Task 2 – Management Representative

Confirm top management has documented the appointment of a management representative.

Verify the responsibilities of the management representative include ensuring that quality management system requirements are effectively established and maintained, reporting to top management on the performance of the quality management system, and ensuring the promotion of awareness of regulatory requirements throughout the medical device organisation.

Clause and Regulation

ISO: ISO 13485:2016: 5.5.2

TGA: TG(MD)R Sch3 P1 1.4(5)(b)(ii)

ANVISA: RDC ANVISA 665/2022: Art. 9º

MHLW/PMDA: MHLW MO169: 16

FDA: 21 CFR 820.20(b)]

Additional country-specific requirements

None

Assessing conformity

Management representative

It is important to confirm that top management has appointed a management representative and that the responsibilities and authorities of the management representative have been defined, documented, and implemented. The appointment of the management representative must be documented.

Confirm appointment

The medical device organisation may document the appointment of a management representative in an organisational chart, Quality Manual, memorandum to file, position description, or other appropriate manner. The appointment of the management representative may be made by name or title.

Evaluate responsibility and authority

Confirm that management has established the management representative's responsibility and authority for ensuring that the quality management system is effectively defined, documented, implemented, and maintained. The management representative must also have responsibility and authority for reporting to top management on the performance of the quality management system.

Confirmation can be accomplished by interviewing the management representative and top management and reviewing the Quality Manual, the management representative's position description, or similar documents.

Other examples

Additional examples of evidence of the management representative's responsibilities and authorities may include:

- Sign-off authority for changes to procedures, processes, designs, etc.
- Authority to act on behalf of top management during the audit
- Authority to place products or processes on hold
- Responsibility for managing quality audit functions
- Responsibility for contributing to corrective and preventive action activities, complaint handling and the handling of nonconforming product, etc.

Training

Where the activities performed personally by the management representative result in a determination of whether product meets requirements, including regulatory requirements, the management representative must be competent to perform such activities. In such cases, verify that training and experience includes the relevant regulatory requirements.

Links

None

Task 3 – Quality Policy and Quality Objectives

Verify that a quality policy and objectives have been set at relevant functions and levels within the medical device organisation.

Ensure the quality objectives are measurable and consistent with the quality policy.

Confirm appropriate measures are taken to achieve the quality objectives.

Clause and Regulation

ISO: ISO 13485:2016: 5.3, 5.4.1

TGA: TG(MD)R Sch3 P1 1.4(5)(a)

ANVISA: RDC ANVISA 665/2022: Art. 5º, Art. 6º, Art. 7º

MHLW/PMDA: MHLW MO169: 12, 13

FDA: 21CFR 820.20(a)]

Additional country-specific requirements

None

Assessing conformity

Quality policy

A quality policy is comprised of one or more statements of the medical device organisation's intentions and direction with respect to meeting agreed requirements. Top management must establish the quality policy and ensure quality objectives are established that are consistent with the quality policy. Top management must ensure that the quality policy is understood and communicated at all levels of the medical device organisation. An assessment of whether the medical device organisation's quality system is satisfying the established quality policy and objectives should be a topic addressed during management reviews.

Quality objectives

An effective way of determining whether quality objectives have been implemented is to ask for examples of quality objectives and the status of these objectives. Typically, a quality objective is expressed as a measurable target or goal. An example of a medical device organisation's quality objective could be "to have all essential components meet specifications at a defined reliability rate or better."

To accomplish this objective, the medical device organisation will have to identify, evaluate, and approve reliable suppliers or bring the manufacturing of that component in-house.

Links

None

Task 4 – Organisational Structure, Responsibility, Authority, Resources

Review the medical device organisation's organisational structure and related documents to verify that they include provisions for responsibilities, authorities (e.g., management representative), personnel, resources for infrastructure, competencies, and training to ensure that personnel have the necessary competence to design and manufacture devices in accordance with the planned arrangements and applicable regulatory requirements.

Clause and Regulation

ISO: ISO 13485:2016: 5.1, 5.5.1, 5.5.2, 6.1, 6.2

TGA: TG(MD)R Sch3 P1 1.4(5)(b)

ANVISA: RDC ANVISA 665/2022: Art. 8º, Art. 13, Art. 14, Art. 15, Art. 16, Art. 17

MHLW/PMDA: MHLW MO169: 10, 15, 16, 21, 22, 23

FDA: 21 CFR 820.20(b), 820.25]

Additional country-specific requirements

None

Assessing conformity

Responsibility and authority

Methods for completing this audit task include reviewing the organisational chart(s) and asking authority and responsibility questions. The responsibilities and authorities of various individuals within the medical device organisation are also typically described within the Quality Manual, position descriptions, and job postings.

Resources

Top management is responsible for ensuring that resources necessary to maintain an effective quality management system are provided. Resources include money, equipment, supplies, and personnel. One method for confirming that adequate resources are made available is to ask the management representative to provide several examples of recent requests for different types of resources and describe the outcomes of these requests.

Links

None

Task 5 - Extent of Outsourcing

Determine the extent of outsourcing of processes that may affect the conformity of product with specified requirements and verify the proper documentation of controls in the quality management system.

Verify the list of critical suppliers is current and accurate.

Clause and Regulation

ISO: ISO 13485:2016: 4.1.5, 4.2.1

TGA: TG Act Section 3, TG (MD)R Sch3 P1 1.4(5) (b)(iii), (d)(ii)

ANVISA: RDC ANVISA 665/2022: Art. 21, Art. 22, Art. 23, Art. 24

MHLW/PMDA: MHLW MO169: 5-5, 6

FDA: 21 CFR 820.50

Additional country-specific requirements

Australia (TGA):

A Sponsor, in relation to therapeutic goods, means:

(a) a person who exports, or arranges the exportation of, the goods from Australia; or

(b) a person who imports, or arranges the importation of, the goods into Australia; or

(c) a person who, in Australia, manufactures the goods, or arranges for another person to manufacture the goods, for supply (whether in Australia or elsewhere).

but does not include a person who:

(d) exports, imports or manufactures the goods; or

(e) arranges the exportation, importation or manufacture of the goods;

on behalf of another person who, at the time of the exportation, importation, manufacture or arrangements, is a resident of, or is carrying on business in, Australia.

A Sponsor is the person who holds market authorisation by way of including a device in the Australian Register of Therapeutic Goods (ARTG). Consequently, for Australia, market authorisation is not the responsibility of a manufacturer.

An application for the conditions of marketing authorization may of a medical device (ARTG inclusion) require the that Australian Sponsor have procedures, and a written agreement with the manufacturer, to obtain information to substantiate application of conformity assessment procedures and compliance with the essential principles of safety and performance. Conditions on marketing authorisation are to ensure continued availability of that information and specifically impose requirements for the sponsor to contribute to, amongst other things, post-market reporting.

Requirements that are specifically assigned to the Australian Sponsor are not auditable by an MDSAP Auditing Organisation. (ISO13485:2016 Clause 3.10 Note 1). Sanctions may be applied to the Sponsor if these conditions are not fulfilled.

From an ISO13485 certification perspective, the Australian Sponsor is at least a customer who receives product from the manufacturer. In this relationship the customer may specify requirements. The manufacturer must review and ensure that the organisation can meet those requirements. If the customer (Sponsor) needs assistance from the manufacturer to meet specifically imposed regulatory requirements, then one option is for the customer to specify what is necessary in their arrangements with the manufacturer. The fulfillment of, and accountability for Sponsor requirements is a matter for the TGA. This is also the case when a Sponsor's legal entity is within the scope of a manufacturer's QMS.

If a manufacturer outsources to the Sponsor a process, product or service that affects product conformity to requirements, then the Sponsor will also be a supplier for those activities. For example, the Australian Sponsor may provide services for the installation and servicing of a device on behalf of the manufacturer, or provide the information required by Essential Principle 13 (Labels and IFU), or 13A (patient implant cards and leaflets).

The Sponsor does not need to be treated as a supplier if the scope of the Manufacturer's quality management system includes the site and activities of the Sponsor. The oversight of activities that are required by legislation to be conducted by the Sponsors are to be clearly documented in the QMS and included in plans for internal audit.

Canada (HC):
Verify that the roles and responsibilities of any regulatory correspondents, importers, distributors, or providers of a service are clearly documented in the medical device organisation's quality management system and are qualified as suppliers and controlled, as appropriate.

Assessing conformity

Outsourcing
Requirements to be fulfilled by a manufacturer may come from ISO13485, other product or process standards, those specified by a customer, applicable regulatory requirements, or those otherwise determined by the manufacturer. The manufacturer has "ultimate legal responsibility for ensuring compliance with all applicable regulatory requirements for the medical devices in the countries or jurisdictions where it is intended to be made available or sold, unless this responsibility is specifically imposed on another person by the Regulatory Authority (RA) within that jurisdiction"[7].

Most organisations outsource at least some products (including services) that affect the ability of the medical device to conform to specified requirements. Some organisations outsource the majority of products. During interview of the management representative, ascertain the extent to which the medical device organisation outsources processes essential for the proper functioning of the finished medical device. Process performance and product conformity, including the performance of supplied product, must be included in management review. The medical device organisation must ensure control over outsourced products and processes that affect product conformance with specified requirements.

Links

Purchasing

During audit of the medical device organisation's purchasing process, ensure that management has assured the appropriate level of control over suppliers, including an assessment of the relationship between supplied products and product risk.

Task 6 – Personnel Competency and Training

Confirm the medical device organisation has determined the necessary competencies for personnel performing work affecting product quality, provided appropriate training, and made personnel aware of the relevance and importance of their activities on product quality and achievement of the quality objectives.

Ensure records of training and competencies are maintained.

Clause and Regulation
ISO: ISO 13485:2016: 4.2.1, 6.2

ANVISA: RDC ANVISA 665/2022: Art. 8°, Art. 13, Art. 14, Art. 15

MHLW/PMDA: MO169: 6, 22, 23

FDA: 21 CFR 820.20(b)(2), 820.25

[7] ISO13485:2016 – Clause 3.10 Note 1

Additional country-specific requirements

Brazil (ANVISA):
Confirm that the manufacturer ensures that any consultant who gives advice regarding design, purchasing, manufacturing, packaging, labeling, storage, installation, or servicing of medical devices has proper qualification to perform such tasks. Those consultants shall be contracted as a formal service supplier, according to purchasing controls defined by the manufacturer [RDC ANVISA 665/2022: Art. 16, Art. 17].

Assessing conformity

Training
A review of employee training records can be performed to ensure that employees have been trained regarding the medical device organisation's quality policy and objectives. In particular, this should be done for employees involved in key operations that affect product realization and product quality.

During the audit of the Production and Service Controls process, ensure that employees who are involved in key operations that affect product realization and product quality have been trained in their specific job tasks, as well as the quality policy and objectives.

When appropriate, review the training records for those employees whose activities have contributed to process nonconformities.

Links

Production and Service Controls

Task 7 – Risk Management Planning and Review

Verify that management has committed to and has responsibility for overall risk management planning, including ongoing review of the effectiveness of risk management activities ensuring that policies, procedures and practices are established and documented for analyzing, evaluating and controlling product risk throughout product realization.

Clause and Regulation

ISO: ISO 13485:2016: 4.1.2 (b), 7.1

TGA: TG(MD)R Sch1 P1 2

ANVISA: RDC ANVISA 665/2022: Art. 18, Art. 19, Art. 20

MHLW/PMDA: MO169: 5-2.1.2, 26

FDA: 21 CFR 820.30(g)

Additional country-specific requirements

None

Assessing conformity

Commitment to risk management
Confirm that top management has shown commitment to the risk management process by ensuring the provision of adequate resources and the assignment of qualified personnel for risk management activities. Risk-based decisions

occur throughout the various quality management system processes. Top management is responsible for defining and documenting the policy for determining criteria for risk acceptability. Additionally, ensure top management reviews the suitability of the risk management process. This review may be part of the management review. Previously unidentified risks discovered during production and post-production of the medical device may indicate a need to improve the risk management process. Each medical device organisation must decide how much risk is acceptable.

When appropriate, assess the role of top management when risk-based decisions are made that appear to justify levels of risk that do not meet the medical device organisation's previously established risk- acceptance criteria.

Risk management usually starts in conjunction with the design and development planning process, at a point in the development when the results of risk analysis can affect the design process. During audit of the Design and Development process, evaluate top management's commitment to risk management activities. Evidence of commitment to risk management may include the implementation of new or more stringent controls in response to changes in the likelihood or severity of a hazard occurring, external controls (e.g., additional supplier-related controls), or design changes to maintain an acceptable level of product risk.

Links

Design and Development

Task 8 – Document and Record Controls

Verify that procedures have been defined, documented, and implemented for the control of documents and records of both internal and external origin required by the quality management system.

Confirm the medical device organisation retains records and at least one obsolete copy of controlled documents for a period of time at least equivalent to the lifetime of the device, but not less than two years from the date of product release.

Clause and Regulation

ISO: ISO 13485:2016: 4.1.4, 4.2.1, 4.2.4, 4.2.5

TGA: TG Act 41FN, TG(MD)R 5.7-5.13, Sch3 P1 1.4(4), Sch 3 P4 4.8.

ANVISA: RDC ANVISA 665/2022: Art. 28, Art. 29, Art. 30, Art. 31, Art. 34, Art. 36, Art. 37

MHLW/PMDA: MO169: 5-4, 6, 8, 9

FDA: 21 CFR 820.40, 820.180]

Additional country-specific requirements

Australia (TGA):

Confirm that Quality Management System documentation and records in relation to a device, any requirement specified by the customer (Sponsor) for the manufacturer to fulfill, or otherwise taken on by the manufacturer, in relation to a regulatory requirement that has been specially imposed on the Sponsor (s41FN or Regulations 5.7-5.13), and the conformity assessment procedure applied by the manufacturer as described in TG(MD)R Sch3 P1 1.9 or Sch3 P4 4.8, are retained by the Manufacturer for at least 5 years.

If the customer (Sponsor) and the manufacturer share the same Quality Management System, it is expected that the record requirements imposed by the conditions of marketing authorization (ARTG inclusion) for Australian sponsors is being captured. Specifically, Class III, implantable Class IIb or Class 4 IVDs to have records of distribution, and records of

information relating to; any malfunction or deterioration in the characteristics or performance of a device, or any inadequacy in the design, manufacture, labelling, instructions for use or advertising materials of a device, or any use in accordance with, or contrary to, the use intended by the manufacturer of a device, that has led to any complaint or problem in relation to the device, for a period of up to 10 years. (Reg 5.10)

Brazil (ANVISA):
Verify that change records include a description of the change, identification of the affected documents, the signature of the approving individual(s), the approval date, and when the change becomes effective [RDC ANVISA 665/2022: Art. 32].

Confirm that the manufacturer maintains a master list of the approved and effective documents [RDC ANVISA 665/2022: Art. 33].

Verify that electronic records and documents have backups [RDC ANVISA 665/2022: Art. 35].

Japan (MHLW):
Confirm that Quality Management System documentation and records in relation to a device are retained for the following periods (5 years for training records and documentation). [MHLW MO169: 8, 9, 67, 68]. (1) 15 years for 'specially designated maintenance control required medical devices' [or one year plus the shelf life for products when the shelf life or the expiry date (hereinafter simply referred to as the "shelf life") plus one year exceeds 15 years]. (2) 5 years for the products other than the 'specially designated maintenance control required medical devices' (or one year plus the shelf life for the products of which the shelf life plus one year exceeds 5 years).

Note: The 'specially designated maintenance control required medical device' is defined as below in PMD Act 2.8:

A medical device designated by the Minister of Health, Labour and Welfare after hearing the opinion of the Pharmaceutical Affairs and Food Sanitation Council as those whose potential risk to the diagnosis, treatment or prevention of disease is significant without proper control since this kind of equipment requires expert knowledge and skill in examination for maintenance and inspection, repair and other management.

United States (FDA):
Verify that electronic records and documents have backups [21 CFR 820.180].

Assessing conformity

Implementation of document and record control procedures
Confirm that the medical device organisation has defined, documented, and implemented procedures for control of quality management system documents and records. Evidence that these controls are effective can be ascertained through the audit of the other quality management system processes. For example, evidence that the document controls process is ineffective might be the observation of obsolete procedures being used or required records being unavailable.

The scope of quality management system documentation shall include documentation that is specified by the participating MDSAP Regulatory Authorities[8] and shall, at minimum, be subject to the same controls to ensure current versions are identified and available for use.

Ensure at least one copy of obsolete controlled documents is maintained.

[8] ISO 13485:2016 – Clause 4.2.1(e)

Links

None

Task 9 – Management Reviews

Verify that procedures for management review have been documented, management reviews are being conducted at planned intervals and that they include a review of the suitability and effectiveness of the quality policy, quality objectives, and quality management system to assure that the quality management system meets all applicable regulatory requirements.

Clause and Regulation

ISO: ISO 13485:2016: 5.6

TGA: TG(MD)R Sch3 P1 1.4(5)(b)(iii)(f)

ANVISA: RDC ANVISA 665/2022: Art. 10, Art. 11, Art. 12

MHLW/PMDA: MO169: 18, 19, 20

FDA: 21 CFR820.20(c)]

Additional country-specific requirements

None

Assessing conformity

Verify implementation of management review procedures

It is important to verify that the medical device organisation has documented and implemented effective management review procedures. Top management must review the suitability, adequacy and effectiveness of the medical device organisation's quality management system at defined intervals and with sufficient frequency to ensure that the quality management system satisfies applicable requirements of Medical devices – Quality management systems – Requirements for regulatory purposes (ISO 13485:2016), Brazilian Good Manufacturing Practices (RDC ANVISA 665/2022), Japanese QMS Ordinance (MHLW MO 169), the Quality System Regulation (21 CFR Part 820) and specific requirements of medical device regulatory authorities participating in the MDSAP program, in addition to the medical device organisation's own established quality policy and objectives. The dates and results of the management reviews must be documented. These documentation requirements must be included in the management review procedure.

Other requirements commonly seen in management review procedures include a fixed agenda of topics to be discussed (with flexibility for unique agenda items to be added), the necessary attendees who are to participate in the management review, and how action items resulting from the management review are to be addressed and input into the Measurement, Analysis and Improvement process when necessary. Ensure that the quality policy and objectives have been reviewed for continued suitability and that any changes to regulatory requirements have been identified. Other inputs to management review include results of internal and external audits, customer feedback, process performance and product conformity, status of preventive and corrective actions, follow-up actions from previous management reviews, changes that could affect the quality management system, and recommendations for improvement.

During audit of the Measurement, Analysis and Improvement process, confirm when necessary that action items resulting from Management review are considered for corrective or preventive action.

Links

Measurement, Analysis and Improvement

Task 10 – Distribution of Devices with Appropriate Marketing Authorization

Confirm that the medical device organisation has defined and implemented controls to ensure that only devices that have received the appropriate marketing authorization are distributed or otherwise offered for commercial distribution into the applicable markets.

Clause and Regulation

ISO: ISO 13485:2016: 4.1.1, 4.2.1, 5.2, 7.2.1, 7.2.3

Additional country-specific requirements

Australia (TGA):
Market Authorisation in Australia by way of inclusion of a device in the Australian Register of Therapeutic Goods (ARTG) is the sole responsibility of the Australian Sponsor. Hence there are no auditable requirements for the Australian jurisdiction under Chapter 1, Task 10.

Canada (HC): When the facility being audited manufactures private-labelled medical devices for the Canadian market, verify that any private-labelled devices shipped, imported, or distributed in Canada are licensed for sale. Confirm that private-labelled devices are labelled using the name, address, and device identifier(s) of the private label medical device licence holder in accordance with the private label medical device licence.

Assessing conformity

Responsibilities and authorities of personnel
During the audit of the Management process, verify that the medical device organisation has identified and documented the responsibilities of employees and personnel for ensuring proper registration, listing, licensing, notification and approval information is accurately submitted to regulatory authorities or authorized representatives.

Verify that the medical device organisation has identified and documented the responsibilities and authorities of personnel who are responsible for implementing controls to ensure that devices are only distributed in participating MDSAP jurisdictions where market authorizations have been obtained.

Verify that these obligations are being carried out by competent personnel.

Controls to ensure appropriate market authorization
Verify that the medical device organisation has identified, documented, and implemented controls to ensure that only devices that have received market authorization are released for distribution, or otherwise offered for commercial distribution, into participating MDSAP jurisdictions where the medical device organisation intends to supply the product.

Controls can include, but are not limited to:

- Change control processes that ensure that changes are assessed for their impact on existing marketing authorizations
- Procedures and/or work instructions that clearly identify the jurisdictions in which products can be sold
- Separate part numbers for devices, by jurisdictions
- Review of purchase orders to assure the customer requests and receives only product with the appropriate market clearance

- Review of sales and marketing practices and materials (including internet pages) to assure product is promoted only for markets where the product maintains appropriate market clearance
- Segregation of finished devices in warehousing and shipping areas, by jurisdictions
- Business rules in software to prevent the acceptance of purchase orders where marketing authorization is absent
- Specific language in distribution agreements limiting devices that can be distributed in certain jurisdictions
- Jurisdiction-specific marketing materials (catalogues, websites, etc.)
- The availability of accurate information on marketing authorizations obtained by jurisdiction.

The effectiveness of these controls can be verified by, for example:

- Interviewing sales and customer-support personnel
- Interviewing personnel in shipping and distribution
- Challenging sales / ERP software
- Reviewing distribution agreements
- Reviewing marketing material
- Reviewing distribution records and/or DHR records against lists of valid market authorizations.

The verification of the effectiveness of these controls should be specific to the device identifier(s) (e.g., model number) as listed in the marketing authorization(s). A broad sample covering many products and jurisdictions should be selected, particularly when reviewing distribution records.

In order to prepare for this audit task, audit teams should ensure that they have current lists of market authorizations held by the medical device organisation as well as the names of all authorized representatives in the MDSAP jurisdictions prior to coming on site.

The appropriate application of registration, listing, licensing, notification and approval processes, and the accuracy of information for Device Marketing Authorization for submission to Regulatory Authorities or authorized representatives participating in the MDSAP will be verified under the Device Marketing Authorization and Facility Registration process. A preliminary review of device marketing authorization and facility registration may be made during the audit of the Management process, followed by comprehensive coverage for specific medical devices selected for review under the Design and Development process.

Links

Device Marketing Authorization and Facility Registration

Task 11 – Top Management Commitment to Quality

At the conclusion of the audit, a decision should be made as to whether top management has demonstrated the necessary commitment to ensure a suitable and effective quality management system is in place and being maintained and whether the effectiveness of the system has been communicated to personnel.

Clause and Regulation

ISO: ISO 13485:2016:4.1.1, 4.1.4, 5.1, 5.5.3

ANVISA: RDC ANVISA 665/2022: Art. 4°, Art. 5°, Art. 6°, Art. 7°

MHLW/PMDA: MO169: 5-1, 5-4, 10, 17

FDA: 21 CFR 820.20(a), 820.5]

Additional country-specific requirements

None

Assessing conformity

Audit the other processes

During the audit of the other MDSAP processes, the audit team will have the opportunity to assess whether management is appropriately carrying out its responsibilities; whether the quality policy is understood, implemented, and maintained at all levels of the medical device organisation; if the necessary resources are being provided to maintain an effective quality management system; if the management representative has the necessary responsibilities and authorities; the adequacy of the organisational structure; and whether management reviews and quality audits are effective, etc.

Remember that a quality management system that has been implemented effectively, monitored to identify and address existing and potential problems, and has an integrated risk management process utilizing risk-based decision-making is more likely to produce medical devices that function as intended.

Links

None

Chapter 2 - Device Marketing Authorization and Facility Registration

The Device Marketing Authorization and Facility Registration process may be audited as a linkage from the Management process and/or the Design and Development process.

Auditing the Device Marketing Authorization and Facility Registration Process

Purpose: The purpose of auditing the Device Marketing Authorization and Facility Registration process is to verify that the medical device organisation has performed the appropriate activities regarding device marketing authorization and facility registration with regulatory authorities participating in the MDSAP.

Outcomes: As a result of the audit of the Device Marketing Authorization and Facility Registration process, objective evidence will show whether the medical device organisation has:

A) Complied with requirements to register and/or license device facilities
B) Submitted device listing information to regulatory authorities, or where required, to an authorised representative within a jurisdiction, when applicable
C) Ensured device marketing authorization has been obtained in the appropriate jurisdictions
D) Arranged for assessment of changes (where applicable) and ensured marketing authorization for changes to devices, or changes to the quality management system which require amendment to existing marketing authorization have been obtained.

Links to Other Processes:

Management; **Design and Development**

Task 1 – Submission for Device Marketing Authorization and Facility Registration

Verify the medical device organisation has complied with regulatory requirements to register and/or license device facilities and submit device listing information in the appropriate jurisdictions where the medical device organisation markets or distributes their devices.

Assessing conformity

In some jurisdictions, Device Market Authorization is the responsibility of the importer / Marketing Authorization Holder / Sponsor. Market Authorization may include conditions requiring the importer to fulfil requirements that have been specifically imposed upon them by the relevant legislation.

The medical device organisation does not have legal responsibility for ensuring compliance with the regulatory requirements that have been specifically imposed on another person by a regulatory authority within that jurisdiction. (ISO13485:2016 – Cl 3.10 Note 1)

Prior to an audit, and where the medical device organisation is the market authorisation holder, an Auditing Organisation shall independently investigate the identity and range of products, facilities and importers (e.g., Importer or MAH) that are known to the Regulatory Authority of the relevant jurisdiction where the medical device organisation intends to supply product.

Verify at audit, or prior to audit, that the regulatory requirements for the Medical Device Organisation to register and/or license device facilities and submit device listing information have been appropriately applied by the Medical Device Organisation for **each** Medical Device Organisation / Importer arrangement.

Note that some importers / MAHs / Sponsors may have provided information to Regulatory Authorities indicating that a medical device organisation is the “legal manufacturer” even though the medical device organisation inappropriately

considers themselves to be an Original Equipment Manufacturer or an Original Device Manufacturer. A review of labelling for product being supplied to a particular jurisdiction should assist with determining who is the legal manufacturer and if appropriate market authorization processes have been applied.

Special attention should be paid to instances where products are being marketed to an MDSAP jurisdiction where marketing authorization has not been granted. This may be evident through audit of other processes, such as Design and Development.

Clause and Regulation

ISO: ISO 13485:2016: 4.1.1, 4.2.1, 5.2, 7.2.1, 7.2.3

Country specific requirements

Australia (TGA):

Australian importers (Sponsors) are responsible for obtaining marketing authorisation by making an application to "include" a medical device from non-Australian and Australian Manufacturers in the Australian Register of Therapeutic Goods (ARTG). The application for inclusion will require manufacturing evidence (for example, a MDSAP certificate) from the manufacturing site (the site listed on labelling). If it is as new manufacturing site, the site is given a new facility identification number by the TGA. Note that ISO13485:2016 defines an authorised representative as a "natural or legal person established within a country or jurisdiction who has received a written mandate from the manufacturer to act on his behalf for specified tasks with regard to the latter's obligations under that country or jurisdiction's legislation". The Australian Sponsor is not acting as an Authorised Representative of the manufacturer for the purpose of market authorization as the responsibility has been specifically imposed on the Sponsor. It is not an obligation on the manufacturer.

As the applicable regulatory requirements for marketing authorization (ARTG inclusion) have been specifically imposed on the Sponsor they are not the responsibility of the manufacturer from an ISO13485 perspective (ISO13485 Cl 3.10 Note 1).

The manufacturer is responsible to complete and sign a Declaration of Conformity to support product inclusion on the ARTG. Verify that the manufacturer has a documented process to compile and maintain the Declaration of Conformity and through sampling, verify that a Declaration of Conformity is in place for devices included on the ARTG. [Sch 3 P1 Cl 1.7, Sch 3, P4 Cl 4.7 or Sch 3 P6 Cl 6.6 (depending on Conformity Assessment procedures and device classification)]

Brazil (ANVISA):

Manufacturer means any person who designs, manufactures, assembles or processes finished devices, including those who only perform sterilization process, labeling and packaging [RDC ANVISA 665/2022: Art. 3°, section IX].

For a domestic manufacturer, confirm that the establishment has ANVISA's authorization to manufacture medical devices (AFE - Autorização de Funcionamento da Empresa). For domestic and international manufacturers, verify that the products already distributed in the Brazilian market are registered/notified with ANVISA [Brazilian Federal Law nº 6360/76].

According to Brazilian Legislation, the Good Manufacturing Practice (GMP) certification is a prerequisite for medical device registration. Therefore, the facility site inspection precedes the device registration request. Medical devices subject to notification do not need the GMP certificate, but even not being certified, their manufacturers shall comply with the GMP requirements.

Medical devices registration/notification

Device marketing authorization shall be requested to ANVISA by the domestic manufacturer or importer (legal representative) formally established in Brazil. Registration is a comprehensive process for market authorization, applied to medical devices in classes III and IV. [ANVISA RDC nº 36/2015, RDC nº 40/2015]

Notification is a simplified market authorization process, applied to all medical device classes I and II. [ANVISA RDC nº 36/2015, RDC nº 40/2015]. Registration is valid for 10 years, while notification has no expiry date. Renewal of the registration shall be requested upon time defined at Brazilian Law 6360/1976.

Establishment license

Domestic manufacturer: shall be authorized by ANVISA, at a minimum, as a manufacturer of medical devices. This license includes authorization to store and distribute medical devices.

Importer: the importer is considered the legal representative of the international manufacturer in Brazil and shall be authorized by ANVISA to import, store, and distribute medical devices. In the case of outsourcing the storage, the importer does not need authorization for this activity.

Canada (HC):

Manufacturer means a person who sells a medical device under their own name, or under a trade-mark, design, trade name or other name or mark owned or controlled by the person, and who is responsible for designing, manufacturing, assembling, processing, labeling, packaging, refurbishing or modifying the device, or for assigning to it a purpose, whether those tasks are performed by that person or on their behalf [CMDR 1].

No person shall import or sell a Class II, III or IV medical device unless the manufacturer of the device holds a license in respect of that device or, if the medical device has been subjected to a change described in section 34, an amended medical device license [CMDR 26].

An application for a medical device license shall be submitted to the Minister by the manufacturer of the medical device in a format established by the Minister [CMDR 32].

An application for a medical device license shall include a copy of a quality management system certificate certifying that the quality management system under which the medical device is manufactured (class II) or designed and manufacturer (class III or IV) satisfies National Standard of Canada CAN/CSA-ISO 13485:2016. [CMDR 32(2)(f); 32(3)(j); 32(4)(p)].

Japan (MHLW):

"Marketing Authorization Holder" means a person who resides in Japan and is granted a license for marketing from a prefectural government [PMD Act 23-2.1].

Application or Notification for marketing

Class 2, class 3, and class 4 medical devices except for the ones specified by the requirement of PMD Act 23-2-23.1.

An" Application for Marketing Approval" shall be submitted to PMDA by the Marketing Authorization Holder to get authorization for marketing a medical device in Japan. [PMD Act 23-2-5.1]

An "Application for QMS Audit" shall also be submitted to PMDA by the Marketing Authorization Holder, when they do not have an effective QMS Certificate for the device. [PMD Act 23-2-5.6, 7]

Class 2 and class 3 medical devices which are specified by the requirement of PMD Act 23-2-23.1

An" Application for Marketing Certification" shall be submitted to a Registered Certification Body (RCB) by the Marketing Authorization Holder to get authorization for marketing a medical device in Japan. [PMD Act 23-2-23.1].

An “Application for QMS Audit” shall also be submitted to an RCB by the person, when the person does not have a valid QMS Certificate for the device. [PMD Act 23-2-23.3, 4].

Class 1 medical device

A “Notification for Marketing” shall be submitted to PMDA by the Marketing Authorization Holder for marketing a class 1 device in Japan [PMD Act 23-2-12].

A class 1 medical device doesn’t need any QMS Certificate for marketing.

Facility Registration (Registered Manufacturing Site)
A medical device manufacturing site which conducts one of the designated manufacturing processes listed below shall be registered:

- Main Designing
- Main assembly
- Sterilization
- Domestic storage before final release.

The site is called “Registered Manufacturing Site”. It has to submit an application to PMDA for registration by itself [PMD Act 23-2-3.1, 23-2-4].

United States (FDA):
21 CFR 807 - Establishment Registration and Device Listing for Manufacturers and Initial Importers of Devices.

Establishment means a place of business under one management at one general physical location at which a device is manufactured, assembled, or otherwise processed.

Owner or operator means the corporation, subsidiary, affiliated company, partnership, or proprietor directly responsible for the activities of the registering establishment.

Owner or operator must register the establishment and submit listing information to Food and Drug Administration (FDA) for those devices in commercial distribution, regardless of classification.

The registration and listing requirements must pertain to any person who:

- Initiates or develops specifications for a device that is to be manufactured by a second party for commercial distribution by the person initiating specifications
- Manufactures for commercial distribution a device either for itself or for another person; regardless of whether the manufacturer places the device into commercial distribution or returns the device to the customer
- Repackages or relabels a device
- Acts as an initial importer, except that initial importers may fulfill their listing obligation for any device for which they did not initiate or develop the specifications for the device or repackage or relabel the device by submitting the name and address of the manufacturer
- Manufactures components or accessories which are ready to be used for any intended health-related purpose and are packaged or labeled for commercial distribution for such purpose
- Sterilizes or otherwise makes a device for or on behalf of a specification developer or any other person
- Acts as a complaint file establishment
- Is a device establishment located in a foreign trade zone.

Links

Management

During audit of the Management process, confirm that management is aware of and has made arrangements for device marketing authorization and facility registration.

Task 2 – Evidence of Marketing Clearance or Approval

Confirm the medical device organisation has received appropriate marketing clearance or approval in the regulatory jurisdictions where the medical device organisation markets their devices.

Clause and Regulation

ISO: ISO 13485:2016: 4.1.1, 4.2.1, 5.2, 7.2.1, 7.2.3

Country specific requirements

Australia (TGA):

As the applicable regulatory requirements have been specifically imposed on the Sponsor, they are not the responsibility of the manufacturer from an ISO13485 perspective (ISO13485 Cl 3.10 Note 1). Hence there are no auditable requirements for the Australian jurisdiction under Chapter 2, Task 2.

Brazil (ANVISA):

In Brazil there are two kinds of marketing clearance, registration and notification:

- Device market clearance shall be requested to ANVISA by the domestic manufacturer or importer (legal representative) formally established in Brazil. Registration is a comprehensive process for market authorization, applied to medical devices in classes III and IV. [ANVISA RDC nº 36/2015, RDC nº 40/2015].
- Notification is a simplified market authorization process, applied to all medical devices classes I and II. [ANVISA RDC nº 36/2015, RDC nº 40/2015] Registration is valid for 10 years, while notifications have no expiry date - renewal of the registration shall be requested upon time defined at Brazilian Law 6360/1976.

Canada (HC):

No person shall import or sell a Class II, III or IV medical device unless the Manufacturer of the device holds a license in respect of that device or, if the medical device has been subjected to a change described in section 34 - an amended medical device license [CMDR 26].

Japan (MHLW):

Any person who intends to market a medical device for business in Japan shall have a license for marketing granted by the prefectural government. This person is called a “Marketing Authorization Holder” (MAH) and shall reside in Japan [PMD Act 23-2.1]. The person has to submit an Application for Marketing Approval/Certification (class 2, 3 or 4 medical device) or a Notification for Marketing (class 1 medical device) to get marketing clearance for the medical device. No person shall market a medical device in Japan, unless the Marketing Authorization Holder of the device has been granted the marketing clearance [PMD Act 23-2-5.1, 23-2-23.1, 23-2-12].

United States (FDA):

21 CFR 807.81- Premarket Notification:

Each person who is required to register his establishment pursuant to 807.20 must submit a premarket notification submission to the Food and Drug Administration at least 90 days before he proposes to begin the introduction or

delivery for introduction into interstate commerce for commercial distribution of a device intended for human use which meets any of the following criteria:

- The device is being introduced into commercial distribution for the first time; that is, the device is not of the same type as, or is not substantially equivalent to, (i) a device in commercial distribution before May 28, 1976, or (ii) a device introduced for commercial distribution after May 28, 1976, that has subsequently been reclassified into class I or II.
- The device is being introduced into commercial distribution for the first time by a person required to register.

21 CFR 814 – Premarket Approval
A Premarket approval is required for any FDA class III device that was not on the market (introduced or delivered for introduction into commerce for commercial distribution) before May 28, 1976, and is not substantially equivalent to a device on the market before May 28, 1976, or to a device first marketed on, or after that date, which has been classified into class I or class II.

Links

Management, **Design and Development**

During the audit of the Management and Design and Development processes, ensure that management is aware of requirements for device marketing authorization and facility registration, and that these are considered when designing the device.

Confirm that management obtains marketing authorization in the appropriate jurisdictions prior to commercial distribution of the device.

Task 3 – Notification of Changes to Marketed Devices or to the QMS

Verify the medical device organisation has identified changes to marketed devices or the quality management system which require notification to regulatory authorities.

The audit team should pay special attention to situations observed in the audit of the Design and Development process (specifically design changes) that may require notification to the jurisdictions to which the changed devices are marketed.

Clause and Regulation

ISO: ISO 13485:2016: 4.1.1, 4.2.1, 5.2, 7.2.1, 7.2.3, 7.3.9

TGA: TG(MD)R 3.5

Assessing conformity

Although not a specifically requirement on the manufacturer, the Auditing Organisation is required to have legally enforceable arrangements for the manufacturers to report without delay, matters that may affect the capability of the management system to continue to fulfil the requirements of the standard used for certification. [ISO 17021 Cl 8.5.3].

Country specific requirements

Australia (TGA):
An MDSAP Auditing Organisation is recognised by the TGA as a body that has the authority and expertise to undertake QMS assessments under the conformity assessment procedures on behalf of the TGA. (Reg 3.5) Consequently, changes

to marketed devices or the quality management system which require notification to the TGA under the Australian conformity assessment procedures are to be notified to the MDSAP Auditing Organisation.

The Australian Sponsor holds the marketing authorisation, not the manufacturer.

The Manufacturer is required to notify their auditing organisation body of:

- A proposed change to their QMS, including the name and location of the manufacturer
- A proposed change to critical suppliers or the goods and services they provide
- A proposed change to a validated manufacturing process
- A proposed change to the kinds of medical devices to which the system is to be applied
- For Class III devices or Class 4 IVD's, a proposed change to the design, intended performance, intended user, packaging, storage or transport conditions of a device.

Changes are to be evaluated by the Auditing Organisation to determine whether a special audit is required to verify the continuing integrity of the quality management system, or whether verification of the change may occur at the next routine audit. The Auditing Organisation should also verify the continuing adequacy of technical documentation relating to the change (**see Annex 1**)

If the Manufacturer is a holder of a TGA Conformity Assessment Certificate, then the Manufacturer is also required to notify the TGA of these changes, prior to implementation. For changes that are not considered substantial by the Manufacturer or applicant, a summary of changes may be requested by the TGA at the time of recertification of an existing conformity assessment certificate, or made available for the TGA auditor during the next on-site audit

Examples of substantial changes that may require notification to the TGA include, but are not limited to, the following:

- Name and/or address of the Manufacturer
- Scope of existing manufacturing facilities, including manufacturing steps
- Addition or removal of a manufacturing facility along with associated activities
- Critical manufacturing process (e.g., a drug coating process, a sterilization method etc.)
- Critical supplier and/or relevant scope
- Type of conformity assessment procedure
- Device category
- Product design (e.g., materials for medical devices, storage, shelf-life, and packaging)
- Information to be provided with a medical device (e.g., intended purpose of the device in the IFU, removal of warnings, contraindications, or other information regarding safety etc.)

Refer to:

Therapeutic Goods (Medical Devices) Regulations 2002

- Regulation 3.5 – Medical devices manufactured outside Australia
- Schedule 3 - The relevant conformity assessment procedure chosen by the Manufacturer

The notification of changes to an ARTG inclusion, or the notification of changes to the validity of certifications that have been used to support the ARTG inclusion (e.g., MDSAP, or MDD, or MDR Certifications), are the responsibility of the Australian Sponsor. As the applicable regulatory requirements have been specifically imposed on the Sponsor,

they are not the responsibility of the manufacturer from an ISO13485 perspective (ISO13485 Cl 3.10 Note 1). Hence these requirements are not to be audited by an MDSAP Auditing Organisation.

Brazil (ANVISA):
Changes involving medical devices already approved by ANVISA, shall be submitted for a new approval [Brazilian Law nº 6360/76 - Art. 13]. Changes/modifications that shall be submitted are those ones classified as significant change, which affects:

- features of safety and effectiveness, including measures to communicate information (ex. residual risk)
- identification of the device or its manufacturer or manufacturing site
- indication for use, including its purpose, patient type (adult, pediatric, newborn)or environment to be used (domestic, hospital, ambulance, etc.)
- device classification
- technical specification of the device, including composition and other operational/technical/physical features
- manufacturing method.

Examples of modifications that may require a submission include, but are not limited to, the following:

- Sterilization method
- Structural material / composition
- New or additional manufacturer
- Manufacturing method
- Manufacturing site
- Operating parameters or conditions for use
- Patient or user safety features
- Sterile barrier packaging material
- Stability or expiration claims
- Design
- Labels and instructions of use (if modification is regarding information)
- Commercial name
- Indication for use
- New software version
- Commercial presentation
- Inclusion of a new device in a family of medical devices already approved
- Inclusion of new accessories.

Canada (HC):
If the Manufacturer proposes to make one or more changes, the Manufacturer shall submit to the Minister, in a format established by the Minister, an application for a medical device license amendment including the information and documents set out in section 32 that are relevant to the change [CMDR 34].

Every Manufacturer of a licensed medical device shall, annually before November 1 and in a form authorized by the Minister, furnish the Minister with a statement signed by the Manufacturer or by a person authorized to sign on the

Manufacturer's behalf describing any change to the information and documents supplied by the Manufacturer with respect to the device, other than those to be submitted under section 34 or 43.1 [CMDR 43].

If the holder of a medical device license discontinues the sale of the medical device in Canada, the licensee shall inform the Minister within 30 days after the discontinuance, and the license shall be cancelled at the time that the Minister is informed [CMDR 43(3)].

Subject to section 34, if a new or modified quality management system certificate is issued in respect of a licensed medical device, the Manufacturer of the device shall submit a copy of the certificate to the Minister within 30 days after it is issued [CMDR 43.1].

Japan (MHLW):
A change to a medical device which is approved/certified by PMDA/a Registered Certification Body may require the Marketing Authorization Holder to submit a new application, a change application, or a change notification [PMD Act 23-2-5.1, 23-2-5.11, 23-2-5.12, 23-2-23.1, 23-2-23.6, 23-2-23.7].

Changes that require the application or the notification are those ones which directly impact the safety and efficacy of the device and/or the substantial identity of the fact approved during marketing approval / certification.

The Registered Manufacturing Site shall communicate with the Marketing Authorization Holder about the change when the Registered Manufacturing Site plans such changes, so that the Marketing Authorization Holder could take any necessary regulatory actions mentioned above [MHLW MO169: 29].

Examples of changes that may require an application or a notification include, but are not limited to, the following:

- Design
- Composition
- Raw material
- Sterilization method
- Manufacturing method
- Manufacturing site
- Patient or user safety features
- Operating Parameters or conditions for use
- Indication for use
- Shelf life
- Performance Specification.

United States (FDA):
21 CFR 807 - Establishment Registration and Device Listing for Manufacturers and Initial Importers of Devices.
Update the device listing information during each June and December or, at its discretion, at the time the change occurs. Conditions that require updating and information to be submitted for each of these updates are as follows:

- If an owner or operator introduces into commercial distribution a device identified with a classification name not currently listed by the owner or operator
- If an owner or operator discontinues commercial distribution of all devices in the same device class

Update registration if changes in individual ownership, corporate or partnership structure, or location of at the time of annual registration, or by letter if the changes occur at other times. This information must be submitted within 30 days

of such changes. Changes in the names of officers and/or directors of the corporation(s) must be filed with the establishment's official correspondent and must be provided to the Food and Drug Administration upon receipt of a written request for this information.

21 CFR 807.81- Premarket Notification:
A new complete 510(k) application is usually required for changes or modifications to an existing device, where the modifications could significantly affect the safety or effectiveness of the device, or the device is to be marketed for a new or different indication. Most changes in indications for use require the submission of a 510(k).

Examples of modifications that may require a 510(k) submission include, but are not limited to, the following:

- Sterilization method
- Structural material
- Manufacturing method
- Operating parameters or conditions for use
- Patient or user safety features
- Sterile barrier packaging material
- Stability or expiration claims
- Design.

21 CFR 814.39 – PMA Supplements
After FDA's approval of a PMA, an applicant must submit a PMA supplement for review and approval by FDA before making a change affecting the safety or effectiveness of the device for which the applicant has an approved PMA. While the burden for determining whether a supplement is required is primarily on the PMA holder, changes for which an applicant shall submit a PMA supplement include, but are not limited to, the following types of changes if they affect the safety or effectiveness of the device:

- New indications for use of the device
- Labeling changes
- The use of a different facility or establishment to manufacture, process, or package the device
- Changes in sterilization procedures
- Changes in packaging
- Changes in the performance or design specifications, circuits, components, ingredients, principle of operation, or physical layout of the device
- Extension of the expiration date of the device based on data obtained under a new or revised stability or sterility testing protocol that has not been approved by FDA
- An applicant may make a change in a device after FDA's approval of a PMA for the device without submitting a PMA supplement if the change does not affect the device's safety or effectiveness and the change is reported to FDA in post approval periodic reports required as a condition to approval of the device, e.g., an editorial change in labeling which does not affect the safety or effectiveness of the device.

Links

Design and Development

During the audit of the Design and Development process, the audit team should confirm the medical device organisation has considered regulatory requirements for device marketing authorization and facility registration; and has complied with these requirements prior to marketing the changed device in the applicable regulatory jurisdictions.

Chapter 3 - Measurement, Analysis and Improvement

One of the most important activities in the quality management system is the identification of existing and potential causes of product and quality problems. Such causes must be identified so that appropriate and effective corrective or preventive actions can take place. These activities are carried out under the Measurement, Analysis and Improvement process.

The purpose of a medical device organisation's Measurement, Analysis and Improvement process is to collect and analyze information, identify and investigate existing and potential causes of product and quality problems, and take appropriate and effective corrective or preventive action to prevent recurrence or occurrence. It is essential that a medical device organisation verify or validate these actions, communicate corrective and preventive action activities to responsible people, provide relevant information for management review, and document these activities. These activities will help the medical device organisation deal effectively with existing or potential product and quality problems, prevent their recurrence and/or occurrence, and prevent or minimize device failures or other quality problems.

The **management representative** is responsible for ensuring that the requirements of the quality management system have been effectively defined, documented, implemented, and maintained. Prior to the audit of a process, it may be helpful to interview the management representative (or designee) to obtain an overview of the process and a feel for management's knowledge and understanding of the process.

The Measurement, Analysis and Improvement process is the second primary process to be audited per the MDSAP audit sequence. When applicable, information regarding device or identified quality management system nonconformities observed during the audit of the Measurement, Analysis and Improvement process should be used to make decisions as to design projects or design changes to assess during audit of the Design and Development process, suppliers to evaluate during audit of the Purchasing process, and processes to review during audit of the Production and Service Controls process.

Auditing the Measurement, Analysis and Improvement Process

Purpose: The purpose of auditing the Measurement, Analysis and Improvement process is to verify that the medical device organisation's processes ensure that information related to products, process/es, or the quality management system is collected and analyzed to identify actual and potential product, process, or quality system nonconformities, that problems and potential problems are investigated, and that appropriate and effective corrective actions and preventive actions are taken.

Outcomes: As a result of the audit of the Measurement, Analysis and Improvement process, objective evidence will show whether the medical device organisation has:

A) Defined, documented, and implemented procedures for measurement, analysis and improvement that address the requirements of the quality management system standard and participating MDSAP regulatory authorities
B) Identified, analysed, and monitored appropriate sources of quality data to identify nonconformities or potential nonconformities and determined the need for corrective or preventive action
C) Ensured investigations are conducted to identify the underlying cause(s) of nonconformities and potential nonconformities, where possible
D) Implemented appropriate corrective action to eliminate the recurrence or preventive action to prevent the occurrence of product or quality system nonconformities, commensurate with the risks associated with the nonconformities or potential nonconformities encountered
E) Reviewed the effectiveness of corrective action and preventive action

F) Utilized information from the analysis of production and post-production quality data to amend the analysis of product risk, as appropriate

Links to Other Processes:

Design and Development; **Production and Service Controls**; **Purchasing**; **Medical Device Adverse Events and Advisory Notices Reporting; Management**

Task 1 – Procedures for Measurement, Analysis, and Improvement of QMS Effectiveness and Product Conformity

Verify that procedures for measurement, analysis and improvement which address the requirements of the quality management system standard and regulatory authorities have been established and documented.

Confirm the medical device organisation maintains and implements procedures to monitor and measure product conformity throughout product realization, as well as procedures that provide for mechanisms for feedback to provide early warnings of quality problems and the implementation of corrective action and preventive action.

Clause and Regulation

ISO: ISO 13485:2016: 4.2.1, 8.1, 8.2.1, 8.2.6, 8.5

TGA: TG(MD)R Sch3 P1 1.4(3)(a),(b), (5)(b)(iii), (f)

ANVISA: RDC ANVISA 665/2022: Art. 88, Art. 120, Art. 121

MHLW/PMDA: MO169: 6, 54, 55-1, 58, 59, 62, 63, 64

FDA: 21 CFR 820.100(a)]

Additional country-specific requirements:

Brazil (ANVISA):

Verify that the manufacturer has ensured that information about quality problems or nonconforming products are properly disseminated to those directly involved in the maintenance of product quality and to prevent occurrence of such problems [RDC ANVISA 665/2022: Art. 120 section VI].

United States (FDA):

Verify procedures ensure that information related to quality problems or nonconforming product is disseminated to those directly responsible for assuring the quality of such product or the prevention of problems [21 CFR 820.100(a)(6)].

Confirm procedures provide for the submission of relevant information on identified quality problems, as well as corrective and preventive actions, for management review [21 CFR 820.100(a)(7)].

Assessing conformity

Procedures

Each medical device organisation must establish and maintain procedures for analyzing data and implementing corrective action and preventive action. The procedures must include requirements for:

- Analyzing feedback, conformity to product requirements, characteristics and trends of processes and products (including opportunities for preventive action), and conformity of suppliers
- Reviewing nonconformities, including customer complaints
- Evaluating the need for action to prevent recurrence or occurrence of nonconformities
- Recording the results of any investigations and of actions taken
- Identifying the action(s) needed to correct and prevent recurrence or occurrence of nonconforming product and other quality problems
- Ensure that action is effective and does not adversely affect the finished device
- Implementing and recording changes in methods and procedures needed to correct and prevent identified quality problems
- Ensuring that information related to quality problems or nonconforming product is disseminated to those directly responsible for assuring the quality of such product or the prevention of such problems

Task 2 – Sources of quality data

Determine if appropriate sources of quality data have been identified and analyzed according to a documented procedure; for the use of valid statistical methods (where appropriate), for input into the measurement, analysis and improvement process, including customer complaints, feedback, service records, returned product, internal and external audit findings, nonconformities from regulatory audits and inspections, and data from the monitoring of products, processes, nonconforming products, and suppliers.

Information from the organisation's analysis of quality data should be used to inform the audit team's decision as to specific complaint records to review in Task 12, and products and processes to audit during the Design and Development, Production and Service Controls, and Purchasing processes.

Clause and Regulation

ISO: ISO 13485:2016: 7.5.4, 8.1, 8.2.1, 8.2.6, 8.4

TGA: TG(MD)R Sch3 P1 1.4(3)(a),(b), (5)(b)(iii), (f)

ANVISA: RDC ANVISA 665/2022: Art. 120 section I, Art. 131

MHLW/PMDA: MO169: 43, 54, 55-1, 58, 59, 61

FDA: 21 CFR 820.100(a)]

Additional country-specific requirements

None

Assessing conformity

Quality data sources

Complaints, records of acceptance activities and concessions, nonconformities identified in internal audits, service records, acceptability of supplied product and supplier performance, and data presented in management review are common quality data sources that are useful in identifying quality problems, among others.

Some sources of quality data that may be useful in identifying potential problems are acceptance activities, such as component, in-process, or finished device testing; environmental monitoring, and statistical process control (SPC).

Results of acceptance activities may indicate an unfavorable trend that left unattended may result in product nonconformity.

During the audit of the Measurement, Analysis and Improvement process, it is recommended that the auditor(s) review the previous audit report if there is one for the medical device organisation. If this information is available, the audit team should use the information in the report when selecting some quality data sources to review during the audit. For example, if service records were reviewed during the previous audit and the medical device organisation handled the data appropriately, the audit team may wish to select a different data source for review during the audit.

However, if the previous audit documented that the data from service records were not being entered into the Measurement, Analysis and Improvement process appropriately, the audit team should consider reviewing service records again to determine whether the previous deficiency was effectively addressed:

- Select some sources of quality data
- Determine if the data from these sources were entered into the medical device organisation's Measurement, Analysis and Improvement process for analysis and whether the information was complete, accurate, and entered in a timely fashion
- Be mindful of quality problems that appear in more than one data source. For example, device nonconformities noted in complaints should be compared with similar nonconformities noted during the medical device organisation's analysis of data from other data sources such as product reject reports, or nonconforming product or process reports.

This comparison will help the medical device organisation and the audit teams understand the full extent of the quality problem.

Analysis of data

A medical device organisation should use data from a variety of quality data sources to identify the causes of existing product and quality problems. Not all organisations will have the same sources of quality data. For example, service records and installation reports are quality data sources that may not be found at every medical device organisation.

As the audit team is conducting the audit, determine what sources of quality data the medical device organisation has identified. The audit team will also determine whether the sources identified by the medical device organisation are appropriate and if the medical device organisation is analyzing quality data from these sources to identify existing product problems as well as existing problems within its quality system.

Later in the evaluation of the Measurement, Analysis and Improvement process, the audit team will be sampling raw quality data to determine how the medical device organisation analyzed the quality data and responded to the results of its analysis.

A medical device organisation should also use data from a variety of quality data sources to identify the causes of potential product and quality problems. The medical device organisation should be looking for trends or other indications of potential problems before the problems actually occur. The medical device organisation may choose to perform analysis of competing devices, including reviewing advisory notices related to competing devices, to determine whether similar nonconformities could occur in the medical device organisation's devices.

Determine whether the medical device organisation can identify potential product and quality problems that may require preventive action.

A medical device organisation has the flexibility to use whatever methods of analysis are appropriate to identify existing and potential causes of nonconforming product or other quality problems. However, a medical device organisation must use appropriate statistical methodology where necessary to detect recurring quality problems.

A medical device organisation must also use appropriate statistical tools when it is necessary to use statistical methodology. It should not misuse statistics in an effort to minimize the problem or avoid addressing the problem.

Links

Purchasing

During the audit of the Measurement, Analysis and Improvement process, the audit team may encounter data involving product nonconformities, including complaints involving finished devices, where the underlying cause of the quality problem has been traced to supplied product.

During the audit of the Purchasing process, the audit team should consider selecting suppliers to audit that have corrective action indicators of nonconformities with supplied components or processes.

Task 3 – Investigation of Nonconformity

Determine if investigations are conducted to identify the underlying cause(s) of detected nonconformities, where possible.

Confirm investigations are commensurate with the risk of the nonconformity.

Clause and Regulation

ISO: ISO 13485:2016: 8.5.2

TGA: TG(MD)R Sch3 P1 1.4(3)(a),(b), (5)(b)(iii),(f), TG(MD)R Sch1 P1 2

ANVISA: RDC ANVISA 665/2022: Art. 116, Art. 120 section II

MHLW/PMDA: MO169: 63

FDA: 21 CFR 820.100 (a)(2)]

Additional country-specific requirements

None

Assessing conformity

Investigations of nonconformities

Organisations must define and implement a process for investigations. The process should consist of a structured, risk-based approach (in a mature QS) intended to determine the root or underlying cause(s) of a quality problem. Criteria should be defined to determine when an investigation is necessary and the extent of the investigation. The investigation should be based on a pre-approved plan or other defined approach, timelines should be defined, roles and responsibilities should be assigned, and the course of action should be assessed when the underlying cause cannot be determined. The results of the investigation must be recorded. The depth of the medical device organisation's investigation of a process, product, or other quality system nonconformity should be commensurate with the significance and risk of the nonconformity. The process for determining the extent of an investigation may be linked to the medical device organisation's risk management system and the design outputs essential to the proper functioning of the device.

A correction is not the same as a corrective action.

In order for a medical device organisation to take a corrective action (i.e., action taken to prevent recurrence of an existing nonconformity), an investigation must be conducted to determine the cause of the nonconformity. Often a medical device organisation will only make a correction to handle the immediate problem (e.g., relabeling a lot of mislabeled finished devices). Determining the cause of the lot of mislabeled finished devices is more difficult and may be overlooked. Where possible, the medical device organisation should identify the underlying cause or causes of the nonconformity so that appropriate corrective action can be taken.

Selecting records
When selecting records of investigations to review, be mindful of the risk of the nonconformity to the product or process. Select records of investigations where the nonconformity has a higher risk of adversely affecting the ability of the finished device to meet its essential design outputs or the nonconformity affects the safety and efficacy of the product.

Links
None

Task 4 – Investigation of Potential Nonconformity

Determine if investigations are conducted to identify the underlying cause(s) of potential nonconformities, where possible.

Confirm investigations are commensurate with the risk of the potential nonconformity.

Clause and Regulation
ISO: ISO 13485:2016: 8.5.3

TGA: TG(MD)R Sch3 P1 1.4(3)(a),(b), (5)(b)(iii),(f),TG(MD)R Sch1 P1 2

ANVISA: RDC ANVISA 665/2022: Art. 120 section I

MHLW/PMDA: MO169: 64

FDA: 21 CFR 820.100(a)(2)]

Additional country-specific requirements
None

Assessing conformity

Investigations of potential nonconformities
The depth of the medical device organisation's investigation into potential process, product, or other quality system nonconformities should be commensurate with the risk of the nonconformity if it were to occur. The process for determining the extent of an investigation may be linked to the medical device organisation's risk management system and outputs essential to the proper functioning of the device.

Selecting records
When selecting records of investigations to review, be mindful of the risk of the potential nonconformity to the product or process. Select records of investigations where the potential nonconformity has a higher risk of adversely affecting the ability of the finished device to meet its essential design outputs or the potential nonconformity could affect the safety and efficacy of the product.

Links
None

Task 5 – Correction, Corrective Action, and Preventive Action

Confirm that corrections, corrective actions, and preventive actions were determined, implemented, documented, effective, and did not adversely affect finished devices.

Ensure corrective action and preventive action is appropriate to the risk of the nonconformities or potential nonconformities encountered.

Clause and Regulation
ISO: ISO 13485:2016: 8.2.1, 8.2.5, 8.3.1, 8.5.2, 8.5.3

TGA: TG(MD)R Sch1 P1 2, TG(MD)R Sch3 P1 1.4(3)(a),(b), (5)(b)(iii), (f)

ANVISA: RDC ANVISA 665/2022: Art. 18, Art. 19, Art. 20, Art. 116, Art. 120 sections II, II, IV, V

MHLW/PMDA: MO169: 55-1, 57, 60-1, 63, 64

FDA: 21 CFR 820.100(a)(3), 820.100 (a)(4),820.100(a)(6), 820.100(b)]

Additional country-specific requirements
None

Assessing conformity

Determining the extent of actions
Corrective actions taken by a medical device organisation can vary depending on the situation. Corrective actions are intended to correct and also prevent recurrence of not only nonconforming product but also poor practices, such as inadequate training.

In developing corrective action addressing nonconforming product, the medical device organisation should consider corrections to be taken regarding the affected products, whether distributed or not. Corrections and corrective actions must be commensurate with the risk associated with the nonconformity.

The audit team may encounter situations where a quality problem has been identified, but the medical device organisation's management has decided not to undertake corrective actions. Confirm that the medical device organisation's decision not to take corrective action has been made using appropriate risk-based decision making, including a determination that the finished device meets risk acceptability criteria.

Determining the effectiveness of actions
During the audit of the Measurement, Analysis and Improvement process, review the mechanisms by which the medical device organisation assessed effectiveness of the corrective and preventive actions. Compare the records of significant and/or higher risk corrective actions and preventive actions to the medical device organisation's product and quality data analyses, such as trend results. Look for product or quality problems or trends that continued or began after the actions were implemented. This may indicate that the corrective actions or preventive actions were not effective.

Review how the medical device organisation has determined that the actions do not adversely affect the finished device(s).

Links

Medical Device Adverse Events and Advisory Notices Reporting

Determine whether any of the medical device organisation's corrective actions require reporting to participating MDSAP authorities.

Task 6 – Assessment of Design Change resulting from Corrective or Preventive Action

When a corrective or preventive action results in a design change, verify that any new hazard(s) and any new risks are evaluated under the risk management process.

Clause and Regulation

ISO: ISO 13485:2016: 7.1, 7.3.9

TGA: TG(MD)R Sch1 P1 2

ANVISA: RDC ANVISA 665/2022: Art. 18, Art. 19, Art. 20, Art. 60

MHLW/PMDA: MO169: 26, 36-1

FDA: 21 CFR 820.30(i), 820.30(g)

Additional country-specific requirements

Canada (HC):
Verify that the Manufacturer has a process or procedure for identifying a "significant change" to a class III or IV device. Verify that information about "significant changes" is submitted in a medical device license amendment application [CMDR 1, 34].

Assessing conformity

Design change
Completing this audit task may involve linkages to other subsystems. Verification and validation are important elements in assuring that corrective actions and preventive actions that result in design changes are effective and do not introduce new hazards.

Links

Design and Development

If the corrective action or preventive action involves changing the design, design controls should be applied to the change where applicable.

When necessary, confirm that design controls were applied to the change according to the medical device organisation's procedures.

In addition, design changes should be evaluated under the medical device organisation's risk management process to ensure that changes do not introduce new hazards.

Task 7 – Assessment of Process Change resulting from Corrective or Preventive Action

When a corrective or preventive action results in a process change, confirm that the process change is assessed to determine if any new risks to the product are introduced.

Verify the medical device organisation has performed revalidation of processes where appropriate.

Clause and Regulation

ISO: ISO 13485:2016: 4.1.2, 4.1.4, 4.1.6, 4.2.1, 7.1, 7.5.2, 7.5.6, 7.5.7

TGA: TG(MD)R Sch1 P1 2; Sch3 P1 1.5(4), [TG(MD)R Sch3 P1 1.5(2)]

ANVISA: RDC ANVISA 665/2022: Art. 18, Art. 19, Art. 20, Art. 106, Art. 120

MHLW/PMDA: MO169: 5-2, 5-4, 5-6, 6, 26, 41, 45, 46

FDA: 21 CFR 820.100(a)(4), 820.100(a)(5), 820.70(b), 820.75(c)

Additional country-specific requirements

Australia (TGA):

Confirm that the Manufacturer's procedure for dealing with substantial changes to a critical process (e.g., sterilization, processing materials of animal origin, processing materials of microbial or recombinant origin, or processes that incorporate a medicinal substance in a medical device), requires the Manufacturer to notify the Auditing Organisation of their plans before implementing a change to a critical process. The Auditing Organisation is to assess the proposed change before implementation by the Manufacturer, to determine if the requirements of the relevant conformity assessment procedure will still be met after the change. [TG(MD)R Sch3 P1 1.5(2)].

If the Manufacturer is also a holder of a TGA Conformity Assessment Certificate, then the Manufacturer is also required to notify the TGA of these changes, prior to implementation. [TG(MD)R Sch3 P1 1.5(2)]

Canada (HC):

Verify that the Manufacturer has a process or procedure for identifying a "significant change" to a class III or IV device. Verify that information about "significant changes" is submitted in a medical device license amendment application [CMDR 1, 34].

Japan (MHLW):

Confirm that when the Registered Manufacturing Site plans to make a significant change to a manufacturing process (e.g., sterilization site change, manufacturing site change), the Registered Manufacturing Site notifies the Marketing Authorization Holder so as the Marketing Authorization Holder can take appropriate regulatory actions [MHLW MO169: 29].

Assessing conformity

Process changes

Completing this audit task may involve linkages to other quality management system processes. Production processes require at least some degree of qualification, verification, or validation. If the change involves a validated process, review the medical device organisation's evaluation of the process change to determine if revalidation is needed.

For changes to production processes that are performed by suppliers, the audit team should consider selecting those suppliers for evaluation during audit of the Purchasing process. In cases where the medical device organisation makes a change to a validated process performed by a supplier, the audit team should evaluate whether re-validation is required. If re-validation of production processes is required, confirm the results show the process meets the planned result.

Links

Production and Service Controls, **Purchasing**

If the corrective action or preventive action involves changing a production process, the audit team should consider selecting this change for evaluation during audit of Production and Service Controls.

Task 8 – Identification and Control of Nonconforming Product

Verify that controls are in place to ensure that product which does not conform to product requirements is identified and controlled to prevent its unintended use or delivery.

Confirm that an appropriate disposition was made, justified, and documented and that any external party responsible for the nonconformity was notified.

Clause and Regulation

ISO: ISO 13485:2016: 8.3.1, 8.3.2

TGA: TG(MD)R Sch3 P1 1.4(5)(b)(iii)

ANVISA: RDC ANVISA 665/2022: Art. 117, Art. 118, Art. 120 section VI

MHLW/PMDA: MO169: 60-1, 60-2

FDA: 21CFR 820.90(a)

Additional country-specific requirements

None

Assessing conformity

Nonconforming product

The audit team should review procedures and controls for preventing the unintended distribution of nonconforming product. The auditor(s) may choose to select a sample of records involving nonconforming product that was in stock or returned to review how the procedures and controls were applied to control the nonconforming product.

Confirm the medical device organisation has established and maintained procedures that define the responsibility for review and the authority for the disposition of nonconforming product, as well as the execution of the review and disposition process. Disposition of nonconforming product must be documented.

The audit team may encounter situations where the medical device organisation's management has decided to authorize the use of nonconforming product under concession. Documentation must include the justification for use of nonconforming product and the signature of the individual(s) authorizing the use. Confirm that the medical device organisation's decision to use nonconforming product under concession has been made using appropriate risk-based decision making, including a determination that the finished device meets specified requirements. Be mindful of instances where the use of nonconforming product under concession has led to devices not meeting specifications.

Selecting records

When selecting records of nonconforming products to review, be mindful of the risk of the nonconformity to the finished device and the patient or user. Select records of nonconforming products to review where the nonconformity has a higher risk of adversely affecting the ability of the finished device to meet its essential design outputs or the nonconformity affects the safety and efficacy of the product.

Links

None

Task 9 – Action Regarding Nonconforming Product Detected After Delivery

Confirm that when nonconforming product is detected after delivery or use, *appropriate action is taken commensurate with the risk,* or potential risks, of the nonconformity.

Clause and Regulation

ISO: ISO 13485:2016: 8.3.3, 8.5.2

TGA: TG(MD)R Sch1 P1 2, TG(MD)R Sch3 P1 1.4(3)(a),(b), (5)(b)(iii), (f)

ANVISA: RDC ANVISA 665/2022: Art. 18, Art. 19, Art. 20, Art. 120 section VIII

MHLW/PMDA: MO169: 60-3, 63

FDA: 21 CFR 820.100(a)]

Additional country-specific requirements

None

Assessing conformity

Control and action based on risk

During this audit task, confirm that the medical device organisation has determined the control and actions to be taken on nonconforming products detected after delivery or use, commensurate with the risk associated with a product failure.

While it may not be necessary for the medical device organisation to recall nonconforming product from distribution as part of its identified actions needed to correct and prevent recurrence of the problem, confirm that the decision is made using an adequate risk justification.

Links

Medical Device Adverse Events and Advisory Notices Reporting

If the medical device organisation has taken field action on products already distributed, confirm that the appropriate MDSAP regulatory authorities have been notified, as necessary.

Task 10 – Internal Audit

Verify that internal audits of the quality management system are being conducted according to planned arrangements and documented procedures to ensure the quality management system is in compliance with the established quality management system requirements and applicable regulatory requirements, and to determine the effectiveness of the quality system.

Confirm that the internal audits include provisions for auditor training and independence over the areas being audited, corrections, corrective actions, follow-up activities, and the verification of corrective actions.

Clause and Regulation

ISO: ISO 13485:2016: 6.2, 8.2.4

TGA: TG(MD)R Sch3 P1 1.4(5)(b)(iii)

ANVISA: RDC ANVISA 665/2022: Art. 122, Art. 123, Art. 124

MHLW/PMDA: MO169: 22, 23, 56

FDA: 21 CFR 820.22, 820.100

Additional country-specific requirements

None

Assessing conformity

Internal audits

Internal audits are systematic, independent examinations of a medical device organisation's quality management system that are performed at defined intervals and at sufficient frequency to determine whether both quality management system activities and the results of such activities comply with quality management system procedures. Internal audits should also determine whether these procedures are implemented effectively and whether they are suitable to achieve quality management system objectives.

Auditors

Internal audits are to be conducted according to established procedures by appropriately trained individuals not having direct responsibility for the matters being audited. If possible, interview auditors and ask how audits are conducted, how long audits typically last, what documents are typically reviewed, etc.

Requirements

Internal audit procedures typically include requirements for auditor qualifications, requirements for the frequency of audits, specified functional areas to be audited, and audit plans (or the requirement to establish audit plans prior to the audit). Procedures should also include requirements for:

- How audit activities and results are to be communicated, addressed, and followed up (including re-audit, if necessary) and,
- How audit activities are to be documented.

Review and documentation

Management having responsibility for the matters audited must review the report of the quality audit. The dates and results of all quality audits (and subsequent re-audits, if necessary) must be documented, as well as any corrective or preventive actions resulting from the internal audits.

Links

Management

During the audit of the Management process, the audit team should confirm that the output of internal audits is an input to management review.

Task 11 – Information Supplied for Management Review

Determine if relevant information regarding nonconforming product, quality management system nonconformities, corrections, corrective actions, and preventive actions has been supplied to management for management review.

Clause and Regulation

ISO: ISO 13485:2016: 5.6.2

TGA: TG(MD)R Sch3 P1 1.4(5)(b)(iii)

ANVISA: RDC ANVISA 665/2022: Art. 12, Art. 120 section VII

MHLW/PMDA: MO169: 19

FDA: 21 CFR 820.100 (a)(7)]

Additional country-specific requirements

None

Assessing conformity

Management review

During the performance of this audit task, the auditor(s) may choose to select a recent, significant corrective or preventive action and determine which records or information regarding the event was submitted for management review.

Links

Management

During the audit of the Management process, the audit team should have confirmed that the status of corrective and preventive actions is an input to the management review.

During the audit of the Measurement, Analysis and Improvement process, determine if top management is aware of higher-risk quality problems, as well as significant corrective and preventive actions, when necessary.

Task 12 – Evaluation of Information from Post-Production Phase, Including Complaints

Confirm that the medical device organisation has made effective arrangements for gaining experience from the post-production phase, including postmarket surveillance, handling complaints, and investigating the cause of nonconformities related to advisory notices with provision for feedback into the Measurement, Analysis and Improvement process.

Select records of complaints for review that represent the highest risk to the user or have the largest impact on the ability of the device to meet its essential design outputs.

Verify that information from the analysis of production and post-production quality data was considered for amending the analysis of product risk, as appropriate.

Clause and Regulation

ISO: ISO 13485:2016: 4.2.1, 7.2.3, 7.5.4 (a), 8.2.1, 8.2.2, 8.5.1

TGA: TG(MD)R Sch1 P1 2, Sch3 P1 1.4(3), 1.4(5)(b)(iii) &1.4(5)(f)

ANVISA: RDC ANVISA 665/2022: Art. 121

HC: CMDR 57-58, 61.4-61.6

MHLW/PMDA: MO169: 6, 29, 43, 55-1, 55-2, 62

FDA: 21 CFR 820.198]

Additional country-specific requirements

Australia (TGA):
Verify that the medical device organisation has procedures for a post-marketing system that includes a systematic review of post-production experience (e.g., from; expert user groups, customer surveys, customer complaints and warranty claims, service and repair information, literature reviews, post-production clinical trials, user feedback other than complaints, device tracking and registration schemes, user reactions during training, adverse event reports).

Investigation should take place in a timely manner as the following is to be reported to the TGA or the Australian Sponsor, as soon as practicable, that is, as soon as the manufacturer is aware of the information to ensure that reporting timeframes for adverse events or the implementation of advisory notices (recalls) may be met by the Australian Sponsor [TG(MD)R Sch3 P1 1.4(3)(a-c)].

- information relating to:

  (i) any malfunction or deterioration in the characteristics or performance of the kind of device; or

  (ii) any inadequacy in the design, production, labelling or instructions for use of the kind of device, or in the advertising material for the kind of device; or

  (iii) any use in accordance with, or contrary to, the use intended by the manufacturer of the kind of device;

  that might lead, or might have led, to the death of a patient or a user of the device, or to a serious deterioration in his or her state of health; and

- information relating to any technical or medical reason for a malfunction or deterioration of a kind mentioned in subparagraph (i) **that has led the manufacturer to take steps to recall** devices of that kind that have been distributed. [TG(MD)R Sch3 P1 1.4(3A)]

Note:

- It is the information about adverse events, near adverse events that occurred in Australia, or information related to the initial decision to conduct a recall (proposed recall), that is to be reported to the TGA or the Sponsor.
- The manufacturer should not delay contact with the TGA or the Sponsor until after a recall has been conducted / completed.

In Australia the conduct of a recall within Australia is the responsibility of the Australian Sponsor in accordance with the Uniform Recall Procedure for Therapeutic Goods (URPTG) **Australian Uniform Recall Procedure for Therapeutic Goods.**

Brazil (ANVISA):
Verify that each manufacturer has established and maintains procedures to receive, examine, evaluate, investigate and document complaints. Such procedures must ensure that:

- Complaints are received, documented, analyzed, evaluated, investigated and documented by a formally designated unit

- Where applicable, complaints must be reported to the competent health authority
- Complaints must be examined to determine whether an investigation is necessary. When an investigation is not done, the unit must maintain a record that includes the reason that the investigation was not performed and the name of the persons responsible for the decision.
- Each manufacturer must examine, evaluate and investigate all complaints involving possible nonconformities of the product. Any claim for death, injury or threat to public health must be immediately reviewed, evaluated and investigated.
- The records of the investigation must include:
- Product name
- Date of receipt of the complaint
- Any control number used
- Name, address and telephone number of the complainant
- Nature of complaint
- Data and research results including actions taken [RDC ANVISA 665/2022: Art. 121].

Canada (HC):
Verify that the Manufacturer maintains records of reported problems related to the performance characteristics or safety of a device, including any consumer complaints received by the Manufacturer after the device was first sold in Canada, and all actions taken by the Manufacturer in response to the problems referred to in the complaints [CMDR Section 57].

Verify that the Manufacturer has established and implemented documented procedures that will enable it to carry out an effective and timely investigation of the problem reports through the customer complaints, and to carry out an effective and timely recall of the device [CMDR Section 58].

Verify that the Manufacturer has established and implemented documented procedures for preparing summary reports with respect to information received or of which they became aware:

During the previous 24 months for class II medical devices; and
During the previous 12 months for class III and IV medical devices. CMDR 61.4(1)]

Verify that summary reports cover:

- Adverse effects;
- Reported problems and complaints;
- Reportable incidents in accordance with section 59(1);
- Serious risks of injury to human health that are relevant to the safety of the medical device in accordance with section 61.2(2). [CMDR 61.4(2)]

Verify that the summary report includes a concise critical analysis of the information required in section 61.4(2) [CMDR 61.4(3)]

Verify that the manufacturer has determined, based on the analysis of data, whether what is known about the benefits and risks associated with the medical device has changed as follows:

- Any of the benefits that may be obtained by patients through the use of the medical device could be less;
- In respect of any of the risks:

    - the risk is more likely to occur; or,
    - if the risk occurs, the consequences for the health and safety of patients, users or other persons could be more serious.
- a new risk has been identified.

Verify that the manufacturer has included the conclusions drawn from the above-mentioned analysis in the summary report.

[CMDR 61.4(4)&(5)]

Verify that the manufacturer has notified the Minister in writing within 72 hours after concluding that what is known about the benefits and risks associated with the medical device has changed.

[CMDR 61.4(6)]

Verify that the manufacturer retains records of the summary reports, the information used in the preparation of the reports, and any associated notification to the Minister for seven years after the day on which they are created.

[CMDR 61.6]

Japan (MHLW/PMDA):
Confirm that the person operating the Registered Manufacturing Site has determined and implemented effective arrangement for communicating with the Japanese Marketing Authorization Holder in relation to customer feedback, including customer complaints, and advisory notices [MHLW MO169: 29].

United States (FDA):
Verify procedures have been defined, documented, and implemented for receiving, reviewing, and evaluating complaints by a formally designated unit. Procedures must ensure that:

- All complaints are processed in a uniform and timely manner
- Oral complaints are documented upon receipt
- Complaints are evaluated to determine whether the complaint represents an event which is required to be reported to FDA

Each manufacturer must review and evaluate all complaints to determine whether an investigation is necessary. When no investigation is made, the manufacturer must maintain a record that includes the reason no investigation was made and the name of the individual responsible for the decision not to investigate.

Any complaint of the failure of the device, labeling, or packaging to meet any of its specifications must be reviewed, evaluated, and investigated, unless such investigation has already been made for a similar complaint and another investigation is not necessary.

Any complaint that represents an event which must be reported to FDA must be promptly reviewed, evaluated, and investigated by a designated individual(s) and must be maintained in a separate portion of the complaint files or otherwise clearly identified. Records of investigation must include a determination of:

- Whether the device failed to meet specifications
- Whether the device was being used for treatment or diagnosis
- The relationship, if any, of the device to the reported incident or adverse event

When an investigation is made, a record of the investigation must be maintained by the formally designated unit. The record of investigation must include:

- The name of the device
- The date the complaint was received
- Any unique identifier (UDI), or Universal Product Code (UPC) or any other device identification(s) and control number(s) used
- The name, address, and telephone number of the complainant
- The nature and details of the complaint
- The dates and results of investigation
- Any corrective action taken

When the manufacturer's formally designated unit is located at a site separate from the manufacturing establishment, the investigated complaint(s) and the record(s) of investigation must be reasonably accessible to the manufacturing establishment [21 CFR 820.198].

Assessing conformity

Evaluation of post-production data

During the review of quality data sources that serve as inputs to the Measurement, Analysis and Improvement process, the audit team may choose to review complaints and customer feedback. Confirm that complaints are handled as required by the MDSAP participating regulatory authorities. Complaints can be an important source of information regarding quality problems and are often indicative that distributed devices (or their packaging or labeling) did not meet specified requirements.

Selecting records

One method to analyze complaints and customer feedback is to review the analysis of complaint data and postmarket surveillance activities and select one or more complaint failure modes, **preferably failure modes associated with higher risk to the patient or user**. Once the audit team has selected complaint failure modes, the auditor(s) can select a sample of complaints from those failure modes and confirm the complaints are handled appropriately, including investigation and implementation of corrective action when necessary.

Risk management

Information from post-production sources, including complaints, customer feedback, and postmarket surveillance can provide important information for the risk management activities for the device. In particular, previously unidentified risks discovered during the post-production monitoring may indicate a need for improving the risk management process or may indicate a need for design changes. Additionally, on the basis of post-production quality data, the medical device organisation may choose to enact new or more stringent controls to maintain an acceptable level of product risk.

Links

Medical Device Adverse Events and Advisory Notices Reporting; **Design and Development**; **Production and Service Controls**

During the review of complaints and feedback, confirm that individual medical device reports were made to the appropriate regulatory authorities when necessary.

Information from reviewing post-production sources, including complaints and postmarket surveillance reports, should guide the audit team in selecting designs to review and production processes to audit.

Task 13 – Communications with External Parties Involved on Complaints

Where investigation determines that activities outside the medical device organisation, contributed to a customer complaint, verify that records show that relevant information was exchanged between the organisations involved.

Clause and Regulation

ISO: ISO 13485:2016: 4.1.5, 7.4.1, 8.3.1

ANVISA: RDC ANVISA 665/2022: Art. 120 section VI

MHLW/PMDA: MO169: 5-5, 37, 60-1

FDA: 21 CFR 820.100(a)(6)

Additional country-specific requirements

None

Assessing conformity

Complaints and nonconformities attributed to supplied product

Confirm that information related to quality problems or nonconforming product, including complaints, is disseminated to those directly responsible for assuring the quality of product. This includes instances where investigation reveals the underlying cause of the complaint or nonconforming product to be related to the supplied product. The medical device organisation should notify the supplier of the quality problem and appropriate corrective action must be taken when necessary. Failure of an outside medical device organisation to provide products that meet specified requirements may disqualify them as an acceptable or approved supplier.

Links

Purchasing

During the audit of the Measurement, Analysis and Improvement process, if significant nonconformities are related to the supplied product, the audit team should consider selecting those suppliers for evaluation during the audit of the medical device organisation's Purchasing process.

Task 14 – Evaluation of Complaints for Adverse Event Reporting

Verify that the medical device organisation has defined and documented procedures for the evaluation of complaints for adverse event reporting.

Confirm that decisions to not report complaints were made according to established procedures and a documented rationale.

Clause and Regulation

ISO: ISO 13485:2016: 4.2.1, 7.2.3, 8.2.3

TGA: TG(MD)R Sch3 P1 1.4(3)(c)

ANVISA: RDC ANVISA 665/2022: Art. 120 section VIII, RDC ANVISA 67/2009

HC: CMDR 59-61.1

MHLW/PMDA: MO169: 6, 29, 55-3

FDA: 21 CFR 803

Additional country-specific requirements

Refer to MDSAP process Medical Device Adverse Events and Advisory Notices Reporting process.

Assessing conformity

Individual adverse event reports

An output of the activities associated with the Measurement, Analysis and Improvement process, such as complaint handling, is the evaluation of individual adverse events to determine whether individual adverse event reports are required to be submitted to the regulatory authorities. During review of complaint records, assess whether the complaint was evaluated to determine whether the criteria for reporting was met and confirm the appropriate reports and information was provided to the regulatory authority when appropriate. Ensure the individual adverse event reports contain accurate information by comparing the submitted reports to the associated complaint and complaint investigation.

Reportable events are often an important Measurement, Analysis and Improvement process quality data source since these events are indicative that the finished device has caused death, serious injury, or has malfunctioned in a manner such that if the malfunction were to recur, the result could be death or serious injury. Any death, even if the medical device organisation attributes it to user error, is considered to have potentially high risk associated with it. Confirm that reportable events were evaluated for corrective action when necessary.

Links

None

Task 15 – Evaluation of Quality Problems for Advisory Notices

Confirm that the manufacturer has made effective arrangements for the timely evaluation of quality problems involving distributed product for potential issuance and implementation of advisory notices.

Select records for review of quality problems that were evaluated for potential issuance of advisory notices (include records where a decision was made not to issue an advisory notice as well as records of decision to issue advisory notices) and assess whether the organisation has taken actions appropriately based on risk and documented the rationale.

Clause and Regulation

ISO: ISO 13485:2016: 4.2.1, 7.2.3, 8.3.3

TGA: TG(MD)R Sch3 P1 1.4(3)(c)

ANVISA: RDC ANVISA 665/2022: Art. 120 section VIII, RDC ANVISA 551/2021

HC: CMDR 63-65.1

MHLW/PMDA: MO169: 6, 29, 60-3

FDA: 21 CFR 806, 820.100(a)]

Additional country-specific requirements

Refer to MDSAP process Medical Device Adverse Events and Advisory Notices Reporting

Assessing conformity

Advisory notices

An output of the activities associated with the Measurement, Analysis and Improvement process, including complaint handling and the discovery of nonconforming product that has been distributed, may be the determination of whether an advisory action is necessary. When applicable, select quality issues that were evaluated for potential advisory actions and assess whether appropriate actions were taken and the organisation's decisions were justified, based on the risk of the quality problem to device users. This may include assessing whether the organisation appropriately determined the scope of the quality issue. For example, if the organisation determined that a product is distributed in three MDSAP jurisdictions, but the advisory notice was only issued in one MDSAP jurisdiction, the audit team should determine whether the organisation has an appropriate documented justification for the scope of the advisory action.

The quality problems that led to an advisory notice is often an important quality data source for the corrective actions process since these events are indicative that the finished device does not meet specified requirements and has the potential for unreasonable risk to the user. Confirm that quality problems that were evaluated by the organisation for potential advisory actions were evaluated for corrective action. If corrective action was taken, evaluate the mechanism by which the medical device organisation assured the action is effective and does not adversely affect the ability of the device to meet specified requirements. If corrective action was not taken for quality problems associated with a correction, removal, or advisory notice; or action appears unduly delayed considering the risk of the quality problem, review the medical device organisation's rationale for not undertaking corrective action and confirm that the decision is appropriate using a risk-based decision-making process.

Decisions to not report a correction, removal, or advisory notice

The audit team may encounter instances where the medical device organisation has performed activities involving issuance of advisory notices without notifying regulatory authorities in the markets in which the device is marketed. In these situations, review the medical device organisation's rationale for not reporting these actions and ensure that the rationale is appropriate. Verify that records of the action are maintained.

Links

None

Task 16 – Top Management Commitment to Measurement, Analysis, and Improvement Process

Determine, based on the assessment of the Measurement, Analysis and Improvement process overall, whether management provides the necessary commitment to detect and address product and quality management system nonconformities, and ensure the continued suitability and effectiveness of the quality management system.

Clause and Regulation

ISO: ISO 13485:2016: 4.1.3, 5.2, 8.1, 8.5.1

ANVISA: RDC ANVISA 665/2022: Art. 5°, Art. 6°, Art. 7°

MHLW/PMDA: MO169: 5-3, 11, 54, 62

Additional country-specific requirements

None

Links

None

Chapter 4 - Medical Device Adverse Events and Advisory Notices Reporting

The Medical Device Adverse Events and Advisory Notices Reporting process may be audited as a linkage from the Measurement, Analysis and Improvement process.

Auditing the Medical Device Adverse Events and Advisory Notices Reporting

Purpose: The purpose of auditing the Medical Device Adverse Events and Advisory Notices Reporting is; to verify that the medical device organisation's processes ensure that individual device-related adverse events and, advisory notices involving medical devices are reported to regulatory authorities within required timeframes.

Outcomes: As a result of the audit of the Medical Device Adverse Events and Advisory Notices Reporting process, objective evidence will show whether the medical device organisation has:

A) Defined processes to ensure individual device-related adverse events are reported to regulatory authorities as required
B) Ensured that advisory notices are reported to regulatory authorities and authorized representatives when necessary
C) Maintained appropriate records of individual device-related adverse events and advisory notices

Links to Other Processes:

Measurement, Analysis and Improvement

Task 1 – Notification of adverse events

Verify that the medical device organisation has a process in place for identifying device-related events that may meet reporting criteria as defined by participating regulatory authorities.

Verify that the complaint process has a mechanism for reviewing each complaint to determine if a report to a regulatory authority is required.

Confirm that the medical device organisation's processes meet the timeframes required by each regulatory authority where the product is marketed.

Clause and Regulation

ISO: ISO 13485:2016: 4.2.1, 7.2.3, 8.2.2, 8.2.3

Country-specific requirements

Australia (TGA):

Manufacturers are required to implement a post-marketing system that includes provisions to report, as soon as practicable information about adverse events and near adverse events to the TGA or the Australian Sponsor. – e.g., *Therapeutic Goods (Medical Devices) Regulations 2002* Schedule 3 Part 1 Clause 1.4(3)(c). This includes:

- information relating to:

  (i) any malfunction or deterioration in the characteristics or performance of the kind of device; or

  (ii) any inadequacy in the design, production, labelling or instructions for use of the kind of device, or in the advertising material for the kind of device; or

  (iii) any use in accordance with, or contrary to, the use intended by the manufacturer of the kind of device;

that might lead, or might have led, to the death of a patient or a user of the device, or to a serious deterioration in his or her state of health. [TG(MD)R Sch3 P1 1.4(3A)]**Note:** Adverse events may be reported on-line to the TGA, by the Manufacturer or Sponsor, at **https://www.tga.gov.au/reporting-problems**.

Brazil (ANVISA):
Verify that a post-market surveillance system is established and implemented in the medical device organisation and integrated into the Quality System, with procedures and workflows established to ensure the correct and the prompt identification of adverse events, the performance of investigations and use of the results to improve the safety and effectiveness of the device when necessary [RDC ANVISA 67/2009 – Art. 6º].

For domestic manufacturers (also applies to legal representatives in Brazil) - verify that top management has designated a professional to be responsible for the post-market surveillance system. This designation shall be documented [RDC ANVISA 67/2009 – Art. 5º].

Verify that the medical device organisation has mechanisms for processing and recording complaints, conducting investigations, and providing feedback directly to the complainant, or in the case of an international manufacturer, to their legal representative in Brazil, as necessary [RDC ANVISA 67/2009 – Art. 6º, Art. 7º, Art. 9º].

Verify that the medical device organisation has notified the regulatory authority about problems associated with their devices, including adverse events (critical or non-critical), any technical defect that was identified regarding products already marketed, anything that can cause a serious hazard to public health, or cases of counterfeit [RDC ANVISA 67/2009 – Art. 8º].

For international manufacturer, verify that the legal representative in Brazil is aware about the occurrence of possibility of death, serious hazard to public health or cases of counterfeit, associated with their products exported to Brazil [RDC ANVISA 67/2009 – Art. 8º].

Canada (HC):
CMDR 59-61.1, 61.2-61.3

Verify that the Manufacturer and the importer of a medical device make a preliminary and final report to the minister concerning any incident occurring inside Canada involving a device sold (authorized for sale) in Canada that:

- Is related to the failure of the device or deterioration in its effectiveness or any inadequacy in its labeling or in its directions for use; and
- Has led to death or serious deterioration in the state of health of a patient, user, or other person, or could do so if it were to recur [CMDR 59(1)].

[Note: the requirement to report incidents occurring outside of Canada no longer applies to class II-IV devices authorized for sale in Canada. The requirement nonetheless still applies for class I devices.[CMDR 59(1.1)]]

Verify that the Manufacturer or other person becoming aware of an event that led to the death or serious deterioration in the state of health of a patient, a user, or other person provides information in a preliminary report within 10 days after the person becomes aware of the event or occurrence [CMDR 60 (1)(a)(i)].

Verify that the Manufacturer or other person becoming aware of an event that the recurrence of which might lead to the death or serious deterioration in the state of health of a patient, a user, or other person provides information in a preliminary report within 30 days after the person becomes aware of the event or occurrence [CMDR 60 (1)(a)(ii)].

Verify that Manufacturer has made effective arrangements to submit preliminary reports to the Minister and that the reports contain [CMDR 60 (2)]:

- the identifier of any medical device that is part of a system, test kit, medical device group,
- medical device family or medical device group family
- if the report is made by:
    - the Manufacturer:
        - the name and address of that Manufacturer and of any known importer, and
        - the name, title and telephone and facsimile numbers of a representative of the Manufacturer to contact for any information concerning the incident, or
    - the importer of the device:
        - the name and address of the importer and of the Manufacturer, and
        - the name, title and telephone and facsimile numbers of a representative of the importer to contact for any information concerning the incident.
- the date on which the incident came to the attention of the Manufacturer or importer
- the details known in respect of the incident, including the date on which the incident occurred
- and the consequences for the patient, user or other person
- the name, address and telephone number, if known, of the person who reported the incident to the Manufacturer or importer
- the identity of any other medical devices or accessories involved in the incident, if known
- the Manufacturer's or importer's preliminary comments with respect to the incident
- the course of action, including an investigation, that the Manufacturer or importer proposes to follow in respect of the incident and a timetable for carrying out any proposed action and for submitting a final report
- a statement indicating whether a previous report has been made to the Minister with respect to the device and, if so, the date of the report.

If a preliminary report required by section 60 is submitted to the Minister and/or Importer, verify that the Manufacturer has submitted a final report to the Minister in writing in accordance with the timetable established under CMDR 60(2)(h) and the final report contains [CMDR 61(1)(2)]:

- a description of the incident, including the number of persons who have experienced a serious deterioration in the state of their health or who have died
- a detailed explanation of the cause of the incident and a justification for the actions taken in respect of the incident
- any actions taken as a result of the investigation, which may include:
    - increased post-market surveillance of the device
    - corrective and preventive action respecting the design and manufacture of the device, and
    - recall of the device.

Manufacturers and Importers can use the **"Mandatory Medical Device Problem Reporting Form for Industry**" to submit preliminary and final incident report.

If the reports required by section 60 and 61 are submitted to the Minister just by the Importer, verify that the Manufacturer has advised the Minister in writing that the reports the Manufacturer and importer would have submitted were identical and that the Manufacturer has permitted the importer to prepare and submit reports to the Minister on the Manufacturer's behalf [CMDR 61.1]. This notification is to be done using **Health Canada form "FRM-0090"**.

Verify that the Manufacturer of a medical device submits to the Minister information regarding serious risk of injury to human health related to the safety of the device that it becomes aware of or receives, regarding:

(a) Risks that have been communicated by any Regulatory Agency that is set out in the **List of Regulatory Agencies for the Purposes of Section 61.2 of the Medical Devices Regulations**, or by any person who is authorized to manufacture or sell a medical device within the jurisdiction of such a Regulatory Agency, and the manner of the communication;
(b) changes that have been made to the labelling of any medical device and that have been communicated to or requested by any Regulatory Agency that is set out in the list referred to in paragraph (a); and
(c) recalls, reassessments and suspensions or revocations of authorizations, including licences, in respect of any medical device, that have taken place within the jurisdiction of any Regulatory Agency that is set out in the list referred to in paragraph (a). [CMDR 61.2(2)]

For greater clarity, serious risk of injury to human health is defined as a hazard associated with the medical device that is relevant to the safety of the medical device and that, without risk mitigation, would likely:

- be life-threatening
- result in persistent or significant disability or incapacity
- require inpatient hospitalization or prolonged hospitalization
- result in a serious health consequence such as loss of function or debilitating chronic pain
- result in death

Verify that manufacturers submit notifications of foreign risks within 72 hours after receiving or becoming aware that a notifiable action has been taken in response to a serious risk, whichever comes first. [CMDR 61.2(3)]

Foreign Risk Notifications can be submitted using the "**Medical Device Foreign Risk Notification Form for Industry**".

If the notification required by section 61.2 is submitted to the Minister just by the Importer, verify that the Manufacturer has advised the Minister in writing that the report the Manufacturer and importer would have submitted were identical and that the Manufacturer has permitted the importer to prepare and submit reports to the Minister on the Manufacturer's behalf [CMDR 61.3(2)]. This notification is to be done using **Health Canada form "FRM-0090"**.

Japan (MHLW):
Marketing Authorization Holders are required to implement post market safety activities in accordance with domestic (Japanese) regulatory requirements in addition to the QMS requirements.

The persons operating the Registered Manufacturing Sites are not required to report any adverse event directly to a Regulatory Authority but shall report any adverse event which meets the criteria specified by the Ordinance for Enforcement of PMD Act Article 228-20 to the Marketing Authorization Holder [MHLW MO169: 55-3].

Verify that the person operating the Registered Manufacturing Site provides events which meets the following criteria defined by the Ordinance for Enforcement of PMD Act Article 228-20.2 (see below), to the Marketing Authorization Holder in a timely manner.

- The following malfunction events which may cause or may have caused health damage:
- Serious event (domestic and foreign)
- Unlabeled non-Serious event (domestic)
- The following Adverse Reaction events which were caused or might have been caused by the malfunction of a medical device:
- Serious event (domestic and foreign)

- Unlabeled non-Serious event (domestic)
- Any action taken for preventing the occurrence or expansion of public health hazard in relation to a medical device which is marketed in foreign countries and is equivalent to the one marketed in Japan. The action includes but not limited to:
- Suspension of manufacturing, importing or selling
- Recall and
- Abolishment.
- Study report that indicates:
- Possibility of event of cancer and other serious illness, injury or death caused by malfunction of a medical device (domestic and foreign), or by infectious disease arising from usage of a device (domestic and foreign)
- Significant occurrence rate change of event etc. caused by malfunction of a medical device (domestic and foreign)
- Significant occurrence rate change of infectious disease caused by usage of a medical device (domestic and foreign)
- The fact that a medical device is less effective than claimed when approved.

United States (FDA):
21 CFR 803: Medical Device Reporting

Determine whether the manufacturer has developed a process for reporting to FDA incidents involving device-related deaths, serious injuries, and reportable malfunctions that occur within and outside the United States if the same or similar device is marketed to the United States.

Confirm that the manufacturer has developed, maintained, and implemented written medical device reporting (MDR) procedures for the following:

- Internal processes that provide for:
    - Timely and effective identification, communication, and evaluation of events that may be subject to MDR requirements
    - A standardized review process or procedure for determining when an event meets the criteria for reporting
    - Timely transmission of complete medical device reports to FDA
- Documentation and recordkeeping requirements for:
    - Information that was evaluated to determine if an event was reportable
    - All medical device reports and information submitted to FDA
- Processes that ensure access to information that facilitates timely follow-up and audit.

Verify that reports are made within 30 calendar days after the day that the manufacturer receives or otherwise becomes aware of information, from any source, that reasonably suggests that a device that is marketed may have caused or contributed to a death or serious injury:

- Confirm the manufacturer's MDR files contain the following:
- Information (or references to information) related to the adverse event, including all documentation of deliberations and decision-making processes used to determine if a device- related death, serious injury, or malfunction was or was not reportable to FDA
- Copies of all MDR forms and other information related to the event submitted to FDA.

If a device has malfunctioned and this device or a similar device that is marketed would be likely to cause or contribute to a death or serious injury, if the malfunction were to recur, quarterly summary reporting is acceptable for most device product codes.

If the manufacturer maintains MDR event files as part of the complaint file, ensure that the manufacturer has prominently identified these records as MDR reportable events. FDA will not consider a submitted MDR report to comply with 21 CFR 803 unless the manufacturer evaluates an event in accordance with the quality management system requirements. Confirm that the manufacturer has documented and maintained in the MDR event files an explanation of why the manufacturer did not submit or could not obtain any information required by 21 CFR 803, as well as the results of the evaluation of each event.

Compare the information submitted on the individual medical device report to the information contained in the associated complaint and confirm the medical device report contains all information related to the event that is reasonably known to the manufacturer.

Verify the manufacturer has submitted reports to FDA no later than 5 workdays after the day that the manufacturer becomes aware that:

- An MDR reportable event necessitates remedial action to prevent an unreasonable risk of substantial harm to the public health. The manufacturer may become aware of the need for remedial action from any information, including any trend analysis; or
- FDA has made a written request for the submission of a 5-day report. If the manufacturer receives such a written request from FDA, the manufacturer must submit, without further requests, a 5-day report for all subsequent events of the same nature that involve substantially similar devices for the time period specified in the written request. FDA may extend the time period stated in the original written request if FDA determines it is in the interest of the public health.

Verify the manufacturer submitted supplemental reports within one month of obtaining information that was not submitted in an initial report.

Confirm that medical device reports include the unique device identifier (UDI) that appears on the device label or on the device package.

Medical device reports submitted to FDA must be submitted electronically via the Electronic Submissions Gateway (ESG) using eSubmitter or the AS2 Gateway-to-Gateway using HL7 ICSR XML software.

Links

Measurement, Analysis and Improvement

Reports of individual adverse events are a form of feedback and must be analyzed as appropriate for trends requiring improvement or corrective action.

During the audit of the Measurement, Analysis and Improvement process, confirm that the medical device organisation has considered individual adverse events and trends of adverse events in the analysis of data.

Task 2 – Notification of advisory notices

Verify that advisory notices are reported to regulatory authorities when necessary and comply with the timeframes and recordkeeping requirements established by participating regulatory authorities.

Clause and Regulation

ISO: ISO 13485:2016: 4.2.1, 7.2.3, 8.2.3, 8.3.3

Country specific requirements

Australia (TGA):

Manufacturers are required to implement a post-marketing system that includes a requirement to inform the TGA or the Australian Sponsor as soon as practicable if the manufacturer proposes to take steps to recall devices that have been distributed in Australia [*Therapeutic Goods (Medical Devices) Regulations 2002* Schedule 3 Part 1 Clause 1.4 (3A)].

- The report is to include information relating to any technical or medical reason for any malfunction or deterioration in the characteristics or performance of the kind of device that has led the manufacturer to take steps to recall devices of that kind that have been distributed. [TG(MD)R Sch3 P1 1.4(3A)]Manufacturers are to inform the TGA or the Australian Sponsor as soon as they are aware that a recall is to be conducted (proposed recalls)
- It is the information that has led to a decision to conduct a recall (proposed recall) that is to be reported to the TGA or the Sponsor as soon as practicable, as soon as the manufacturer is aware, not after investigations, corrections and corrective actions have been implemented and concluded.
- The conduct of a recall within Australia is the responsibility of the Sponsor in accordance with the **Uniform Recall Procedure for Therapeutic Goods (URPTG)**.

Brazil (ANVISA):

Verify that procedures and workflows were established in order to identify when field actions (recalls and corrections) are necessary, in accordance with the medical device organisation's post-market surveillance system and quality system [RDC ANVISA 67/2009 - Art. 6º, RDC ANVISA 551/2021 – Art. 1º, Art. 5º].

Verify that the medical device organisation keeps records regarding field actions performed, including those that do not need to be reported to regulatory authorities [RDC ANVISA 551/2021 – Art. 4º; Art. 6º, Art. 10, Art. 11, Art. 16].

For domestic manufacturers (also applies to legal representatives in Brazil) - verify that the medical device organisation has sent to the regulatory authority the reports requested, according to Brazilian regulation [RDC ANVISA 551/2021– Art. 10, Art. 11].

Verify that the medical device organisation has performed field actions based on potential or concrete evidence that their product does not comply with essential requirements of safety and effectiveness [RDC ANVISA 551/2021 – Art. 4º, Art. 6º, Art. 7º, Art. 13, Art. 14, Art. 15].

For domestic manufacturers (also applies to legal representatives in Brazil) - verify that the medical device organisation has performed field actions when required by the regulatory authority [RDC ANVISA 551/2021 – Art. 6º].

For domestic manufacturers (also applies to legal representatives in Brazil) - verify that the medical device organisation notified the regulatory authority regarding field actions, in accordance with requirements and deadlines established per Brazilian regulation [RDC ANVISA 551/2021 – Art. 7º, Art. 8º].

For international manufacturers, verify that the legal representative in Brazil was aware about the occurrence of field actions performed on products exported to Brazil [RDC ANVISA 67/2009 – Art. 8º].

Canada (HC):
Medical Device Regulations SOR/98-282, Section 63 – 65.1:

Verify that the Manufacturer and the importer of a medical device, on or before undertaking a recall of a device provide the minister with the following information [CMDR 64]:

- the name of the device and its identifier, including the identifier of any medical device that is part of a system, test kit, medical device group, medical device family or medical device group family
- the name and address of the Manufacturer and importer, and the name and address of the establishment where the device was manufactured, if different from that of the Manufacturer
- the reason for the recall, the nature of the defectiveness or possible defectiveness and the date on and circumstances under which the defectiveness or possible defectiveness was discovered
- an evaluation of the risk associated with the defectiveness or possible defectiveness
- the number of affected units of the device that the Manufacturer or importer:
- manufactured in Canada,
- imported into Canada,
- sold in Canada.
- the period during which the affected units of the device were distributed in Canada by the Manufacturer or importer
- the name of each person to whom the affected device was sold by the Manufacturer or importer and the number of units of the device sold to each person
- a copy of any communication issued with respect to the recall
- the proposed strategy for conducting the recall, including the date for beginning the recall, information as to how and when the Minister will be informed of the progress of the recall and the proposed date for its completion
- the proposed action to prevent a recurrence of the problem
- the name, title and telephone number of the representative of the Manufacturer or importer to contact for any information concerning the recall.

Verify that as soon as possible after the completion of the recall the Manufacturer and the importer reports to the minister the results of the recall and the action taken to prevent a recurrence of the problem [CMDR 65].

If the reports required by section 64 and 65 are submitted to the Minister just by the Importer, verify that the Manufacturer has advised the Minister in writing that the reports the Manufacturer and importer would have submitted were identical and that the Manufacturer has permitted the importer to prepare and submit reports to the Minister on the Manufacturer's behalf [CMDR 65.1].

For greater clarity and consistency with **section 4.1.1 of Health Canada's Recall Policy for Health Products (POL-0016)**, AOs and auditors are advised of the following interpretations of the timelines in sections 64 and 65 of the *Medical Devices Regulations*:

*Section 64 of the Medical Devices Regulations requires the manufacturer and importer of a medical device to provide Health Canada with information concerning a recall "**on or before undertaking a recall**". This is interpreted to mean that the manufacturer and importer must submit to Health Canada as much recall information as is known **within 24 hours of having made the decision to recall**. This initial notification may be made verbally or in writing. This must be followed by a written report containing full information as required by section 64 **within three business days of starting the recall**. As*

per section 65 of the Medical Devices Regulations, a report on the results of the recall and the action taken to prevent a recurrence of the problem must be submitted ***as soon as possible after the completion of a recall****.*

Japan (MHLW):
Marketing Authorization Holders are required to report advisory notices to Regulatory Authorities [PMD Act 68-11].

Confirm that the person operating the Registered Manufacturing Site has determined and implemented effective arrangement for communicating with the Marketing Authorization Holder in relation to advisory notices [MHLW MO169: 29].

Note: Persons operating Registered Manufacturing Sites are not required to report any advisory notice directly to regulatory authority, but shall communicate with the Marketing Authorization Holder, so they can take necessary regulatory actions.

United States (FDA):
21 CFR 806: Medical Devices; Reports of Corrections and Removals

Verify that the manufacturer has a process in place to notify FDA in the event of actions concerning device corrections and removals and to maintain records of those corrections and removals.

Verify that the written report to FDA of any correction or removal initiated to reduce a risk to health or remedy a violation of the U.S. Food, Drug and Cosmetic Act is reported within 10 working days of initiating the correction or removal. Confirm that the report contains the unique device identifier (UDI) that appears on the device label or on the device package, or the device identifier, Universal Product Code (UPC), model, catalog, or code number of the device and the manufacturing lot or serial number of the device or other identification number.

Confirm that the manufacturer maintains records of any correction and removal not required to be reported to FDA (e.g., corrections and removals conducted to correct a minor violation of the U.S. Food, Drug and Cosmetic Act or no risk to health). Confirm that records of corrections and removals not required to be reported contain the unique device identifier (UDI) that appears on the device label or on the device package, or the device identifier, Universal Product Code (UPC), model, catalog, or code number of the device and the manufacturing lot or serial number of the device or other identification number.

Links

Measurement, Analysis and Improvement

Corrections and removals are indicative that the product or process does not meet specified requirements or planned results and the nonconformity was not detected prior to distribution. When specified requirements or planned results are not achieved, correction and corrective action must be taken as necessary.

During the audit of the Measurement, Analysis and Improvement process, confirm the medical device organisation has taken appropriate correction regarding devices already distributed, and taken appropriate corrective action to prevent recurrence of the condition(s) that caused the nonconformity.

Chapter 5 - Design and Development

The purpose of the Design and Development process is to control the design of a medical device and to assure that the device meets user needs, intended use, and its specified requirements. Attention to design and development planning, identifying design inputs, developing design outputs, verifying that design outputs meet design inputs, validating the design, controlling design changes, reviewing design results, transferring the design to production, and compiling the appropriate records will help a medical device organisation assure that resulting designs will meet user needs, intended uses, and requirements.

The **management representative** is responsible for ensuring that the requirements of the quality management system have been effectively defined, documented, implemented, and maintained. Prior to the audit of a process, it may be helpful to interview the management representative (or designee) to obtain an overview of the process and a feel for management's knowledge and understanding of the process.

Audit of the Design and Development process will follow audit of the Measurement, Analysis and Improvement process per the MDSAP audit sequence. Information regarding product or quality system nonconformities noted during audit of the Measurement, Analysis and Improvement process should be considered when making decisions as to the design and development projects, including design changes resulting from corrective actions, to be reviewed during the audit of the Design and Development process.

Review of the Design and Development process will also provide an opportunity to evaluate how the medical device organisation has utilized risk management activities to ensure design inputs are comprehensive and meet user needs, to confirm that risk control measures that were planned have been implemented in the design, and to verify that risk control measures are effective in controlling or reducing risk.

Additionally, review of design and development activities will assist the audit team during the audit of the medical device organisation's Purchasing process because the auditor(s) has an opportunity to select suppliers for review whose activities are associated with higher risk to the product or whose activities are critical to the essential design outputs. The review of design and development activities also provides information to assist the audit team in performing a final evaluation of the Management process at the conclusion of the audit.

Auditing the Design and Development Process

Purpose: The purpose of auditing the Design and Development process is to verify that the medical device organisation establishes, documents, implements, and maintains controls to ensure that medical devices meet user needs, intended uses, and specified requirements.

Outcomes: As a result of the audit of the Design and Development process, objective evidence will show whether the medical device organisation has:

A) Defined, documented and implemented procedures to ensure medical devices are designed according to specified requirements
B) Effectively planned the design and development of a device
C) Established mechanisms, including systematic review, for addressing incomplete, ambiguous or conflicting requirements
D) Determined the internally or externally imposed requirements for safety, function, and performance for the intended use, including regulatory requirements, risk management, and human factors requirements
E) Verified that design outputs satisfy design input requirements
F) Identified and mitigated, to the extent practical, the risks associated with the device, including the device software

G) Ensured that changes to the device design are controlled, the risks associated with the design change are identified and mitigated, to the extent practical, and that the device will continue to perform as intended
H) Performed design validation to ensure devices conform to user needs and intended use
I) Confirmed that the design is correctly translated into production methods and procedures

Links to Other Processes:

Purchasing; **Production and Service Controls**; **Measurement, Analysis and Improvement**; **Device Marketing Authorization and Facility Registration**

Task 1 – Identification of devices subject to design and development procedures; technical documentation

Verify that those devices that are, by regulation, subject to design and development procedures have been identified. (See Annex 1)

Clause and Regulation

ISO: ISO 13485:2016: 4.1.1, 4.2.1, 7.1, 7.3.10

TGA: TG(MD)R Division 3.2

MHLW/PMDA: MO169: 5-1, 6, 26, 36-2

FDA: 21 CFR 820.30(a)]

Additional country-specific requirements

Australia (TGA):
When a Manufacturer applies TG(MD)R Division 3.2 and selects the Full Quality Assurance conformity assessment procedures [TG(MR)R Schedule 3, Part1, (excluding or including clause 1.6)], quality management system procedures for design and development must be available.

In addition, for all classes of devices, the guidance provided for the audit of technical documentation in **Annex 1** is to be followed to ensure the availability of objective evidence that demonstrates compliance with the Essential Principles of Safety and Performance.

Brazil (ANVISA):
According to Brazilian legislations, there is no exception to design control.

If design activities are outsourced, verify that the manufacturer has a complete device master record for the device and records of the design transfer to production [RDC ANVISA 665/2022: Art. 52, Art. 63].

Canada (HC):
With respect to Class II devices that are not subject to Design and Development controls, verify that the manufacturer has objective evidence to establish that Class II devices meet the safety and effectiveness requirements of section 10 to 20 [CMDR 9, 10 to 20].

Japan (MHLW):
Class 1 devices are not required to comply with the requirements of MHLW MO169:30-36-2, which are equivalent to the requirements of design and development in ISO13485 [MHLW MO169: 4.1].

Assessing conformity

Absence of design activity

The audit team may encounter situations where the medical device organisation has not completed any design projects, has no ongoing or planned design projects, and has not made any design changes (i.e., there has been no design activity). At the minimum, verify that the medical device organisation maintains a defined and documented design change procedure. A medical device organisation may also have defined and documented other design control procedures. For that type of medical device organisation — a medical device organisation with no design activity, including no design changes — assess the procedures the medical device organisation has in place. The audit team can then proceed to the audit of the next process.

Outsourced design activities

In cases where design activities (development and changes) are completely outsourced by the medical device organisation, the audit team must verify (at a minimum) that the controls and records related to the design transfer to production have been determined and that the production line, implemented in the medical device organisation's site, meets the production requirements established during the design and development of the device.

In these cases, the medical device organisation shall ensure that the supplier complies with the requirements of design and development, established by Medical devices – Quality management systems – Requirements for regulatory purposes (ISO 13485:2016), the Quality Management System requirements of the Conformity Assessment Procedures of the Australian Therapeutic Goods (Medical Devices) Regulations (TG(MD)R Sch3), Brazilian Good Manufacturing Practices (RDC ANVISA 665/2022), Japanese QMS Ordinance (MHLW MO 169), the Quality System Regulation (21 CFR Part 820), and any other specific requirements of medical device regulatory authorities participating in the MDSAP program.

Links

Purchasing

If the medical device organisation outsources design and development activities, or any portion of the design and development, confirm that the medical device organisation treats the outsourced medical device organisation as a supplier, has appropriately qualified and maintains control over the supplier, communicates requirements to the supplier, including regulatory requirements, and has arrangements to verify that the design and development activities satisfy those requirements.

Task 2 – Selection of a completed design and development project

Select a completed (where applicable) design and development project for review.

Priority criteria for selection:

1. complaints or known problems with a particular device
2. product risk
3. recent design changes, particularly design changes made to correct quality problems associated with the device design
4. age of design (prefer most recent)
5. designs that have not been recently audited

Links

Measurement, Analysis and Improvement

At this point in the audit, the audit team will have already reviewed the Measurement, Analysis and Improvement process. If the auditors noted corrective actions that resulted in design changes, or noted product nonconformities that have been attributed to the design of the device, the audit team should consider selecting those designs for review.

The audit team should be particularly mindful of how the identified quality problems from the Measurement, Analysis and Improvement process are related to specific aspects of the design and development of the device. For example, if the auditors review complaints related to a safety feature of the device that is not performing as intended, the audit team should consider selecting for review the design verification of that safety feature and determine whether appropriate risk control methods were confirmed to be effective.

Task 3 – Design and development planning

Verify that the design and development process is planned and controlled.

Review the design plan for the selected design and development project to understand the design and development activities; including the design and development stages, the review, verification, validation, and design transfer activities that are appropriate at each stage; and the assignment of responsibilities, authorities, and interfaces between different groups involved in design and development.

Clause and Regulation

ISO: ISO 13485:2016: 4.2.1, 7.1, 7.3.2

TGA: TG(MD)R Sch3 P1 Cl 1.4(4)&(5)(c)

ANVISA: RDC ANVISA 665/2022: Art. 44, Art. 61

MHLW/PMDA: MO169: 6, 26, 30

FDA: 21 CFR 820.30(b), 820.30(j)]

Additional country-specific requirements

Australia (TGA):
Verify that effective planning for design and development is documented, typically as part of a Quality Plan [TG(MD)R Sch3 P1 Cl 1.4(4)].

Canada (HC):
Verify that Manufacturers of Class IV devices maintain a quality plan that sets out the specific quality practices, resources, and sequence of activities relevant to the device [CMDR 32].

Assessing conformity

Reviewing the design plan
Review the design plan for the selected project to understand the layout of the design and development activities, including assigned responsibilities and interfaces.

The design plan for the selected project can be used by the audit team as a roadmap for the review of the project.

Plans may vary depending on the type or size of the project. Some design plans may be expressed as simple flowcharts, or for larger projects, Gantt or Program Evaluation Review Technique (PERT) charts may be used. Plans do not have to show starting or completion dates for activities covered. However, plans must define responsibility for implementation of the design and development activities and describe the interfaces with different groups or activities.

Expect to see interfacing between research and development, marketing, regulatory, manufacturing, and quality departments. The audit team might also see interfacing with purchasing, installers, and servicers. When external institutions (e.g., universities or research and development centers) are involved in the design and development activities, the interfaces between the medical device organisation and those external institutions must also be defined.

Design and development plans may change while the design and development process evolve; however, all changes on the plan must be documented and approved.

Links

None

Task 4 – Implementation of the design and development process

For the device design and development record(s) selected, verify that design and development procedures have been established and applied.

Confirm the design and development procedures address the design and development stages, review, verification, validation, design transfer, and design changes.

Clause and Regulation

ISO: ISO 13485:2016: 4.2.1, 7.3.1, 7.3.10

TGA: TG(MD)R Sch3 P1 Cl 1.4(4)&(5)(c)

ANVISA: RDC ANVISA 665/2022: Art. 43

MHLW/PMDA: MO169: 6, 30, 36-2

FDA: 21 CFR 820.30(a), 820.30(j)]

Additional country-specific requirements

United States (FDA):

Verify that the design input procedures contain a mechanism for addressing incomplete, ambiguous, or conflicting requirements [21 CFR 820.30(c)].

Assessing conformity

Review of procedures

Design and development procedures set the structure, provide the framework, and support the medical device organisation's Design and Development process. The purpose of auditing the procedures is to determine if the medical device organisation has that framework in place. If procedures have not been defined and documented, or are deficient, the medical device organisation's devices may not meet user needs and intended use.

In accomplishing this audit task, the audit team is to review the medical device organisation's procedures and verify that the procedures address the requirements of the Medical devices – Quality management systems – Requirements for regulatory purposes (ISO 13485:2016), the Quality Management System requirements of the Conformity Assessment

Procedures of the Australian Therapeutic Goods (Medical Devices) Regulations (TG(MD)R Sch3), Brazilian Good Manufacturing Practices (RDC ANVISA 665/2022), Japanese QMS Ordinance (MHLW MO 169), the Quality System Regulation (21 CFR Part 820), and specific requirements of medical device regulatory authorities participating in the MDSAP program. For example:

- verify that the design input procedure includes a mechanism for addressing incomplete, ambiguous, or conflicting requirements
- Verify that the output procedure ensures that essential outputs are identified
- Verify that the design review procedure ensures that each design review includes an individual who does not have responsibility for the design stage being reviewed.

Minimum requirement
If the medical device organisation has no ongoing or planned design projects, has not made any design changes, then ensure that, at a minimum, the medical device organisation maintains defined and documented design change procedures.

Links
None

Task 5 – Design and development input

Verify that design and development inputs were established, reviewed and approved; and that they address customer functional, performance and safety requirements, intended use, applicable regulatory requirements, and other requirements including those arising from human factors issues, essential for design and development.

Verify that any risks and risk mitigation measures identified during the risk management process are used as an input in the design and development process.

Clause and Regulation
ISO: ISO 13485:2016: 4.2.1, 5.2, 7.2.1, 7.3.3, 8.2.1

TGA: TG(MD)R Sch1 P1 2, Sch3 P1 Cl 1.4(2)&(5)(c), Sch 3 P1 1.4(3)(a)&(b)

ANVISA: RDC ANVISA 665/2022: Art. 18, Art. 19, Art. 20, Art. 46, Art. 61

HC: CMDR 10-20, 21-23, 66, 67, 68

MHLW/PMDA: MO169: 6, 11, 27, 31, 55-1

FDA: 21 CFR820.30(c), 820.30(g)]

Additional country-specific requirements
Australia (TGA):
Verify that the Manufacturer has identified the relevant Essential Principles that apply to the medical device [TG(MD)R Sch1 Essential Principles].

Verify that the Manufacturer has considered post-production feedback and customer requirements as an input to monitoring and maintaining product requirements and improving product realization processes.

Sponsors have been assigned specific requirements as conditions on marketing authorisations. They may require information from the manufacturer to fulfill those requirements. If assistance is required, the Sponsor may communicate customer requirements to the manufacturer in the form of a written agreement.

United States (FDA):
For the selected device(s), verify that the medical device organisation has the appropriate marketing clearance [510(k)] or pre-market approval (PMA) if distributing the devices in the United States [21 CFR 807].

Assessing conformity

Design inputs
Inputs are the physical and performance requirements of a device that are used as a basis for device design. Inputs must be documented and approved by appropriate personnel. The audit team should review the sources used to develop the inputs and determine whether the relevant aspects of the requirements for the device were covered. These sources must include the relevant regulations where safety and performance criteria have been defined (e.g., safety and efficacy requirements or Essential Principles of Safety and Performance). Examples of relevant aspects include:

- intended use, performance characteristics
- intended user
- risk mitigation
- biocompatibility
- compatibility with the environment of intended use (including electromagnetic compatibility)
- software
- radiation protection
- human factors
- sterility.

Organisations must take into account the current thinking of experts where published information is available (e.g., Standards).

Design inputs may also relate to manufacturing processes particularly where validation, revalidation, the periodic monitoring of critical process parameters, or the implementation of specified controls, is required to assure the quality of product (e.g., sterilization, injection molding, control on the source, or inactivation of transmissible agents in, materials of animal origin, or GMP controls on the handling, processing or incorporation of a medicinal substance in a medical device).

Design inputs are the basis of the design verification and validation; therefore, design inputs need to be defined and recorded as formal requirements that allow for confirmation to the design outputs.

Relevant information for design input can also come from post-production data or experience from similar devices. Complaints, adverse events, feedback, and post-market surveillance form a feedback system that can help drive quality improvements in new designs and changes to current designs.

Links

Device Marketing Authorization and Facility Registration

Confirm the medical device organisation has considered regulatory requirements for registration, listing, notification and licensing; and has complied with these requirements prior to marketing the device in the applicable regulatory jurisdictions.

Task 6 – Completeness, coherence, and unambiguity of design and development input

Confirm that the design and development inputs are complete, unambiguous, and not in conflict with each other.

Clause and Regulation

ISO: ISO 13485:2016: 7.3.3

TGA: TG(MD)R Sch 3 Part 1.4(4)

ANVISA: RDC ANVISA 665/2022: Art. 46

MHLW/PMDA: MO169: 31

FDA: 21 CFR820.30(c)]

Additional country-specific requirements

Australia (TGA):
Confirm that design inputs include the relevant Essential Principles [TG(MD)R – Schedule 1].

Solutions adopted by the Manufacturer for the design and construction of a medical device are to conform to safety principles that are derived from the generally acknowledged state of the art. [TG(MD)R – Sch 1 – EP2] Safety principles are usually identified in internationally recognized standards.

Compliance with any given standard is not mandatory under Australian legislation however it is one way to demonstrate compliance with the Essential Principles.

The TGA presumes compliance with the relevant Essential Principles if the Manufacturer has applied, in full, a relevant standard that is identified in a Medical Device Standards Order. (See TGA website - For example, ISO 10993).

If relevant standards have not been identified as design inputs, ensure that the Manufacturer has documented a rationale to explain why alternatives have been applied to demonstrate compliance with the Essential Principles [TG(MD)R Sch3 Part 1.4(5)(c)(iii)(C)].

Assessing conformity

Design inputs
Design inputs must be defined and recorded as verifiable requirements, approved by the appropriate personnel. If the medical device organisation does not have accurate and complete design inputs, the final design may not meet user needs and intended use.

A common method for a medical device organisation to confirm the design inputs for a design and development project are complete, unambiguous, and not in conflict with each other is to perform a design review after the initial requirements are determined.

Links

None

Task 7 – Design and development output and design verification

Review medical device specifications to confirm that design and development outputs are traceable to and satisfy design input requirements.

Verify that the design and development outputs essential for the proper functioning of the medical device have been identified.

Outputs include, but are not limited to:

- device specifications
- specifications for the manufacturing process
- specifications for the sterilization process (if applicable)
- the quality assurance testing
- device labeling and packaging.

Clause and Regulation

ISO: ISO 13485:2016: 4.2.1, 4.2.3, 7.3.4

TGA: TG(MD)R Sch3 P1 Cl 1.4(5)(c)

ANVISA: RDC ANVISA 665/2022: Art. 48, Art. 49, Art. 61

MHLW/PMDA: MO169: 6, 7-2, 32

FDA: 21 CFR 820.30(d), 820.30(f)]

Additional country-specific requirements

Australia (TGA):

If relevant standards have not been applied, or not been applied in full, ensure that the Manufacturer has documented a rationale to explain why alternative methods have been applied to demonstrate compliance with the Essential Principles [TG(MD)R Sch3 Part 1.4(5)(c)(iii)(C)].

For devices incorporating a medicinal substance, verify that documentation also identifies the data to be derived from tests conducted in relation to the substance, and its interaction with the device [TG(MD)R Sch 3 Part 1.4(5)(c)(v)].

Assessing conformity

Design outputs

Design outputs are the work products or deliverables of a design stage. Design outputs can include documents such as diagrams, drawings, specifications, and procedures for both products and processes. The outputs from one stage may become inputs to the next stage. The total finished design output consists of the specifications for the device, its packaging and labeling (including implant cards and leaflets, where applicable), quality management system requirements, the manufacturing process, and if applicable, installation and servicing requirements.

During this design stage, a tremendous number of records, or outputs, can be produced. Only the approved outputs need to be retained. However, if a medical device organisation chooses to retain other records, for historical or other purposes, they may do so.

Essential outputs
Outputs that are essential for the proper functioning of the device must be identified. Typically, a medical device organisation can use a risk management tool to determine the essential outputs. To verify that this has been done, the auditor(s) may review the medical device organisation's process for determining how the essential outputs were identified and if it was done in accordance with their design output procedures.

The identification of essential outputs may influence other quality system activities. For example, the establishment of manufacturing process controls and tolerances, the degree of purchasing controls and acceptance activities applied to a supplier or the priority and depth of a failure investigation may be influenced by whether or not the component (assembly, material, etc.) is considered an output essential for the proper functioning of the device.

Design outputs for sterile devices
Design and development of medical devices that are intended to be sterile should ensure compatibility of the sterilization process with the device, compatibility of the device packaging and the sterilization process, ability of the device to be sterilized or re-sterilized, and (if applicable), rationale for adding the device to a product family covered by a validated sterilization process.

Design verification
In design verification, the medical device organisation obtains objective evidence (i.e., data) that design outputs meet design inputs. A medical device organisation generates this objective evidence by conducting verification activities such as tests, measurements, and analyses. These activities should be explicit and thorough in their execution. A medical device organisation's verification activity should be predictive, not empiric. In other words, acceptance criteria need to be stated in advance of the verification activity. The establishment of pre-determined acceptance criteria should be documented in a verification protocol or similar document. During the review of design verification activities, the auditor(s) will determine if the design verification data confirms that design outputs met the design input requirements.

Verification techniques
Complex designs will require more and different types of verifications than simple designs. Sometimes a medical device organisation has to use its own expertise to develop (in-house) a way to verify a particular aspect of a design. Any approach selected by a medical device organisation is acceptable as long as it provides reliable objective evidence that the output met the input.

Choosing verification activities for review
In accomplishing this audit task, select records generated from design verification activities associated with a number of design inputs and design outputs. The review of these records will determine whether design outputs met design input requirements. When possible, select documentation of design verification activities that are associated with outputs that are considered essential for the proper functioning of the device or are associated with the highest risk to the user or patient.

Links

Purchasing, **Production and Service Controls**

During the review of a design project, the audit team should be mindful of production processes and supplied products that are essential to the proper functioning of the device. Production processes can include not only the manufacturing instructions, but also internal controls, such as the type and extent of acceptance activities, equipment calibration and maintenance intervals, environmental controls, and personnel controls. For suppliers that provide products and services related to the essential design outputs, the degree of purchasing controls necessary is commensurate with the effect of the supplied product on the proper functioning of the finished device.

During the audits of the Purchasing process and Production and Service Controls process, the audit team should consider reviewing production processes and supplied products that have the highest risk or greatest effect on the essential design outputs.

Task 8 – Risk management activities applied throughout the design and development project

Verify that risk management activities are defined and implemented for product and process design and development.

Confirm that risk acceptability criteria are established and met throughout the design and development process.

Verify that any residual risk is evaluated and, where appropriate, communicated to the customer (e.g., labeling, service documents, advisory notices, etc.).

Note: In some instances, it may be necessary for the medical device organisation to conduct a risk/benefit analysis to justify a risk that cannot be mitigated to an acceptable level. ***Additionally, it may be necessary to audit other processes (e.g., Production and Service Controls, Purchasing) to verify that risk acceptability criteria are met, risk is controlled or reduced, and residual risk is communicated if necessary.***

Clause and Regulation

ISO: ISO 13485:2016: 4.2.1, 7.1, 7.3.3, 7.3.4

TGA: TG(MD)R Sch1 P1 2, Sch3 P1 Cl 1.4(5)(c)(iii)

ANVISA: RDC ANVISA 665/2022: Art. 18, Art. 19, Art. 20, Art. 61, RDC ANVISA 56/2001

HC: CMDR 10, 11, 15, 16

MHLW/PMDA: MO169: 6, 26, 31, 32

FDA: 21 CFR 820.30(g)]

Additional country-specific requirements

Brazil (ANVISA):

Verify that the manufacturer has established and maintains a continuous process of risk management which covers the entire life cycle of the product. Possible hazards must be identified in both normal and fault conditions, including those arising from human factors issues. The risk associated with those hazards, shall be calculated. Risks must be analyzed,

evaluated and controlled, as necessary. Effectiveness of risk controls implemented shall be evaluated [RDC ANVISA 56/2001, RDC ANVISA 665/2022: Art. 18, Art. 19, Art. 20].

United States (FDA):
Confirm that the manufacturer has identified the possible hazards associated with the device in both normal and fault conditions. The risks associated with the hazards, including those resulting from user error, should be calculated in both normal and fault conditions. If any risk is judged to be unacceptable, it should be reduced to acceptable levels by the appropriate means. Ensure changes to the device to eliminate or minimize hazards do not introduce new hazards [21 CFR 820.30(g); preamble comment 83].

Assessing conformity

Risk management
Each medical device organisation must determine and document how much risk is acceptable. The actual use of any medical device includes some measure of risk to users or patients. Determining an acceptable level of risk depends on the intended use of the device, including the health concern of the patient population, the training of the users involved, and the use environment. For example, pediatric patients may have less ability to detect a device malfunction. A device used by consumers generally has less medical oversight than a device used in a hospital setting. The goal of a risk management program is to ensure the device is as safe as practical and the safety of the device is acceptable for the intended use.

Effective risk management usually starts in conjunction with the design and development process, proceeds through product realization, including the selection of suppliers, and continues until the time the product is decommissioned. Risk management should be initiated at a point early in the design and development process. This includes defining the intended use of the device, considering risk under normal use and reasonably foreseen misuse. Starting the risk management process after the design has progressed beyond a point where reasonable risk mitigation features can be included in the design can lead to devices that do not meet customer needs and the medical device organisation's requirements for safety. Records of risk management should demonstrate that risks that have been identified as unacceptable have been mitigated to an acceptable level.

Mitigation of risks
There are several mechanisms that can be used to mitigate product risk. These risk mitigation mechanisms, in descending order of effectiveness, include safety features inherent in the device design, protective measures in the design (e.g., alarms), and user notifications (e.g., labeled warnings).

Review of risk management activities
During the review of the design project selected, verify that risk management is initiated early in the design and development process. Confirm that the medical device organisation's risk management process involves the proactive evaluation, control, and monitoring of product risk, followed by the reactive response to quality data that indicates new or changing product risk.

Links
None

Task 9 – Design verification or design validation to confirm effectiveness of risk control measures

Confirm that design verification and/or design validation includes assurances that risk control measures are effective in controlling or reducing risk.

Clause and Regulation

ISO: ISO 13485:2016: 7.1, 7.3.6, 7.3.7

TGA: TG(MD)R Sch1 P1 2, Sch3 P1 Cl 1.4(5)(c)

ANVISA: RDC ANVISA 665/2022: Art. 18, Art. 19, Art. 20, Art. 48

HC: CMDR 10,11, 15, 16

MHLW/PMDA: MO169: 26, 34, 35-1

FDA: 21 CFR 820.30(f), 820.30(g)]

Additional country-specific requirements

None

Assessing conformity

Verification of risk control measures

During the review of design verification activities for the chosen design project, confirm that the identified risk control measures are effective in reducing or controlling risk. For example, a design for an enteral feeding tube may have a unique connector to prevent the potential for misconnection to other types of devices, such as suction catheters. Design verification should show that it is difficult or impossible to connect non-related devices to the enteral feeding tube.

Links

None

Task 10 – Design validation

Verify that design and development validation data show that the approved design meets the requirements for the specified application or intended use(s).

Verify that design validation testing is adjusted according to the nature and risk of the product and element being validated.

Clause and Regulation

ISO: ISO 13485:2016: 4.2.1, 7.3.7

TGA: TG(MD)R Sch1 P1 2; Sch3 P1 Cl1.4(5)(d)

ANVISA: RDC ANVISA 665/2022: Art. 18, Art. 19, Art. 20, Art. 49, Art. 53, Art. 54, Art. 55, Art. 56, Art. 57, Art. 58, Art. 61

HC: CMDR 12, 18, 19

MHLW/PMDA: MO169: 6, 35-1

FDA: 21 CFR 820.30(g)]

Additional country-specific requirements

None

Assessing conformity

Design validation

Design validation is performed to provide objective evidence that design specifications (outputs) conform to user needs and intended uses. Design validation must be completed before commercial distribution of the product. The design validation activities should be predictive, not empiric. In other words, acceptance criteria need to be stated in advance of the validation activity. The establishment of pre- determined acceptance criteria may be found in a validation protocol or similar document.

Design validation must be performed under defined operating conditions on initial production units, lots, or batches, or their equivalents. Design validation shall ensure that devices conform to defined user needs and intended uses and includes testing of production units under actual or simulated use conditions. The results of the design validation, including identification of the design, method(s), the date, and the individual(s) performing the validation, must be recorded.

Needs, environment and uses

Design validation must address the needs of all relevant parties, such as the patient, healthcare worker, biomedical engineer, and storage clerk. Consideration must be given to the environment in which the device will be stored, transported, and used.

Design validation needs to be performed for each intended use. Design validation must also confirm that user needs and intended uses associated with the device's packaging and labeling are met. These outputs have human factors implications and unless they are adequately considered during design validation, they may adversely affect the device and its use. Confirm that design validation data show that the approved design met the predetermined user needs and intended uses. The intended uses must include the purpose of the device, patient type (adults, pediatrics or newborn) and the environment in which the device is to be transported and used (domestic use, hospitals, ambulances, etc.).

Links

None

Task 11 – Clinical evaluation and/or evaluation of medical device safety and performance

Verify that clinical evaluations and/or evaluation of the medical device safety and performance were performed as part of design validation if required by national or regional regulations.

Clause and Regulation

ISO: ISO 13485:2016: 4.2.1, 7.3.7

TGA: TG(MD)R Reg 3.11, Sch1 EP14, Sch3 P1 Cl 1.4(5)(c)(vii), Sch3 P8

ANVISA: RDC ANVISA 665/2022: Art. 53, Art. 54, Art. 55, Art. 56, Art. 57, Art. 58, Art. 61, RDC ANVISA 56/2001

HC: CMDR 12, 18, 19

MHLW/PMDA: MO169: 6, 35-1

FDA: 21 CFR 820.30(g)]

Additional country-specific requirements

Australia (TGA):

Verify that records of the validation include clinical evidence as required by the clinical evidence procedures [TG(MD) Sch3 P1 Cl 1.4(5)(c)(vii) and TG(MD) Sch3 P8].

For more information about the sources and types of clinical evidence and how they may be used to demonstrate compliance with the Australian EPs, auditors may refer to the clinical evidence guidelines (medical devices)

Assessing conformity

Clinical evaluations and testing

Design validation may involve the performance of some sort of clinical evaluation, including testing under actual or simulated use conditions. Clinical evaluations may involve full clinical studies. Clinical evaluations may also consist of other evaluations in a clinical or non-clinical setting, provision of historical evidence that similar designs are clinically safe, or reviews of scientific literature.

The audit team should limit their review of clinical evaluations to verifying whether clinical evaluations have been performed as part of design validation, when necessary, and whether the medical device organisation has established acceptance criteria for the results in order to validate the device and that the results obtained meet the defined acceptance criteria.

When applicable, review the clinical evaluations, if performed, to validate the design. The audit team should confirm that the data from clinical evaluations demonstrates that the user needs and intended uses for the device and its packaging and labeling were met.

Links

None

Task 12 – Software design and development

If the medical device contains software, verify that the software was subject to the design and development process.

Confirm that the software was included within the risk management process.

Clause and Regulation

ISO: ISO 13485:2016: 7.3.2, 7.3.10

TGA: TG(MD)R Sch1 P1 2, Sch1 EP12.1

ANVISA: RDC ANVISA 665/2022: Art. 18, Art. 19, Art. 20, Art. 53, Art. 54, Art. 55, Art. 56, Art. 57, Art. 58, Art. 61

HC: CMDR 20

MHLW/PMDA: MO169: 30, 36-2

FDA: 21 CFR 820.30(g)]

Additional country-specific requirements

None

Assessing conformity

Software development

Many devices are at least partially controlled by software. Some devices consist almost entirely of software. For the device software, confirm that the software is part of the design and development plan for the device. The life cycle requirements for medical device software must be defined, including the intended use.

Software verification
"Software verification" is a term often used to describe the testing of the software. During the review of the software development, confirm that the medical device organisation has conducted appropriate verification activities. Verification is often accomplished by performing test cases at the unit, subsystem, and integration levels; as well as system functional testing.

Software verification can include the testing of the software product installed on the target hardware. As with other types of design verification, verification of software is a predictive activity. The acceptance criteria must be determined prior to performing the testing.

The predetermined acceptance criteria are often found in a verification protocol or similar document. Confirm that the predetermined acceptance criteria have been met by reviewing the actual results of the selected software tests. The risk management activities for the device and software can help guide the audit team as to which verification tests involve the essential design outputs of the device and software.

Software validation
Software validation is a "confirmation by examination and provision of objective evidence that software specifications conform to user needs and intended uses, and that the particular requirements implemented through software can be consistently fulfilled." It involves checking for proper operation of the software in its actual or simulated use environment, including integration into the final device where appropriate. Testing of device software functionality in a simulated use environment, and user site testing are typically included as components of an overall design validation program for a software automated device.

The audit team may encounter times when the software has been installed at user sites as part of validation, often referred to as "beta testing". Beta testing can be a method to confirm the device, including the software, meets the user needs and intended uses.

Links
None

Task 13 – Design and development change

Verify that design and development changes were controlled, verified (or where appropriate validated), and approved prior to implementation.

Confirm that any new risks associated with the design change have been identified and mitigated to the extent practical.

Clause and Regulation
ISO: ISO 13485:2016: 4.2.1, 4.2.3, 7.1, 7.3.9, 7.3.10, 8.2.1

TGA: TG(MD)R Sch1 P1 2, Sch3 P1 Cl 1.4(5)(f), Sch3 P1Cl1.5(4), Sch3 P1 1.4(3)(a)&(b)

ANVISA: RDC ANVISA 665/2022: Art. 18, Art. 19, Art. 20, Art. 49, Art. 53, Art. 54, Art. 55, Art. 56, Art. 57, Art. 58, Art. 60, Art. 61, Brazilian Law 6360/76 - Art. 13

HC: CMDR 1, 34

MHLW/PMDA: MO169: 6, 7-2, 26, 36-1, 36-2, 55-1

FDA: 21 CFR 820.30(i)]

Additional country-specific requirements

Australia (TGA):
Verify that the Manufacturer has a process or procedure for notifying the Auditing Organisation of a substantial change to the design process or the range of products to be manufactured [TG(MD)R Sch3 Cl1.5].

Verify that the Manufacturer has a process or procedure for identifying a proposed substantial change to the design, or the intended performance, of a Class 4 IVD or Class III device, and to notify the assessment body prior to implementing the change [TG(MD)R Sch3 P1 Cl 1.6(4)].

If the Manufacturer is also a holder of a TGA Conformity Assessment Certificate, then the Manufacturer is also required to notify the TGA of these changes.

Verify that Manufacturer has taken into account post-production feedback as an input to monitoring and maintaining product requirements and improving product realization processes.

Brazil (ANVISA):
If the medical device evaluated is already registered/notified with ANVISA, verify that the design change was correctly and promptly submitted to ANVISA for approval, when applicable [Brazilian Law 6360/76 - Art. 13].

Canada (HC):
Verify that the manufacturer has a process or procedure for identifying a “significant change” to a Class III or IV medical device. Verify that information about “significant changes” is submitted in a medical device license amendment application [CMDR 1, 34].

Japan (MHLW):
For the Marketing Authorization Holder, confirm if the Marketing Authorization Holder has submitted a new application, a change application, or a change notification to PMDA/ a Registered Certification Body, when applicable [PMD Act 23-2-5.1, 23-2-5.11, 23-2-5.12, 23-2-23.1, 23-2-23.6, 23-2-23.7].

For the Registered Manufacturing Site, confirm if the site has a mechanism to communicate with the Marketing Authorization Holder about device modifications, so the Marketing Authorization Holder can take appropriate actions. If a critical medical device modification has happened in the Registered Manufacturing Site, confirm if the Registered Manufacturing Site has communicated with Marketing Authorization Holder about the change [MHLW MO169: 29].

United States (FDA):
Verify that the medical device organisation obtained a new 510(k) or supplement to the pre-market approval if required [21 CFR 807].

Assessing conformity

Procedures
A medical device organisation may have separate change control procedures to handle the post-production and pre-production changes, or a medical device organisation may have one procedure that handles both.

Nature of change
The documentation and control of changes begins when the initial design inputs are approved and continues for the life of the product. Design change control applies to changes to inputs or outputs as a result of design verification or design validation, changes to labeling or packaging, changes to enhance a product’s performance, changes of production process/es, and changes that result from product complaints. Change can be acceptable as long as it is controlled.

Records
The control of changes is not complete until the results of the review of changes and any updates to product specifications or changed processes are documented or amended.

Communication and consequential actions
Changes need to be effectively communicated and requirements for any consequential actions should be defined (e.g., training or communication to design or production staff

Links

Measurement, Analysis and Improvement process (if a design change was made to correct a quality problem with the device); **Device Marketing Authorization and Facility Registration**

During the audit of the Measurement, Analysis and Improvement process, the auditors may encounter corrective actions or preventive actions that resulted in design changes. When corrective action or preventive action involves changing the design, confirm that design controls have been applied to the change, in accordance with the medical device organisation's procedures. Confirm these design changes were effective in addressing the quality issues or potential quality issues identified in corrective or preventive action. In addition, the design change should be evaluated under the medical device organisation's risk management process to ensure that changes do not introduce new hazards. Some changes may require revalidation where it is not possible to verify that requirements have been met after the change has been implemented.

The audit team should also confirm the medical device organisation has considered regulatory requirements for registration, listing, notification and licensing; and has complied with these requirements prior to marketing the changed device in the applicable regulatory jurisdictions.

Task 14 – Design review

Verify that design reviews were conducted at suitable stages as required by the design and development plan.

Confirm that the participants in the reviews include representatives of functions concerned with the design and development stage being reviewed, as well as any specialist personnel needed.

Clause and Regulation

ISO: ISO 13485:2016: 4.2.1, 7.3.2, 7.3.5

TGA: TG(MD)R Sch3 P1 C1.4(5)(c)(i)

ANVISA: RDC ANVISA 665/2022: Art. 50, Art. 61

MHLW/PMDA: MO169: 6, 30, 33

FDA: 21 CFR 820.30(e)]

Additional country-specific requirements

United States (FDA):
Verify that procedures ensure that participants include representatives of all functions concerned with the design stage being reviewed and an individual(s) who does not have direct responsibility for the design stage being reviewed, as well as any specialists needed [21 CFR 820.30(e)].

Assessing conformity

Design reviews

Design reviews typically occur at the end of each design stage or phase or after the completion of project milestones. The number of design reviews can vary, but at a minimum, one formal review must be conducted. Reviews should provide feedback to the design team on emerging problems, assess the progress of the design and development project, and confirm that the design is ready to move to the next phase of development or for transfer to the manufacturing phase.

It is not necessary to have fully convened meetings for all design reviews. For simple designs or minor changes, desk reviews and sign-offs may be adequate. Design reviews must include an individual who does not have direct responsibility for the design stage being reviewed and representation from manufacturing to ensure that design and development outputs are verified as suitable for manufacturing before becoming final production specifications.

During the review of design review activities for the selected design project, confirm that the reviews included an individual who did not have direct responsibility for the design stage being reviewed. The audit team should also confirm that outstanding action items are being resolved or have been resolved.

Links

None

Task 15 – Impact review of design and development changes on previously made and distributed devices

Verify that design changes have been reviewed for the effect on products previously made and delivered, and that records of review results are maintained.

Clause and Regulation

ISO: ISO 13485:2016: 7.3.9

ANVISA: RDC ANVISA 665/2022: Art. 60

MHLW/PMDA: MO169: 36-1

FDA: 21 CFR 820.30(i)]

Additional country-specific requirements

None

Assessing conformity

Effects on constituent parts and products already delivered

There are situations where a design change can affect constituent parts. For example, a change to a disposable portion of an aspiration system might affect the ability of the disposable to connect to the console. When necessary, ensure the design change does not negatively impact products in distribution.

Links

None

Task 16 – Design transfer

Determine if the design was correctly transferred to production.

Clause and Regulation

ISO: ISO 13485:2016: 4.2.1, 4.2.3, 7.3.8

ANVISA: RDC ANVISA 665/2022: Art. 52, Art. 54, Art. 55, Art. 56, Art. 57, Art. 58, Art. 61

MHLW/PMDA: MO169: 6, 7-2, 35-2

FDA: 21 CFR 830.30(h)]

Additional country-specific requirements

Brazil (ANVISA):

Confirm that the manufacture ensures that the design is not released for production until its approval by the persons assigned by the manufacturer and that the person/s assigned review all records required to the design history file in order to ensure it is complete and the final design is compatible with the approved plans, prior to its release. Confirm that this release, including date and manual or electronic signature of the responsible is documented [RDC ANVISA 665/2022: Art. 58, Art. 61].

Assessing conformity

Transferring the design to production

During this phase, the design is translated into production specifications. This can take place in steps or phases. The audit team should review how the design for the selected project was transferred into production specifications. Based on the medical device organisation's identification of essential outputs and risk management activities, review significant elements of the manufacturing processes, including products from suppliers and the established tolerances for processes, and compare them with the approved design outputs contained within the design records. These activities can confirm whether or not the design was correctly transferred.

Design transfer is a process that may be initiated not only at the end of the design and development process but may also be initiated immediately before validation stages and may continue as design and development evolves. This early initiation of design transfer is helpful in order to have production processes and device validations conducted properly and allow for corrections during the process. At the end, design and development process is "finalized" by a "final design transfer."

Links

Production and Service Controls, **Purchasing**

Verify that production processes for the device, including process validation (if required) have been defined, documented, and implemented. Confirm that potential hazards that could be introduced or exacerbated by the production process have been identified, and production controls have been established. Production processes include not only the manufacturing instructions, but also internal controls, such as the type and extent of acceptance activities, equipment calibration and maintenance intervals, environmental controls, and personnel controls.

Confirm that the medical device organisation has determined the type and extent of supplier controls based on the relationship between the supplied products and services and product risk.

Task 17 – Top management commitment to design and development process

Determine, based on the assessment of the design and development process overall, whether management provides the necessary commitment to the design and development process.

Clause and Regulation

ISO: ISO 13485:2016: 4.1.3, 5.1, 5.5.1

TGA: TG(MD)R Sch3 P1 Cl 1.4(5)(b)(ii)

ANVISA: RDC ANVISA 665/2022: Art. 5°, Art. 6°, Art. 7°

MHLW/PMDA: MO169: 5-3, 10, 15

Additional country-specific requirements

None

Links

None

Chapter 6 - Production and Service Controls

The purpose of the Production and Service Controls process is to manufacture products that meet specifications. Developing processes that are adequate to produce devices that meet specifications, validating (or fully verifying the results of) those processes, and monitoring and controlling those processes are all steps that help assure the result will be devices that meet specified requirements. After completing the audit of the medical device organisation's Production and Service Controls process, the audit team will return to the Management process to make a final decision of whether top management ensures that an adequate and effective quality management system has been established and maintained at the medical device organisation.

In order to meet the Production and Service Controls requirements of Medical devices – Quality management systems – Requirements for regulatory purposes (ISO 13485:2016), the Quality Management System requirements of the Conformity Assessment Procedures of the Australian Therapeutic Goods (Medical Devices) Regulations (TG(MD)R Sch3), Brazilian Good Manufacturing Practices (RDC ANVISA 665/2022), Japanese QMS Ordinance (MHLW MO 169), the Quality System Regulation (21 CFR Part 820), and specific requirements of medical device regulatory authorities participating in the MDSAP program, the medical device organisation must understand when deviations from device specifications could occur as a result of the production process or environment.

The **management representative** is responsible for ensuring that the requirements of the quality management system have been effectively defined, documented, implemented, and maintained. Prior to the audit of a process, it may be helpful to interview the management representative (or designee) to obtain an overview of the process and a feel for management's knowledge and understanding of the process.

Audit of the Production and Service Controls process will follow audit of the Measurement, Analysis and Improvement process and the Design and Development process per the MDSAP audit sequence. Information the audit team has learned about device and quality management system nonconformities during audit of the Measurement, Analysis and Improvement process, as well as higher risk elements and essential design outputs from the design projects reviewed during audit of the Design and Development process, should be used to make decisions as to the production processes to be reviewed during the audit of the Production and Service Controls process.

Auditing the Production and Service Controls Process

Purpose: The purpose of auditing the production and service controls process (including testing, infrastructure, facilities, equipment, and servicing) is to verify that the medical device organisation's process/es are capable of ensuring that products will meet specifications.

Outcomes: As a result of the audit of the Production and Service Controls process, objective evidence will show whether the medical device organisation has:

A) Defined, documented and implemented procedures to ensure production and service processes are planned, developed, conducted, controlled, and monitored to ensure conformity to specified requirements
B) Developed production and service process controls commensurate with the potential effect of the process on product risk
C) Ensured that when the results of a process cannot be verified by subsequent monitoring or measurement, the process is validated with a high degree of assurance that the process will consistently achieve the planned result
D) Implemented procedures for the validation of the application of computer software for production and service processes that affect the ability of the product to conform to specified requirements, including validation of computer software used in the quality management system
E) Maintained records for each batch of medical devices that provides information for traceability and confirmation that the batch meets specified requirements

F) Implemented controls to protect customer property, including intellectual property, confidential health information, and other forms of customer property that is used or incorporated into products

Links to Other Processes:

Management; **Design and Development**; **Measurement, Analysis and Improvement**; **Purchasing**

Task 1 – Planning of production and service process

Verify that the product realization processes are planned, including any necessary controls, controlled conditions, and risk management activities required for the product to meet the specified or intended uses, the statutory and regulatory requirements related to the product, and (when applicable) unique device identifier requirements.

Confirm that the planning of product realization is consistent with the requirements of the other processes of the quality management system and performed in consideration of the quality objectives.

Clause and Regulation

ISO: ISO 13485:2016: 7.1, 7.2.1, 7.5.1

TGA: TG(MD)R Sch 1 P1 2, Sch3 P1 Cl1.4(4), Sch3 P1 Cl1.4(5)(d)&(e)

ANVISA: RDC ANVISA 665/2022: Art. 5°, Art. 6°, Art. 7°, Art. 44, Art. 52, Art. 64, Art. 65, Art. 66

MHLW/PMDA: MO169: 26, 27, 40

FDA: 21 CFR 801, 820.30(b), 820.20(a), 820.30(h), 820.70(a), 830]

Additional country-specific requirements

United States (FDA):

Confirm that the medical device organisation has determined the applicability of unique device identifier requirements per 21 CFR 801 and 21 CFR 830, has obtained the unique device identifiers from an FDA-accredited UDI-issuing agency, and the required data elements have been entered in the Global Unique Device Identification Database (GUDID) [21 CFR 801, 830].

Assessing conformity

Planning

In planning product realization, the medical device organisation must determine as appropriate the quality objectives and requirements for the product, the processes, documents, and resources specific to the product, the criteria for product acceptance, and the required verification, monitoring, inspection, and test activities specific to the product. Planning of product realization often begins in the design and development of the product, including the translation of the design into production specifications.

The planning of product realization should be consistent with the risk control and mitigation strategies identified by the medical device organisation during risk management activities.

During the audit, be mindful of requirements for the product that relate to statutory and regulatory requirements, requirements necessary for the product to meet specified or intended uses, and requirements for safe and efficacious use of the product. The medical device organisation must ensure their processes, and the monitoring of processes, inspection, and test activities are planned and developed to ensure these requirements are met.

Unique Device Identifier (UDI)
A UDI is a coded representation of specified information. It appears on the device label, packaging, or in some cases on the device itself. The UDI should be presented in two forms: easily readable plain text, and Automated Identification and Data Capture (or AIDC) format. Many types of AIDC compliant codings are available and are permissible provided they can be entered into an electronic patient record or other computer system via an automated process.

The requirements of the rule are generally directed at labelers. Labeler is defined in 21 CFR 801.3.

Two main factors determine if a party is a labeler: (1) a labeler causes a label to be applied to a device with the intent that the device will be commercially distributed without any intended subsequent replacement or modification of the label, or (2) a labeler causes a label to be replaced or modified with the intent that the device will be commercially distributed.

Manufacturers, contract manufacturers, private label distributors, and convenience kit assemblers are the most common types of organisations that are considered labelers. Some small exceptions apply, such as adding a name or contact information to the already existing label.

The UDI program requires labelers to work with an FDA accredited issuing agency to produce their UDIs. The issuing agency provides a portion of the UDI to identify the labeler, as well as providing a standards compliant format for the display of the UDI in easily readable plain text and AIDC code.

The UDI rule requires device labelers to meet two basic requirements: (1) the devices must bear a UDI in the appropriate location, (2) and certain data elements must be entered in the Global Unique Device Identification Database (GUDID). The GUDID is a database maintained by the UDI team at FDA that serves as a public facing repository for UDI related device information.

Under the UDI rule, all medical devices, regardless of class (and including unclassified devices) must comply with the requirements of the rule, unless covered by an exemption or enforcement discretion.

Quality objectives
Quality objectives are typically expressed as a measurable target or goal. The planning of product realization should include consideration of how the production processes, the criteria for product acceptance, and the required verification, validation, monitoring, inspection, and test activities specific to the product will achieve the quality objectives. Confirm that the medical device organisation has defined quality objectives for the device.

Links

Management

Confirm when necessary that the quality objectives related to the product were considered for inclusion in management review.

Task 2 – Selection of production and service process(es)

Review production processes considering the following criteria.

Select one or more production processes to audit.

Reminder: Information the audit team has learned about device and quality management system nonconformities during audit of the Measurement, Analysis and Improvement process, as well as higher risk elements and essential

design outputs from the design projects reviewed during audit of the Design and Development process should be used to make decisions as to the production processes to be reviewed.

Priority criteria for selection:

1. Corrective and preventive action indicators of process problems or potential problems
2. Use of the production process for higher risk products
3. Use of production processes that directly impact the ability of the device to meet its Essential design outputs
4. New production processes or new technologies
5. Use of the process in manufacturing multiple products
6. Processes that operate over multiple shifts
7. Processes not covered during previous audits

Links

None

Task 3 – Controls for the implementation of selected production and service process(es)

For each selected process, determine if the production and service provision processes are planned and conducted under controlled conditions that include the following:

- the availability of information describing product characteristics
- the availability of documented procedures, requirements, work instructions, and reference materials, reference measurements, and criteria for workmanship
- the use of suitable equipment
- the availability and use of monitoring and measuring devices
- the implementation of monitoring and measurement of process parameters and product characteristics during production
- the implementation of release, delivery and post-delivery activities
- the implementation of defined operations for labeling and packaging
- the establishment of documented requirements for changes to methods and processes

Clause and Regulation

ISO: ISO 13485:2016: 7.5.1, 8.2.5, 8.2.6

TGA: TG(MD)R Sch3 P1 Cl1.4(5)(d)&(e)

ANVISA: RDC ANVISA 665/2022: Art. 30, Art. 63, Art. 62, Art. 64, Art. 65, Art. 66, Art. 84, Art. 88

MHLW/PMDA: MO169: 40, 57, 58, 59

FDA: 21 CFR 820.70(a), 820.70(b), 820.75, 820.120, 820.130]

Additional country-specific requirements

None

Assessing conformity

Establishment of work instructions, procedures, and production processes

Production processes that may cause a deviation to a device specification and all validated processes must be controlled and monitored. The planning of production includes the establishment of procedures and work instructions for the

control and monitoring of the production processes, including service controls when necessary. Control and monitoring procedures may include in-process and finished device acceptance activities as well as environmental and contamination control measures. The establishment of procedures and work instructions to control the production of the device should provide the controls and tolerances necessary to ensure finished devices conform to product specifications.

Links

None

Task 4 – Control of product cleanliness

Determine if the medical device organisation has established documented requirements for product cleanliness including any cleaning prior to sterilization, cleanliness requirements if provided non-sterile, and assuring that process agents are removed from the product if required.

Clause and Regulation

ISO: ISO 13485:2016: 4.2.1, 4.2.3, 6.4.2, 7.5.2

TGA: TG(MD)R Sch3 P1 Cl1.4(5)(d)

ANVISA: RDC ANVISA 665/2022: Art. 69, Art. 75, Art. 79

MHLW/PMDA: MO169: 6, 7-2, 25-2, 41

FDA: 21 CFR 820.70(c), 820.70(d), 820.70(e), 820.70(h)]

Additional country-specific requirements:

Brazil (ANVISA):

Confirm that a pest control program has been established and where chemicals are used as part of the pest control program, the company must ensure that they do not affect product quality [RDC ANVISA 665/2022: Art. 74].

Verify that the manufacturer has established and maintains housekeeping procedures and schedules for production areas and warehouses, in conformance with production specifications [RDC ANVISA 665/2022: Art. 69].

Assessing conformity

Cleanliness requirements

The goal of establishing requirements for product cleanliness is to minimize contamination of the finished device and the manufacturing environment. Sterile devices may require a higher level of control in terms of minimizing the bioburden and particulate contamination in order to assure the desired sterility assurance level is met.

Each medical device organisation must evaluate the extent of cleanliness required for the proper functioning and intended use of the finished device and implement the necessary control measures. Examples of control measures include, but are not limited to, cleaning procedures, environmental controls (e.g., cleanrooms, or other controlled environments), requirements for attire, and training of personnel. When necessary, confirm the medical device organisation has identified the cleanliness requirements for the finished device and the proper controls to achieve the required level of cleanliness.

Process agents

Process agents, also known as manufacturing materials, are generally defined as materials or substances used to facilitate the manufacturing process, which are present in or on the finished devices as a residue or impurity. Examples of process agents include cleaning agents, mold- release agents, lubricating oils, latex proteins, sterilant residues, etc. The medical device organisation must evaluate process agents used during the manufacturing process when the process

agent could potentially have an adverse effect on the product. During the design of the product and the development of the manufacturing process, the potential effect of process agents should be considered.

If the audit team encounters situations where process agents are being utilized in the manufacturing of the product, and the process agent could potentially have an adverse effect on the product, confirm that the medical device organisation has made effective arrangements to control the process agent in a manner commensurate with the risk the agent poses to the finished device. For example, the medical device organisation may need to validate a cleaning process to ensure cutting oil is removed from an orthopedic implant prior to packaging and sterilization.

Links

None

Task 5 – Infrastructure

Verify that the medical device organisation has determined and documented the infrastructure requirements to achieve product conformity, including buildings, workspace, process equipment, and supporting services.

Confirm that buildings, workspaces, and supporting services allow product to meet requirements.

Verify that there are documented and implemented requirements for maintenance of process equipment where important for product quality, and that records of maintenance are maintained.

Clause and Regulation

ISO: ISO 13485:2016: 4.2.1, 6.3, 7.5.1

ANVISA: RDC ANVISA 665/2022: Art. 67, Art. 78

HC: CMDR 14

MHLW/PMDA: MO169: 6, 24, 40

FDA: 21 CFR 820.70(g), 820.70(f)]

Additional country-specific requirements

Brazil (ANVISA):

Verify that manufacturing facilities are configured in order to provide adequate means for people flow [RDC ANVISA 665/2022: Art. 67].

Assessing conformity

Infrastructure requirements

The medical device organisation is responsible for evaluating the manufacturing facility to ensure that the buildings, utilities, and space allow for the achievement of product conformity. The medical device organisation is responsible for ensuring adequate space to prevent mix-ups and ensure orderly handling of products.

Equipment maintenance

The medical device organisation must consider whether maintenance of production equipment may affect product quality. Procedures, including the frequency of maintenance and the records of maintenance must be available for these items of equipment.

Links
None

Task 6 – Work environment

Verify documented requirements have been established, implemented and maintained for:

- health, cleanliness, and clothing of personnel that could have an adverse effect on product quality
- monitoring and controlling work environment conditions that can have an adverse effect on product quality
- training or supervision of personnel who are required to work under special environmental conditions
- controlling contaminated or potentially contaminated product (including returned products) in order to prevent contamination of other product, the work environment, or personnel

Clause and Regulation

ISO: ISO 13485:2016: 4.2.1, 6.4

TGA: TG(MD)R Sch1 P2 7.2, 8

ANVISA: RDC ANVISA 665/2022: Art. 68

MHLW/PMDA: MO169: 6, 25-1, 25-2

FDA: 21 CFR 820.70(c), 820.70(d), 820.70(e)]

Additional country-specific requirements

Brazil (ANVISA):
Verify that biosafety standards are used, when applicable [RDC ANVISA 665/2022: Art. 76].

Assessing conformity

Contamination control
The medical device organisation is responsible for establishing and maintaining procedures to prevent contamination of products, equipment, and personnel by substances that could adversely affect the device. If contamination control measures are necessary to meet specified requirements, cleaning and sanitation procedures and schedules may be required to ensure the contamination control measures are properly functioning. The medical device organisation should consider the segregation and decontamination of returned product.

Personnel practices
Personnel practices must address personnel health, cleanliness, and attire if these could adversely affect product quality or the work environment. In the event that maintenance or other personnel are required to work temporarily under special environmental conditions, these individuals must be appropriately trained or supervised by a trained individual.

Links
None

Task 7 – Identification of processes subject to validation

Determine if the selected process(es) and sub-process(es) have been reviewed, including any outsourced processes, to determine if validation of these processes is required.

Clause and Regulation

ISO: ISO 13485:2016: 4.2.1, 4.1.6, 7.5.6

TGA: TG(MD)R Sch1 P2 8.2, 8.3; Sch3 P1 1.4(5)(d)

ANVISA: RDC ANVISA 665/2022: Art. 103, Art. 104, Art. 105, Art. 106

MHLW/PMDA: MO169: 6, 5-6, 45

FDA: 21 CFR 820.75(a)]

Additional country-specific requirements

Brazil (ANVISA):

Verify that analytical methods, supporting auxiliary systems for production and environmental control that can adversely affect product quality or the quality system are validated, periodically reviewed and, when necessary, revalidated according to documented procedures [RDC ANVISA 665/2022: Art. 103, Art. 104, Art. 105, Art. 106].

United States (FDA):

Process validation is required for sterilization, aseptic processing, injection molding, and welding [21 CFR 820.75; preamble comment 143].

Assessing conformity

Process validation

During the planning of product realization, the medical device organisation must determine which production processes require validation and which processes can be verified. Process validation may apply to processes that generate components, subassemblies, or finished devices. Process validation is required for processes where the results of the process cannot be fully verified. Processes that cannot be fully verified include processes where clinical or destructive testing is necessary to show that the process produced the desired result, where routine inspection and/or testing does not examine quality attributes essential to the proper functioning of the finished device, or where routine testing has insufficient sensitivity to verify the desired safety and efficacy of the finished product.

Examples of processes that require validation include, but are not limited to sterilization, aseptic processing, welding, and injection molding. When applicable, confirm that the medical device organisation has identified processes which require validation, including validation requirements for any outsourced processes.

When validating processes, organisations must take into account the current thinking of experts where published information is available (e.g., though the application of ISO standards for sterilization validation).

Links

Purchasing

The audit team may encounter situations where the medical device organisation outsources processes that require validation.

During the review of the Purchasing process, review the controls the medical device organisation has instituted over suppliers that perform validated processes. This can be particularly important for higher risk validated processes performed by suppliers, since the finished device manufacturer does not have immediate control over those processes.

Task 8 – Process validation

Verify that the selected process(es) have been validated according to documented procedures if the result of the process cannot be fully verified or can be verified but is not.

Confirm that the validation demonstrates the ability of the process/es to consistently achieve the planned result.

In the event changes have occurred to a previously validated process, confirm that the process was reviewed and evaluated, and re-validation was performed where appropriate.

Clause and Regulation

ISO: ISO 13485:2016: 4.2.1, 7.5.6

TGA: TG(MD)R Sch1 P1 2(1), Sch3 P1 1.4(5)(d)

ANVISA: RDC ANVISA 665/2022: Art. 3° section 31, Art. 103

MHLW/PMDA: MO169: 6, 45

FDA: 21 CFR 820.75(a), 820.75(c)]

Additional country-specific requirements

Australia (TGA):

Confirm that methods of validation have regard to the generally acknowledged state of the art (e.g., current Medical Device Standard Orders - MDSO, ISO/IEC Standards, BP, EP, USP etc.) [TG Act s41CB, TG(MD)R Sch 1 P1 2(1)].

Assessing conformity

Process validation

Process validation means establishing by objective evidence (i.e., data) that a process ***consistently*** produces a ***result*** (e.g., sterility assurance level) or ***product*** meeting predetermined specifications. Remember that the term "***product***" applies to components and in-process devices as well as finished devices. Therefore, process validation may apply to processes that generate components, in-process devices, or finished devices.

Process validation procedures

Some organisations have general process validation procedures. Other organisations establish separate procedures for each individual process validation study. Both methods for establishing process validation procedures are acceptable.

Reviewing a validation

During review of a validation study, determine when applicable whether:

- The instruments used to generate the data were properly calibrated and maintained
- Predetermined product and process specifications were established
- Sampling plans used to collect test samples are based on a statistically valid rationale
- Data demonstrates predetermined specifications were met consistently
- Process tolerance limits were challenged
- Process equipment was properly installed, adjusted, and maintained
- Process monitoring instruments were properly calibrated and maintained
- Changes to the validated process were appropriately challenged (if applicable)

- Process operators were appropriately qualified.

Achieving the planned result
Process validation activities are predictive, rather than empiric. In order for a process validation study to show the process achieves the planned result, the acceptance criteria must be stated in advance of performing the validation. The data from the process validation study must show the predetermined acceptance criteria have been met.

Evidence of nonconformities
Process validation studies may also provide valuable insight into process or product nonconformities. For example, the process validation study must demonstrate not only that the process can produce a result or product meeting predetermined specifications but also that the process will consistently produce a result or product meeting predetermined specifications. If process or product nonconformities related to a validated process are encountered at a higher than anticipated rate, it may indicate the process validation study did not confirm that the process could consistently produce a result or product meeting predetermined specifications. Unless the medical device organisation recognized this during the process validation study, they may not have investigated the cause of the process inconsistency.

Links
None

Task 9 – Validation of sterilization process

If product is supplied sterile (see Annex 2):

Verify the sterilization process is validated, periodically re-validated, and records of the validation are available.

Verify that devices sold in a sterile state are manufactured and sterilized under appropriately controlled conditions.

Determine if the sterilization process and results are documented and traceable to each batch of product.

Clause and Regulation
ISO: ISO 13485:2016: 4.2.1, 7.5.5, 7.5.6, 7.5.7

TGA: TG(MD)R Sch1 2(1) & 8.3, Sch3 P1 1.4(5)(d)

ANVISA: RDC ANVISA 665/2022: Art. 83, Art. 103, Art. 104, Art. 105, Art. 106

HC: CMDR 17

MHLW/PMDA: MO169: 6, 44, 45, 46

FDA: 21 CFR 820.75, 820.184(d)]

Additional country-specific requirements
Australia (TGA):
Verify that methods of sterilization validation have regard to the generally acknowledged state of the art (e.g. Australian Medical Device Standard Orders – MDSO e.g. **Medical Device Standards Order (Endotoxin Requirements for Medical Devices) 2018**) or Australian Conformity Assessment Standard Orders - **Conformity Assessment Standards Order**

(Quality Management Systems) 2019 that refer to the use of ISO 11135, ISO 11137 and other standards). [TG(MD)R Sch1 P1 2(1)].

Assessing conformity

Validation of sterilization processes

Sterilization processes include terminal sterilization methods (such as radiation and ethylene oxide) as well as aseptic processing methods. Sterilization processes must be validated, with periodic revalidation as required by established standards or requirements established by the medical device organisation.

Control of the manufacturing processes for devices intended to be sterile

In addition to ensuring the cleaning, packaging, and sterilization processes are validated, auditors should ensure the medical device organisation maintains appropriate controls over the following:

- routine monitoring and measurement of the cleaning, packaging and sterilization processes
- routine acceptance criteria of the cleaning, packaging and sterilization processes
- (re-)qualification, (re-)verification, (re-)calibration and maintenance of the cleaning, packaging and sterilization equipment
- environmental control of production areas (cleanroom design and monitoring)
- storage of device parts, components, and packaging material
- storage of finished sterile product and management of shelf life
- handling processes for non-sterile devices for re-sterilization.

Links

None

Task 10 – Monitoring and measurement of product conformity

Verify that the system for monitoring and measuring of product characteristics is capable of demonstrating the conformity of products to specified requirements.

Confirm that product risk is considered in the type and extent of product monitoring activities.

Clause and Regulation

ISO: ISO 13485:2016: 7.1, 7.5.1, 8.1, 8.2.6

TGA: TG(MD)R Sch1 P1 2, Sch3 P1 1.4(5)(b)&(e)

ANVISA: RDC ANVISA 665/2022: Art. 18, Art. 19, Art. 20, Art. 64, Art. 131

MHLW/PMDA: MO169: 26, 40, 54, 58, 59

FDA: 21 CFR 820.70(a), 820.250(a)]

Additional country-specific requirements

None

Assessing conformity

Monitoring systems

The general goal of monitoring processes and product characteristics during production is to ensure that products conform to the specified requirements defined and approved during the design and development of the device. The

medical device organisation has the flexibility to determine the controls that are necessary, commensurate with the risk to the finished device if processes or product characteristics do not meet specified requirements. During the audit of production processes, confirm that the control measures are suitable for detecting process or product nonconformities.

Links

None

Task 11 – Control, operation, and monitoring of the production and service process; risk controls

Verify that the processes used in production and service are appropriately controlled, monitored, operated within specified limits and documented in the product realization records.

In addition, verify that risk control measures identified by the medical device organisation for production processes are implemented, monitored and evaluated.

Clause and Regulation

ISO: ISO 13485:2016: 7.1, 7.5.1, 8.1, 8.2.5

TGA: TG(MD)R Sch1 P1 2, Sch3 P1 1.4(5)(b)&(e)

ANVISA: RDC ANVISA 665/2022: Art. 18, Art. 19, Art. 20, Art. 64, Art. 83, Art. 128, Art. 131

MHLW/PMDA: MO169: 26, 40, 54, 57

FDA: 21 CFR 820.70(a), 820.75(b), 820.250]

Additional country-specific requirements

Australia (TGA):
See **Annex 1**

Assessing conformity

Process control and monitoring

Processes that may cause a deviation to device specifications and validated processes must be controlled and monitored. Control and monitoring procedures may include in-process and finished device acceptance activities as well as environmental and contamination control measures.

Compare the process monitoring and acceptance procedures contained or referenced within the records of production specifications with those available to the production personnel. Confirm that the procedures available to the production personnel are the most current approved revisions.

While in the production area, verify that the building is of suitable design and contains sufficient space to perform necessary operations. Also, verify that the results of control and monitoring activities demonstrate that the process is currently operating in accordance with applicable procedures. This can be done by comparing work instructions with what is actually being done, comparing product acceptance criteria with acceptance activity results, reviewing control charts against specified requirements, etc.

Links

Design and Development

The design outputs for a device include documents such as diagrams, drawings, specifications, procedures, and the production processes that are essential to the proper manufacturing of the device. Production processes can include not only the manufacturing instructions, but also internal controls, such as the type and extent of acceptance activities, equipment calibration and maintenance intervals, environmental controls, and personnel controls.

During the audit of the Production and Service Controls process, consider reviewing production processes that have the highest risk or greatest effect on the essential design outputs.

Task 12 – Competence of personnel

Verify that personnel are competent to implement and maintain the processes in accordance with the requirements identified by the medical device organisation.

Clause and Regulation

ISO: ISO 13485:2016: 6.2

ANVISA: RDC ANVISA 665/2022: Art. 15

MHLW/PMDA: MO169: 22

FDA: 21 CFR 820.25, 820.70(d), 820.75(b)]

Additional country-specific requirements

None

Assessing conformity

Personnel training and qualification

Production processes must be performed by adequately trained personnel. The medical device organisation must establish procedures for identifying training needs and ensure that all personnel are trained to adequately perform their assigned responsibilities.

This training must be documented. In addition, personnel who perform validated processes must be qualified.

It is management's responsibility to determine what qualifications are necessary for personnel who perform validated processes.

Links

Management

During the audit of the Production and Service Controls process, ensure that employees who are involved in key operations that affect product realization and product quality have been trained in their specific job tasks, as well as the quality policy and objectives.

When appropriate, review the training records for those employees whose activities have contributed to process nonconformities.

Task 13 – Control of monitoring and measuring device

Confirm that the medical device organisation has determined the monitoring and measuring devices needed to provide evidence of conformity to specified requirements.

Verify that the monitoring and measuring equipment used in production and service control has been identified, adjusted, calibrated and maintained, and capable of producing valid results.

Clause and Regulation

ISO: ISO 13485:2016: 7.5.1, 7.6

TGA: TG(MD)R Sch3 P1 1.4(5)(e)

ANVISA: RDC ANVISA 665/2022: Art. 93, Art. 94, Art. 95

MHLW/PMDA: MO169: 40, 53

FDA: 21 CFR 820.70(g), 820.72]

Additional country-specific requirements

None

Assessing conformity

Maintenance and calibration

While reviewing the selected production process, make note of significant pieces of process equipment and significant pieces of measuring or test equipment. Consider selecting process and test equipment that, if not properly controlled, could cause devices to not meet specified requirements; or produce inaccurate results that could lead to unrecognized nonconformities. Confirm that the production and test equipment selected for review is suitable for its intended purpose and capable of giving valid results.

Review the maintenance, control, and calibration procedures (and records) for the equipment selected for review. The initial frequency with which measuring and test equipment is calibrated and maintained is usually based on the equipment manufacturer's recommendations. As the medical device organisation gains experience with the piece of equipment, the frequency of calibration and maintenance may be adjusted, based on a documented rationale.

Accuracy and precision

When accuracy and precision is a factor in the validity of the result of the measuring equipment, the required accuracy and precision should be defined during the planning of product realization to ensure the equipment is suitable and capable of providing valid results.

Reviewing records

If production equipment or test equipment is found to be outside of its maintenance or calibration requirements, verify that the medical device organisation made an assessment of the effect of the out-of- tolerance situation on in-process, finished, or released devices, based on risk. Equipment adjustment, calibration, and maintenance procedures and records may provide insight into nonconformities. Review these procedures and records to determine whether inadequate procedures or the medical device organisation's failure to comply with adequate procedures contributed to the nonconformity. For example, determine whether the lack of specified equipment adjustment or maintenance contributed to the production of nonconforming product.

Links

None

Task 14 – Impact analysis of monitoring and measuring device found out of specifications

Confirm that the medical device organisation assesses and records, the validity of previous measurements when equipment is found not to conform to specified requirements and takes appropriate action on the equipment and any product affected.

Verify that the control of the monitoring and measuring devices is adequate to ensure valid results. Confirm that monitoring and measuring devices are protected from damage or deterioration.

Clause and Regulation

ISO: ISO 13485:2016: 7.6

TGA: TG(MD)R Sch3 P1 1.4(5)(e)

ANVISA: RDC ANVISA 665/2022: Art. 102

MHLW/PMDA: MO169: 53

FDA: 21 CFR 820.72(a)]

Additional country-specific requirements

None

Assessing conformity

Control of monitoring and measuring devices

Organisations must maintain proper calibration, storage, and handling controls for measuring, monitoring, and test equipment used in the development, production, installation, and servicing of product. Calibration must be traceable to a national or international measurement standard if one is available. If calibration services are provided by a supplier, the supplier controls are to be applied to ensure calibration is performed competently. Proper controls will help instill confidence in results obtained from the use of the equipment.

Procedures

Organisations must define, implement, and maintain procedures for the control of monitoring and measuring devices. The medical device organisation may choose to develop general policies for the control of monitoring and measuring devices, along with separate, more specific procedures for the actual calibration and control of each piece of equipment.

Procedures must account for any environmental controls necessary for the equipment to produce valid results, as well as any specific storage or handling requirements when necessary. For example, a set of calibrated calipers may require storage in a padded case to maintain the required accuracy and precision. Confirm that the medical device organisation has the proper procedures and controls in place to preserve the proper functioning of monitoring, measuring, and test equipment.

When equipment is found to be out-of-tolerance

The medical device organisation may discover that monitoring or measuring equipment is no longer within its adjustment or calibration tolerance. In these situations, the medical device organisation must assess and record the validity of previous measuring results and take appropriate action on the equipment and any product affected.

Links

None

Task 15 – Validation of software used for the control of the production and service process

If the selected process is software controlled, or if software is used in production equipment or the quality management system, verify that the software is validated for its intended use.

Software validation may be part of equipment qualification.

Clause and Regulation

ISO: ISO 13485:2016: 4.1.6, 7.5.6, 7.6

ANVISA: RDC ANVISA 665/2022: Art. 104

MHLW/PMDA: MO169: 5-6, 45, 53

FDA: 21 CFR 820.70(i)]

Additional country-specific requirements

None

Assessing conformity

Validation of production and quality system software

Production process control software (and any other software used in the medical device organisation's quality system) must be validated for its intended use according to an established protocol. If the production process the audit team selected for review is controlled with software, review the software validation documents and records.

Software validation documents and records should include:

- A software requirements document describing the intended use(s) and user needs associated with the software.
- An established validation protocol or similar document describing the activities necessary to demonstrate that the software requirements can be met.
- Records of the results of the software validation activities described in the software validation protocol or similar document.
- Records that software changes are appropriately controlled (where applicable).

For off-the-shelf quality management system software and software-controlled production or test equipment, it may not be possible, practical, or necessary for the medical device organisation to review the software code or the various software verification test cases that are typically performed by the software or equipment manufacturer. However, the medical device organisation must still ensure the software is capable of functioning according to the device medical device organisation's needs. The validation to confirm the software meets the medical device organisation's needs must be performed according to a protocol or similar document with predetermined acceptance criteria.

If multiple software driven systems are used in the production process, be sure to assess the system(s) most likely to have an impact on the finished device's ability to meet specified requirements. Not all software driven systems used in a production process will need to be audited during each audit.

Links

None

Task 16 – Device master file

Determine if the medical device organisation has established and maintained a file for each type of device that includes or refers to the location of device specifications, production process specifications, quality assurance procedures, traceability requirements, and packaging, labeling specifications, and when applicable requirements for installation and servicing.

Confirm that the medical device organisation determined the extent of traceability based on the risk posed by the device in the event the device does not meet specified requirements.

Clause and Regulation

ISO: ISO: 13485:2016: 4.2.1, 4.2.3, 7.1, 7.5.8, 7.5.9.1

TGA: TG(MD)R, Sch1 EP13, Sch3 P1 1.4(5) (c),(d),(e) & 1.9

ANVISA: RDC ANVISA 665/2022: Art. 18, Art. 19, Art. 20, Art. 63, Art. 64, Art. 84, Art. 85, Art. 86, Art. 87

HC: CMDR 9(2), 21-23, 52-56, 66-68

MHLW/PMDA: MO169: 6, 7-2, 26, 47, 48

FDA: 21 CFR 820.65, 820.181]

Additional country-specific requirements:

Australia (TGA):
Verify that the design and location of information to be provided with a medical device, including labelling and instructions for use, comply with Essential Principle 13 and implant cards and leaflets with Essential principle 13A.

Brazil (ANVISA):
Verify that the manufacturer has established and maintains procedures to ensure integrity and to prevent accidental mixing of labels, instructions, and packaging materials [RDC ANVISA 665/2022: Art. 85].

Confirm that the manufacturer has ensured that labels are designed, printed and, where applicable, applied so that they remain legible and attached to the product during processing, storage, handling and use [RDC ANVISA 665/2022: Art. 86].

Canada (HC):
Verify that the Manufacturer maintains objective evidence that devices meet the safety and effectiveness requirements. [CMDR 9(2)].

Verify that devices sold in Canada have labeling that conforms to Canadian English and French language requirements and contains the Manufacturer's name and address, device identifier, control number (for Class III and IV devices), contents of packaging, sterility, expiry, intended use, directions for use and any special storage conditions [CMDR 21-23].

Verify that the Manufacturer maintains distribution records in respect of a device that will permit a complete and rapid withdrawal of the device from the market [CMDR 52-56].

United States (FDA):
If a control number is required for traceability, confirm that a control number is on, or accompanies the device throughout distribution [21 CFR 820.120(e)].

Assessing conformity

Records

The required records for each type or model of device include documents such as diagrams, drawings, specifications, and procedures associated with the device, its packaging and labeling; as well as quality management system and production process requirements; and if applicable, installation and servicing requirements. Documents and records associated with production processes can include not only the manufacturing instructions, but also internal controls, such as the type and extent of acceptance activities, equipment calibration and maintenance intervals, environmental controls, and personnel controls.

These documents and records provide the requirements and instructions for the proper manufacturing, labeling, packaging, and testing of the device to assure specified requirements are met during the production of each batch of devices. For the device(s) the audit team has selected to review, confirm that the required records have been established.

General traceability

It is the responsibility of the medical device organisation to establish procedures for traceability. For devices that are not implanted and are not life-supporting or life-sustaining, the medical device organisation has the flexibility to determine which raw materials and components are required to be traceable, commensurate with the risk posed by the device in the event the component does not meet specified requirements.

Traceability systems commonly include elements such as written procedures describing the control numbering system to be used, as well as the documentation of lot numbers, control numbers, or serial numbers identifying the batch of components, subassemblies, finished devices, packaging, and labeling in order to aid their identification in the manufacturing process.

Links

Design and Development

During the design and development of the device, the essential design outputs for the proper functioning of the device should have been identified. Raw materials, components, and subassemblies should have been considered for traceability if their nonconformity could result in the finished device not meeting its specified requirements and essential functions.

Task 17 – Production record; evidence of compliance of released devices

Determine if the medical device organisation has established and maintained a record of the amount manufactured and approved for distribution for each batch of medical devices, the record is verified and approved, the device is manufactured according to the file referenced in Task 16, and the requirements for product release were met and documented.

Clause and Regulation

ISO: ISO: 13485:2016: 4.2.1, 7.5.1, 7.5.8, 7.5.9.1, 8.2.6

ANVISA: RDC ANVISA 665/2022: Art. 39, Art. 113, Art. 114

MHLW/PMDA: MO169: 6, 40, 47, 48, 58, 59

FDA: 21 CFR 820.120, 820.184]

Additional country-specific requirements

Brazil (ANVISA):
Verify that the device history record of the product includes or refers to the following information: date of manufacture; components used; quantity manufactured; results of inspections and tests; parameters of special processes; quantity released for distribution; labeling; identification of the serial number or batch of production; and final release of the product [RDC ANVISA 665/2022: Art. 40].

Verify that labeling has not been released for storage or use until a designated individual has examined the labeling for accuracy. The approval, including the date, name, and physical or electronic signature of the person responsible, must be documented in the device history record [RDC ANVISA 665/2022: Art. 87].

United States (FDA):
Verify that labeling is not released for storage or use until a designated individual has examined the labeling for accuracy including, where applicable, the correct unique device identifier (UDI) or Universal Product Code (UPC), expiration date, control number, storage instructions, handling instructions, and any additional processing instructions [21 CFR 820.120(b)].

Confirm that labeling is stored in a manner that provides proper identification and prevents mix-ups. Verify labeling and packaging operations are controlled to prevent labeling mix-ups [21 CFR 820.120(c) and (d)].

Verify that the label and labeling used for each production unit, lot, or batch are documented in the batch record, as well as any control numbers used [21 CFR 820.120(e), 820.184(e)].

Assessing conformity

Verify manufacturing of the device
Verify that each batch of devices was manufactured in accordance with product and production specifications, being mindful that in some instances, a batch can be a single device. This verification should include a review of the purchasing controls and receiving acceptance activities applied to at least one significant component or raw material, in-process and final finished device acceptance activities and results, environmental and contamination control records (if applicable), and sampling plans for process and environmental controls and monitoring.

The record for each batch of devices must include, or refer to the location of, the following information:

- The dates of manufacture
- The quantity manufactured
- The quantity released for distribution
- The acceptance records which demonstrate the device has been manufactured in accordance with the planned arrangements and defined product specifications
- The primary identification label and labeling used for each production unit
- Any device identification(s) and control number(s) used, including unique device identifiers when applicable
- A provision to indicate that the record has been verified and approved.

Determine if there are problems
If, during the accomplishment of this audit task, the audit team observes evidence that the process is outside the medical device organisation’s acceptance range for operating parameters or that product nonconformities exist, confirm that the nonconformities were handled appropriately, with input into the Measurement, Analysis and Improvement process when appropriate.

Links

None

Task 18 – Traceability applied to implantable, life-supporting or life-sustaining medical devices

If the medical device organisation manufactures active or non-active implantable medical devices, life-supporting or life-sustaining devices, confirm that the medical device organisation maintains traceability records of all components, materials, and work environment conditions (if these could cause the medical device to not satisfy its specified requirements) in addition to records of the identity of personnel performing any inspection or testing of these devices.

Confirm that the medical device organisation requires that agents or distributors of these devices maintain distribution records and makes them available for inspection.

Verify that the medical device organisation records the name and address of shipping consignees for these devices.

Clause and Regulation

ISO: ISO: 13485:2016: 4.2.1, 7.5.9.2, 8.2.6

HC: CMDR 54, 66-68

MHLW/PMDA: MO169: 6, 49, 59

FDA: 21 CFR 820.65]

Additional country-specific requirements

Canada (HC):

Verify that the Manufacturer has identified Schedule 2 implants and provides implant registration cards with devices or employs another suitable system approved by Health Canada [CMDR 66-68].

Verify that the Manufacturer of devices that are listed on Schedule 2 of the Medical Devices Regulations maintains distribution records of these devices as well as any information received on implant registration cards related to these Schedule 2 devices [CMDR 54].

United States (FDA):

Verify that the manufacturer has implemented a tracking system for devices for which the manufacturer has received a tracking order from FDA. The tracking system must ensure the manufacturer is able to track the device to the end-user. The manufacturer must conduct periodic audits of the tracking system [21 CFR 821].

Assessing conformity

Traceability of implantable, life-supporting or life-sustaining devices

Medical device organisations that produce finished devices whose failure could result in serious injury or harm to the user must implement a traceability system. The traceability system must allow for each batch of finished devices to be traced by a control number or similar mechanism throughout the distribution chain. Organisations must also provide for the control and traceability of components and materials used in the manufacture of the device, as well as documentation of the manufacturing conditions when manufacturing conditions could cause the finished device to not meet specified requirements (e.g., cleanroom conditions).

The determination of which components and raw materials may be required to be traceable may be made by the medical device organisation using risk management tools, such as risk analysis, or by identification of the components and processes used to fulfill the essential design outputs.

Medical Device Tracking
Some regulatory authorities participating in the MDSAP have requirements for tracking certain types of devices to the end-user. For regulatory authorities that have tracking requirements, these requirements generally apply to a small subset of devices that are life-sustaining or life supporting, intended for implant longer than one year, or are considered by the regulatory authority to be high risk.

If the medical device organisation manufactures or distributes a device that falls under a tracking requirement, confirm that the medical device organisation has the necessary systems in place to provide for tracking each device to the end-user.

The medical device organisation's tracking system must be periodically reviewed and audited by the medical device organisation to confirm that the tracking system is effective. The tracking system must contain the unique device identifier (UDI), lot number, batch number, model number, or serial number of the device or other identifier necessary to provide for effective tracking of the devices.

Links
None

Task 19 – Identification of product status

Verify that product status identification is adequate to ensure that only product which has passed the required inspections and tests is dispatched, used, or installed.

Clause and Regulation
ISO: ISO: 13485:2016: 7.5.8

ANVISA: RDC ANVISA 665/2022: Art. 108, Art. 113

MHLW/PMDA: MO169: 47

FDA: 21 CFR 820.86]

Additional country-specific requirements
None

Assessing conformity

Identification
Identification is generally defined as the description of the product that distinguishes it from other product. Organisations must define, document, and implement processes for the identification and control of product, including components, process agents, subassemblies, finished devices, packaging, and labeling. This can be accomplished through the use of part numbers, lot numbers, batch numbers, work order numbers, quantities, supplier name, as well as other means. The extent of identification activities should be based on the complexity and risk of the product.

Links
None

Task 20 – Customer property

Verify that the medical device organisation has implemented controls to identify, verify, protect, and safeguard customer property provided for use or incorporation into the product.

Verify that the medical device organisation treats patient information and confidential health information as customer property.

Clause and Regulation

ISO: ISO: 13485:2016: 7.5.10

MHLW/PMDA: MO169: 51

Additional country-specific requirements

None

Assessing conformity

Safeguarding customer property

The medical device organisation is responsible for safeguarding customer property while it is under the medical device organisation's control. If any customer property is lost, damaged, or otherwise unsuitable for use, this must be reported to the customer and records maintained.

Links

None

Task 21 – Acceptance activities

Verify that acceptance activities assure conformity with specifications and are documented.

Confirm that the extent of acceptance activities is commensurate with the risk posed by the device.

Note: Acceptance activities apply to any incoming component, subassembly, or service, regardless of the medical device organisation's financial or business arrangement with the supplier.

Clause and Regulation

ISO: ISO: 13485:2016: 4.2.1, 7.4.3, 7.5.8, 8.2.6

TGA: TG(MD)R Sch1 P1 2, Sch3 P1 Cl1.4(5)(d)

ANVISA: RDC ANVISA 665/2022: Art. 88, Art. 89, Art. 90, Art. 131

MHLW/PMDA: MO169: 6, 39, 47, 58, 59

FDA: 21 CFR 820.80, 820.250(b)]

Additional country-specific requirements

Brazil (ANVISA):

Verify that sampling plans are defined and based on valid statistical rationale. Each manufacturer must establish and maintain procedures to ensure that sampling methods are suitable for their intended use and are reviewed regularly. A review of sampling plans should consider the occurrence of nonconforming product, quality audit reports, complaints and other indicators [RDC ANVISA 665/2022: Art. 132, Art. 133, Art.134].

United States (FDA):
Verify that the manufacturer establishes and maintains procedures to ensure that sampling methods are adequate for their intended use and ensure that when changes occur, the sampling plans are reviewed [21 CFR 820.250(b)].

Assessing conformity

Recognized acceptance activities
Organisations are expected to define, document, and implement systems and procedures for acceptance activities to verify that products, including finished devices, in-process devices, components, packaging, and labeling conform to specified requirements. Recognized acceptance activities include, but are not limited to, inspections, tests, review of certificates of analysis, and supplier audits. Effective acceptance procedures and systems directly affect the ability of a medical device organisation to demonstrate that the process and product meets specifications.

During the audit of acceptance activities for the devices selected for audit, confirm that the medical device organisation has defined processes for receiving, in-process, and final acceptance activities. Determine if the acceptance activities have been implemented. One way to accomplish this audit task is to review a sample of batch records and confirm that the acceptance activities have been documented and that the acceptance activities show specified requirements have been met. Records should identify who conducted acceptance activities.

The acceptance status of incoming, in-process, and finished devices must be identified. The identification of acceptance status must be maintained throughout manufacturing, packaging, labeling, and where applicable, installation and servicing to ensure that only product which has passed the required acceptance activities is distributed, used, or installed.

Acceptance activities involving related firms
The audit team may encounter situations where the medical device organisation receives incoming product from a financial or corporate affiliate. It is the receiving medical device organisation's responsibility to perform and record the necessary acceptance activities to ensure the received product conforms to specified requirements, as well as applying the necessary purchasing controls to the supplier. Acceptance activities and purchasing controls apply to all product received from suppliers outside of the scope of the medical device organisations quality management system, whether a payment occurs or not, and regardless of the corporate or financial relationship of the supplier to the medical device organisation.

Sampling
The audit team may encounter the use of sampling during acceptance activities. For example, a medical device organisation might choose to use sampling to perform receiving acceptance on a large lot of incoming components. When used, sampling plans must be written and based on a valid statistical rationale and a risk-based methodology.

Combination of controls
An important concept to remember is that quality cannot be inspected or tested into products. Organisations must establish an appropriate mix of acceptance activities and purchasing controls to ensure products will meet specified requirements. The type and extent of acceptance activities can be based in part on the amount of purchasing controls applied to the supplier, the demonstrated capability of the supplier to provide quality products, and the potential impact of the product on the finished device, including the risk the device poses to the patient or user if specified requirements are not met. Organisations that conduct quality control solely in-house must still assess the capability of suppliers to provide acceptable products.

Evidence of inadequate acceptance activities

The audit team may encounter instances where product has been deemed acceptable by the successful completion of acceptance activities, but the product is later shown to not meet specified requirements (i.e., failure of the device leading to product complaint). This can be an indication that the acceptance activities are not sufficient to identify nonconformities. Confirm that the medical device organisation has taken the appropriate action to determine the suitability of the acceptance activities.

Links

Purchasing, **Design and Development**

The audit team should consider reviewing the purchasing controls and requirements for suppliers of higher risk products. The audit team should also consider reviewing the purchasing controls and requirements for suppliers of products that undergo minimal acceptance activities at the medical device organisation, particularly if the supplied product is manufactured using a process that requires validation. During the review of acceptance activities, if the audit team encounters situations where records of acceptance activities for supplied product reveal products that do not meet specified requirements, consider selecting those suppliers for review during the audit of the medical device organisation's Purchasing process.

The establishment of the necessary purchasing controls and required acceptance activities is a design output. The degree of the purchasing controls necessary and extent of acceptance activities should be based on the risk posed by the product not meeting its specified requirements and essential design outputs.

Task 22 – Identification, control, and disposition of nonconforming products

Verify that the identification, control, and disposition of nonconforming products is adequate, *based on the risk the nonconformity poses to the device meeting its specified requirements*.

Clause and Regulation

ISO: ISO: 13485:2016: 7.5.8, 8.3

TGA: TG(MD)R Sch1 P1 2, Sch3 P1 Cl1.4(5)(b)

ANVISA: RDC ANVISA 665/2022: Art. 115, Art. 116

MHLW/PMDA: MO169: 47, 60-1, 60-2, 60-3, 60-4

FDA: 21 CFR 820.60, 820.90(a), 820.86, 820.100(a)]

Additional country-specific requirements

None

Assessing conformity

Procedures

The purpose of controlling nonconforming product is to prevent the unintended use and distribution of nonconforming product, including components, processing agents, in-process devices, and finished devices. Confirm that the medical device organisation has defined and implemented procedures for the identification, control, segregation, evaluation, and disposition of nonconforming product.

Handling nonconforming product

The medical device organisation can address nonconforming product by taking action to eliminate the detected nonconformity (e.g., sorting an incoming lot of components to remove components that do not meet specifications), authorizing its use, release, or acceptance under concession, or by taking action to prevent its original intended use (e.g., allowing the components or devices to be used as demonstration units at marketing conferences).

Until a disposition can be made, the medical device organisation must have a process to properly identify nonconforming product to prevent its accidental or unauthorized use. One example is tagging and moving the nonconforming product to a controlled enclosure away from the production area.

If nonconforming product is accepted under concession, the records of the identity of the person authorizing the concession must be maintained.

If nonconforming product has been detected after a product has been released and put into use the medical device organisation must consider the risks associated with the device and may need to consider an advisory notice or recall.

Evaluation of nonconforming product

The evaluation of nonconformity must include a determination of the need for an investigation and notification of the persons or organisations responsible for the nonconformity, such as a supplier. Ensure that the medical device organisation has adequately established an interface / interaction between the processes for the identification of non-conforming product and the processes for corrective action. These interactions should be evident in the quality manual.

Links

Measurement, Analysis and Improvement

The audit team should be mindful of any instances where the acceptance of nonconforming product has led to finished devices not meeting specified requirements. This information can often be found in records of acceptance activities and complaint records.

During the review of the medical device organisation's corrective and preventive actions, the auditors may have noted instances where nonconforming products were found to be the underlying cause of quality problems and complaints. The audit team should consider reviewing the medical device organisation's handling and evaluation of nonconforming products that were determined to be the underlying cause of quality problems.

Ensure that the analysis of data regarding nonconforming product is considered as an input to the medical device organisation's Measurement, Analysis and Improvement process and that corrective or preventive actions have been implemented when necessary.

Task 23 – Rework of nonconforming products

If a product needs to be reworked, confirm that the medical device organisation has made a determination of any adverse effect of the rework upon the product.

Verify that the rework process has been performed according to an approved procedure, that the results of the rework have been documented, and that the reworked product has been re-verified to demonstrate conformity to requirements.

Clause and Regulation

ISO: ISO: 13485:2016: 8.3.4

ANVISA: RDC ANVISA 665/2022: Art. 119

MHLW/PMDA: MO169: 60-4

FDA: 21 CFR 820.90(b)]

Additional country-specific requirements
None

Assessing conformity

Reworking nonconforming product
The audit team may encounter instances where the medical device organisation has chosen to address nonconforming product by means of reworking the component, subassembly or finished device. The medical device organisation must have suitable approved procedures in place to address nonconforming product destined for rework. Reworked product must be re-evaluated or re-tested to ensure it meets its original specified requirements. Rework must be documented.

Be mindful of instances where the underlying cause of quality problems, such as complaints that finished devices do not meet specified requirements, are traced to devices that have been reworked. This can be an indication that the rework process was not adequate to ensure the finished device meets specifications.

Additionally, rework of products manufactured using validated processes can be an indication that the process cannot consistently produce product that meets specified requirements. If the audit team notes a pattern of reworking products that are manufactured using a validated process, consider reviewing the process validation to confirm that the medical device organisation has data to show the process is effective, reproducible, and stable; and that the medical device organisation is operating the process within the validated parameters.

Links
None

Task 24 – Preservation of the product

Verify that procedures are established and maintained for preserving the conformity of product and constituent parts of a product during internal processing, storage, and transport to the intended destination. This preservation encompasses identification, handling, packaging, storage, and protection, including those products with limited shelf-life or requiring special storage conditions.

Clause and Regulation
ISO: ISO: 13485:2016: 7.5.8, 7.5.11

TGA: TG(MD)R Sch1 P1 4&5

ANVISA: RDC ANVISA 665/2022: Art. 84, Art. 107, Art. 111

HC: CMDR 14

MHLW/PMDA: MO169: 47, 52

FDA: 21 CFR 820.130, 820.140, 820.150, 820.160(a)]

Additional country-specific requirements
None

Assessing conformity

Ensuring proper handling

The medical device organisation must have a documented system that defines product handling requirements at all stages of manufacturing to prevent mix-ups, damage, and deterioration. This can include specified requirements for storage and shipping to ensure the preservation of the product to its destination. For example, an in-vitro diagnostic device may need to be stored and shipped in a frozen state to maintain proper shelf-life of the reagents, or test samples may need to be conditioned to cover Australian climate zone (extreme temperature range -29C-50C) for packaging validation. These handling requirements should have been considered during the planning of product realization for the device. When necessary, confirm that the needed control measures are implemented to ensure the conformity of product to its specified requirements.

Links

None

Task 25 – Review of customer requirements, distribution records

Confirm that the medical device organisation performs a review of the customer's requirements, including the purchase order requirements, prior to the medical device organisation's commitment to supply a product to a customer.

Verify that the medical device organisation maintains documentation required by regulatory authorities regarding maintenance of distribution records.

Clause and Regulation

ISO: ISO: 13485:2016: 4.2.1, 5.2, 7.2.2, 7.5.9

ANVISA: RDC ANVISA 665/2022: Art. 112

MHLW/PMDA: MO169: 6, 11, 28, 48, 49

FDA: 21 CFR 820.160(a)]

Additional country-specific requirements

Australia (TGA):

Specific regulatory requirements are imposed on the Australian Sponsors as conditions of marketing authorisation. This includes distribution records for devices that have been subject to complaint or adverse events, near adverse events or proposed recalls. Sponsors may require information from the manufacturer to allow the Sponsor to fulfill those requirements. If assistance is required, the Sponsor, as a customer of the manufacturer that receives product, may specify requirements to be fulfilled by the manufacturer, for example, in a written agreement. (ISO13485:2016 Clause 7.2.1 a) (See also Task 5 – Chapter 7)

Brazil (ANVISA):

Verify that the manufacturer maintains distribution records which include or make reference to: the name and address of the consignee, the identification and quantity of products shipped, the date of dispatch, and any numerical control used for traceability [RDC ANVISA 665/2022: Art. 112].

Canada (HC):

Verify that the Manufacturer maintains distribution records that contain sufficient information to permit complete and rapid withdrawal of the medical device from the market [CMDR 52-53].

Verify that distribution records of a device are retained by the Manufacturer in a manner that will allow for timely retrieval, for the longer of (a) the projected useful life of the device; and (b) two years after the date the device was shipped [CMDR 55-56].

United States (FDA):
Verify that the Manufacturer maintains distribution records which include or refer to the location of the name and address of the initial consignee, the identification and quantity of devices shipped; and any control numbers used [21 CFR 820.160(b)].

Assessing conformity

Distribution records
The medical device organisation must maintain distribution records which include or refer to the location of the initial consignee, the identification and quantity of devices shipped, the date shipped, and any control numbers used.

Links
None

Task 26 – Installation activities

If installation activities are required, confirm that records of installation and verification activities are maintained.

Clause and Regulation
ISO: ISO: 13485:2016: 7.5.3

ANVISA: RDC ANVISA 665/2022: Art. 125, Art. 126

MHLW/PMDA: MO169: 42

FDA: 21 CFR 820.170]

Additional country-specific requirements
None

Assessing conformity

Installation activities
When a device must be installed for suitable functioning, the medical device organisation must establish procedures and instructions to ensure proper installation. These instructions must be made available to personnel performing the installation. Installation activities must be documented.

Determining the extent of review
In the absence of identified quality problems related to the installation of the selected device, the audit team may choose to limit the review of the installation process to confirming the necessary procedures are in place.

Links
None

Task 27 – Servicing activities

Determine if servicing activities are conducted and documented in accordance with defined and implemented instructions and procedures.

Confirm that service records are used as a source of quality data in the Measurement, Analysis and Improvement process.

Clause and Regulation

ISO: ISO: 13485:2016: 4.2.1, 7.5.4, 8.4

ANVISA: RDC ANVISA 665/2022: Art. 130

MHLW/PMDA: MO169: 6, 43, 61

FDA: 21 CFR 820.200]

Additional country-specific requirements

Brazil (ANVISA):
Confirm that the manufacturer has established and maintains procedures to ensure that records of servicing activities are kept with the following information:

- the product serviced
- the control number of the product serviced
- the date of completion of service
- identification of the service provider
- description of service performed
- results of inspections and tests performed [RDC ANVISA 665/2022: Art. 129].

Verify that the manufacturer periodically reviews the records of servicing activities. In cases where the analysis identifies trends that pose danger or records involving death or serious injury, a corrective or preventive action must be initiated [RDC ANVISA 665/2022: Art. 130].

United States (FDA):
Verify that each manufacturer who receives a service report that represents an event that must be reported to FDA as a medical device report automatically considers the report a complaint [21 CFR 820.200(c)].

Confirm that service reports are documented and include the name of the device serviced, any unique device identifier (UDI) or universal product code (UPC), and any other device identification(s) and control number(s) used; and the date of service [21 CFR 820.200(d)].

Assessing conformity

Procedures
When servicing is a specified requirement, the medical device organisation must define and maintain procedures, instructions, and processes for performing and verifying that servicing activities meet specified requirements.

Servicing process
When organisations implement servicing programs, the medical device organisation must ensure components used for repair are acceptable for the intended use, inspection and test procedures are available, and test equipment is properly maintained to ensure serviced devices will perform as intended after servicing. Personnel performing service activities must have the appropriate training.

The audit team may observe instances where nonconformities occurred and/or complaints were received after the servicing of the device. This can be an indication that the service activity was not properly controlled or that service personnel do not have the proper equipment, instructions, or training to perform the required service.

Analysis of service reports

Service reports can be an important source of quality data for input into the medical device organisation's Measurement, Analysis and Improvement process. When necessary, confirm data regarding service reports is analyzed for possible corrective action or preventive action. Service reports must also be analyzed to determine if the service event represents an adverse event that is reportable to regulatory authorities.

In some instances, product complaints may be initially recorded by the medical device organisation as a service report. For example, a user may report to the medical device organisation that a patient blood parameter monitoring device is not working correctly and requires service. Upon receipt of the device from the user by the medical device organisation's service function, the service function notes the reason the monitoring device is not working is that an essential component within the device failed prematurely. This service report should be considered by the medical device organisation to be a complaint and analyzed by the medical device organisation to determine if an adverse event report needs to be submitted to regulatory authorities.

Links

Measurement, Analysis and Improvement

During the audit of the medical device organisation's Measurement, Analysis and Improvement process, the audit team may have already confirmed that quality data from the analysis of servicing activities is analyzed for possible corrective or preventive action. When reviewing the medical device organisation's service reports, the audit team should be mindful of service reports that appear to be product complaints. Ensure that service reports that appear to be complaints have been appropriately addressed.

In some instances, a similar quality problem for a particular device may be found in the service reports and the complaint records. In these instances, confirm that the medical device organisation is taking appropriate corrections and/or corrective actions considering a similar quality problem is observed in multiple data sources.

Task 28 – Risk controls applied to transport, installation, and servicing

When appropriate, verify that risk control and mitigation measures are applied to transport, installation and servicing, in accordance with the medical device organisation's risk management practices.

Clause and Regulation

ISO: ISO: ISO 13485:2016: 7.1, 7.5.1, 7.5.3, 7.5.4, 7.5.11

TGA: TG(MD)R Sch1 P1 2&5

ANVISA: RDC ANVISA 665/2022: Art. 18, Art. 19, Art. 20

MHLW/PMDA: MO169: 26, 40, 42, 43, 52

FDA: 21 CFR 820.160(a), 820.170(a), 820.200(a)]

Additional country-specific requirements

None

Assessing conformity

Risk control

The requirements for delivery, installation, and servicing of a particular device should have already been evaluated and addressed by the medical device organisation during design and development and planning for product realization.

If risk control measures were identified involving the delivery, installation, and servicing for a particular device, confirm that the necessary processes have been implemented to ensure the risk control measures are in place. For example, a medical device organisation may have identified that in order for a medical imaging device to give accurate images, servicing must be performed by trained personnel according to specific instructions.

Risk control measures might include warnings on the imaging device that only authorized personnel should service the device and the design of a unique tool to access the inside of the device that is only provided to authorized service personnel.

Links

None

Task 29 – Top management commitment to the production and service process

Determine, based on the assessment of the production and service control process overall, whether management provides the necessary commitment to the production and service control process to ensure devices meet specified requirements and quality objectives.

Clause and Regulation

ISO: ISO: 13485:2016: 5.1, 5.2

ANVISA: RDC ANVISA 665/2022: Art. 5°, Art. 6°, Art. 7°

MHLW/PMDA: MO169: 10, 11

Additional country-specific requirements

None

Links

None

Chapter 7 - Purchasing

The intent of the Purchasing process is to ensure that purchased, subcontracted, or otherwise received products and services conform to specified requirements. The medical device organisation is expected to establish and maintain documented controls for planning and performing purchasing activities.

The controls necessary depend on the effect of the product on the quality, safety, and effectiveness of the finished device. Effective purchasing processes incorporate purchasing requirements and specifications, the selection of acceptable suppliers based on the capability of the suppliers to provide acceptable product, the performance of necessary acceptance activities, and maintenance of the required quality records.

The **management representative** is responsible for ensuring that the requirements of the quality management system have been effectively defined, documented, implemented, and maintained. Prior to the audit of a process, it may be helpful to interview the management representative (or designee) to obtain an overview of the process and a feel for management's knowledge and understanding of the process.

The Purchasing process is integral to the other processes of the MDSAP audit sequence. As the audit is being performed of the medical device organisation's Measurement, Analysis and Improvement process, Design and Development process, and Production and Service Controls process, the audit team should be assessing the affect purchased product has on the quality of the finished device. The audit team should be using information learned about actual and potential product and process nonconformities during the audit of the Measurement, Analysis and Improvement process, higher risk elements and essential design outputs from the design projects reviewed during audit of the Design and Development process, in addition to significant outsourced product and production processes identified during the audit of the Production and Service Controls process to make decisions as to supplier evaluation files to be reviewed during the audit of the Purchasing process.

The medical device organisation's purchasing process may be reviewed in conjunction with the Measurement, Analysis and Improvement process, the Design and Development process, and the Production and Service Controls process, being mindful of the MSDAP process linkages. The Purchasing process should be considered a critical process for those organisations that outsource essential activities such as design and development and/or production to one or more suppliers.

Auditing the Purchasing Process

Purpose: The purpose of auditing the Purchasing process is to verify that the medical device organisation's processes ensure that products (e.g., components, materials and services provided by suppliers, including contractors and consultants) are in conformance with specified purchase requirements, including quality management system requirements. This is particularly important for those organisations who outsource activities such as design and development and/or production to one or more suppliers, and when the supplied product or service cannot be verified by inspection (e.g., sterilization services). Suppliers include those providers of any product received from outside the medical device organisation, including corporate or financial affiliates, where the product has an effect on subsequent product realization or the final product.

Outcomes: As a result of the audit of the Purchasing process, objective evidence will show whether the medical device organisation has:

A) Defined, documented and implemented procedures to ensure purchased or otherwise supplied products conform to specified purchase requirements

B) Established criteria for the selection, evaluation and re-evaluation of suppliers based on the type and significance of the product purchased and the impact of the supplied product on subsequent product realization or the quality of the finished device
C) Performed the evaluation and selection of suppliers based on the capability of the supplier to meet specified requirements
D) Ensured the continued capability of suppliers to provide quality products that meet specified purchase requirements through re-evaluation
E) Determined and implemented an appropriate combination of controls applied to suppliers in conjunction with acceptance verification activities to ensure conformity to product and quality management system requirements, based on the impact of the supplied product on the finished device.

Links to Other Processes:

Management; **Design and Development**; **Measurement, Analysis and Improvement**; **Production and Service Controls**

Task 1 – Planning activities regarding purchased products and outsourced processes

Verify that planning activities describe or identify products to purchase and processes to outsource, the specified requirements for purchased products, the requirements for purchasing documentation and records, purchasing resources, the activities for purchased product acceptance, and *risk management* in supplier selection and purchasing.

Clause and Regulation

ISO: ISO: 13485:2016: 4.1.2, 4.1.3, 4.1.5, 7.1, 7.4.1, 7.4.2, 7.4.3

TGA: TG(MD)R Sch1 P1 2, Sch3 P1 Cl1.4(5)(d)(ii)

ANVISA: RDC ANVISA 665/2022: Art. 18, Art. 21

MHLW/PMDA: MO169: 5-2, 5-3, 5-5, 26, 37, 38, 39

FDA: 21 CFR 820.20, 820.50]

Additional country-specific requirements

None

Assessing conformity

Planning

In planning product realization, the medical device organisation must determine as appropriate the quality objectives and requirements for the purchased products, the processes, documents, and resources specific to the purchased products, the criteria for purchased product acceptance, and the required verification, monitoring, inspection, and test activities specific to the purchased products. Planning of product realization often begins in the design and development of the product, including the translation of the design into production specifications. The translation of the design into production specifications includes the establishment of specified requirements for purchased product.

Quality objectives

Quality objectives are typically expressed as a measurable target or goal. The planning of product realization should include consideration of how the purchased product, the criteria for purchased product acceptance, and the required

verification, monitoring, inspection, and test activities specific to the purchased product will achieve the quality objectives.

Links

Design and Development, **Management**

During the review of a design project, confirm that the medical device organisation has considered the effect of purchased product on the essential design outputs. For suppliers that provide product and services related to the essential design outputs, the degree of purchasing controls necessary is commensurate with the effect of the supplied product on the proper functioning of the finished device.

During the audit of the Purchasing process, confirm when necessary that the degree of control over suppliers of purchased product has been made based on the risk the supplied product poses to the ability of the finished device to meet specified requirements.

Additionally, confirm when necessary that the quality objectives related to the purchased product were considered for inclusion in management review.

Task 2 – Selection of supplier file to audit

Select one or more supplier evaluation files to audit.

Priority criteria for selection:

1. Indications of problems with supplied products or processes from audit of the Measurement, Analysis and Improvement process
2. Suppliers of higher risk products or processes
3. Suppliers who provide products or services that directly impact the design outputs required for proper functioning of the device
4. Suppliers of processes that require validation or revalidation
5. Newly approved suppliers of products or services
6. Suppliers of products or services used in the manufacturing of multiple products
7. Suppliers of components or services not covered during previous audits

Links

None

Task 3 – Procedure for the control of purchased products and outsourced processes

Verify that procedures for ensuring purchased product conforms to purchasing requirements have been established and documented.

Clause and Regulation

ISO: ISO: 13485:2016: 7.4.1

TGA: TG(MD)R Sch3 P1 Cl1.4(5)(d)(ii)

ANVISA: RDC ANVISA 665/2022: Art. 21

MHLW/PMDA: MO169: 37

FDA: 21 CFR 820.50]

Additional country-specific requirements

None

Assessing conformity

Procedures

The medical device organisation must define, document, and implement procedures to ensure that purchased product conforms to specified requirements. These procedures commonly contain information as to the mechanisms by which the medical device organisation is going to categorize suppliers based on the risk the supplied product has on the ability of the finished device to meet specified requirements, the criteria the medical device organisation intends to use to evaluate the suppliers, the means of determination that a supplier is acceptable, the methods for supplier monitoring, the requirements for re-evaluating suppliers, and the means by which a supplier might be determined to be unacceptable.

It is important to remember that the requirements for purchasing controls apply to all product received from a supplier by the medical device organisation that have an impact on product realization, whether a payment occurs or not, and regardless of the corporate or financial affiliation between the supplier and the medical device organisation.

Links

None

Task 4 – Extent of controls applied to the supplier and the purchased product; criteria for selection, evaluation, and re-evaluation of the supplier

Verify that the procedures assure the type and extent of control applied to the supplier and the purchased product is dependent upon the effect of the purchased product on subsequent product realization or the final product.

Verify that criteria for the selection, evaluation and re-evaluation of suppliers have been established and documented.

Clause and Regulation

ISO: ISO: 13485:2016: 7.4.1

ANVISA: RDC ANVISA 665/2022: Art. 22, Art. 23

MHLW/PMDA: MO169: 37

FDA: 21 CFR 820.50]

Additional country-specific requirements

None

Assessing conformity

Extent of control

The type and extent of control applied to the supplier must take into consideration the affect the supplied product has on the finished device. Procedures commonly contain methods to categorize suppliers, based on the importance of the supplied product to the proper functioning of the finished device and the past history (if applicable) of the supplier.

Be mindful of organisations that use a “one-size-fits-all” approach to managing their suppliers, as these systems may not provide the necessary amount of evaluation and oversight over suppliers of products essential for demonstrating conformity to requirements and the proper functioning of the finished device.

Evaluation criteria
The medical device organisation must define, document, and implement procedures outlining the criteria for the selection, evaluation and re-evaluation of suppliers. The procedures for supplier evaluation and selection typically include such items as the methods by which suppliers will be evaluated and the means and frequency by which supplier performance will be monitored.

The evaluation of suppliers must provide a means to assess the capability of the supplier to supply products that meet specified requirements. The medical device organisation can assess a supplier’s capability to supply quality product in a number of ways, including but not limited to performing supplier audits, first-article inspections, supplier surveys, and reviewing the supplier’s past history in supplying a similar product or service if applicable.

The medical device organisation may also choose to consider the supplier’s conformity with quality management system requirements through third party certifications; however, third party certification should not be relied on exclusively in initially evaluating a supplier.

Controls over suppliers of sterilization processes
For devices intended to be sterile, the medical device organisation must determine the criteria the supplier must meet to be selected, with regards to the control of the sterility of the device and perform selection and monitoring of suppliers considering the identified criteria.

Links
None

Task 5 – Selection of supplier based on ability of the supplier to satisfy the specified purchase requirements

Verify that suppliers are selected based on their ability to supply product or services in accordance with the medical device organisation’s specified requirements.

Confirm that the degree of control applied to the supplier is commensurate with the significance of the supplied product or service on the quality of the finished device, based on risk.

Verify that records of supplier evaluations are maintained.

Clause and Regulation
ISO: ISO: 13485:2016: 4.2.1, 7.1, 7.4.1

TGA: TG(MD)R Sch1 P1 2

ANVISA: RDC ANVISA 665/2022: Art. 16, Art. 17, Art. Art. 18, Art. 23

MHLW/PMDA: MO169: 6, 26, 37

FDA: 21 CFR 820.50(a)]

Additional country-specific requirements

Australia (TGA):

The conditions of marketing authorization (ARTG inclusion) specifically impose some applicable regulatory requirements to the Australian Sponsors including;

- providing information to the TGA, when they are aware of the specified information, and within specified timeframes, about; adverse events or near adverse events, when the manufacturer is taking steps to recall a device, non-compliance with the Essential Principles, or the validity of a conformity assessment document used to support an ARTG inclusion (Act s 41FN, Reg 5.7),
- provision of information to the manufacturer related to customer complaints, adverse events or near adverse events, events leading to a recall (by the Sponsor), non-compliance with the Essential Principles, or related to the validity of a conformity assessment document that was used to support an ARTG inclusion, when the Sponsor is aware of the information. (Act s 41FN, Reg 5.8),
- provision of a 120-day follow-up report related to adverse events and near adverse events. (Act s 41FN, Reg 5.8A),
- ensuring that the Sponsor stores and transports a device in accordance with the manufacturer's instructions whilst the Sponsor has control over the device. (Act s 41FN, Reg 5.9),
- the keeping and retention of:
    - records of the information provided to the manufacturer; including complaints or problems, information about adverse events, near adverse events, or the validity of certification documents used to support ARTG inclusion;
    - records of distribution of the product that was associated with a complaint, problem, adverse event, near adverse event or invalid certification and that has been distributed by the Sponsor. (Act s 41FN, Reg 5.10)
- the annual reporting of information (complaint, problem, adverse event, near adverse event or validity of a certification document) related to high-risk devices (Class III, Class IIb implantable, Class 4 IVDs) for a period up to three years post-ARTG inclusion. (Act s 41FN, Reg 5.11)
- the notification of information related to spinal infusion implantable devices and the types of IVDs identified in Reg 5.3(1)(j). (Act s41FN, Reg 5.12)
- the availability of documentation that substantiates compliance with the essential principles and application of conformity assessment procedures by the manufacturer. (Act s 41FN(3)),
- conducting recalls in Australia (Part 4-9),
- ensuring that the name and address of the Sponsor is provided with the device (Reg 10.2).

To the extent that these activities that have been specifically imposed on the Sponsor by the TGA they are not the responsibility of the manufacturer (ISO13485:2016 Cl 3.10 – Note 1). Complementary requirements may be specifically imposed on a manufacturer under a conformity assessment procedure. For example, the requirement to have a post-marketing system that informs the TGA or the Sponsor as soon as practicable about adverse events that have occurred in Australian or when the manufacturer has taken steps to recall product that has been supplied in Australia.

It is likely that the Sponsor will need the assistance of the manufacturer to fulfill many of their responsibilities. To the extent of the imposed requirements, these activities are not to be included in the scope of an MDSAP audit of the manufacturer.

The legal entity that is the Australian Sponsor may however be included in the scope of the manufacturer's audit for other activities if, for example:

- the legal entity is within the scope of the manufacturer's QMS and is performing activities under the QMS other than the activities that have been specifically imposed on the Sponsor. (Although a Sponsor is within the QMS of the manufacturer it should not be presumed that Sponsor requirements automatically become auditable manufacturer requirements); or
- the manufacturer outsources processes that the manufacturer is responsible for and that affects product conformity to requirements, including, but not limited to, installation, servicing, the provision of labelling and instructions for use in part of in whole (Essential principle 13) or the provision of patient implant cards (PICs), and patient information leaflets (PILs) (Essential Principle 13A).

The requirement of Regulation 10.2 for "ensuring that the name and address of the Sponsor is provided with the device in such a way that the user of the device can readily identify the Sponsor" is a requirement that has been specifically imposed by the TGA on the Sponsor and hence is out of scope for the audit of the manufacturer. This does not prevent the Sponsor, as a customer receiving product, from specifying this as a requirement for the manufacturer to fulfill. The customer requirement then becomes an auditable requirement of the manufacturer.

If the Sponsor is within the scope of the manufacturer's QMS, and there are other activities of the Sponsor that are necessary for the manufacturer to demonstrate product conformity to requirements (that is, they are not activities specifically imposed by the TGA on the Sponsor) then those activities should be clearly documented in the QMS and be included in plans for internal audit.

Canada (HC):
Verify that any regulatory correspondent used by the Manufacturer is treated as a supplier and is adequately qualified.

Assessing conformity

Supplier selection
The selection of suppliers must be based on defined criteria. An important concept to remember is that quality cannot be inspected or tested into products. Medical device organisations that choose to conduct product quality control solely in-house must still assess the capability of suppliers to provide acceptable product.

Some organisations require suppliers to maintain various types of certifications or registrations. While registrations and third-party certifications may be considered in supplier evaluations, the medical device organisation should not exclusively rely on these methods to perform the initial evaluation of suppliers.

For the supplier(s) the audit team has chosen to review, confirm that the medical device organisation's selection of the supplier was based on defined criteria commensurate with the risk posed if the supplied product causes the finished device to not meet specified requirements.

Records of supplier evaluations
The medical device organisation must maintain records of the evaluation of the capability of the supplier to meet specified requirements. The records should include the mechanism by which the supplier was evaluated, the results of the evaluation, and the determination of whether the supplier was deemed to be acceptable.

For the supplier(s) the audit team has selected, review the medical device organisation's evaluation of the supplier(s). Confirm that the evaluation was made according to defined criteria and is commensurate with the effect the supplied product has on the essential design outputs.

Links

Design and Development, **Production and Service Controls**

The establishment of the necessary purchasing controls and required acceptance activities is a design output. The degree of the purchasing controls necessary and extent of acceptance activities should be based on the risk posed by the product not meeting its specified requirements and essential design outputs.

Auditors may encounter situations where the medical device organisation outsources processes that require validation.

During the review of the Purchasing process, review the controls the medical device organisation has instituted over suppliers that perform validated processes. This typically includes confirming that the medical device organisation has reviewed the process validation data generated by the supplier to ensure the process is effective, reproducible, and stable. This can be particularly important for higher risk validated processes performed by suppliers, since the medical device organisation does not have immediate control over those processes.

The audit team should also consider reviewing the purchasing controls and requirements for suppliers of products that undergo minimal acceptance activities by the medical device organisation.

Task 6 – Records of supplier evaluation

Verify that the medical device organisation maintains effective controls over suppliers and product, so that specified requirements continue to be met.

Clause and Regulation

ISO: ISO: 13485:2016: 7.4.1

ANVISA: RDC ANVISA 665/2022: Art. 23

MHLW/PMDA: MO169: 37

FDA: 21 CFR 820.50(a)]

Additional country-specific requirements

None

Assessing conformity

Monitoring supplier performance

The medical device organisation must define and implement processes to monitor the performance of suppliers. The monitoring of supplier performance should not be based solely on cost considerations or on- time deliveries. The monitoring of suppliers should take into consideration the actual performance of the supplier in terms of providing products that meet specified requirements. Examples of supplier monitoring activities may include, but are not limited to supplier re-audits, statistical analysis of incoming acceptance results, monitoring of complaints and nonconformities related to supplied product, independent confirmation of certificate of conformance data, and consideration of the supplier's responses to requests for corrective action.

In order for the supplier to maintain a status as an acceptable supplier, the supplier must be capable of supplying product that consistently meets the medical device organisation's specified requirements. If supplier monitoring does not demonstrate that the supplier has the capability to provide acceptable products, the medical device organisation must have a means to undertake appropriate action, including such activities as requesting corrective action from the supplier, and in some cases, removing the supplier from records of acceptable suppliers.

For the supplier(s) the audit team has chosen to review, confirm that the supplier monitoring is documented and reviewed by the appropriate individuals responsible for supplier selection. Be particularly mindful of instances where supplied product has caused complaints and/or product nonconformities. Verify that the medical device organisation has performed the appropriate monitoring of the supplier and taken actions when necessary, such as requesting the supplier undertake a corrective action.

Links

Production and Service Controls, **Measurement, Analysis and Improvement**

Organisations are expected to define, document, and implement systems and procedures for acceptance activities to verify that supplied products conform to specified requirements. Effective acceptance procedures and systems directly affect the ability of a medical device organisation to demonstrate that supplied products meets specifications. During the audit of the Production and Service Controls process, confirm that the appropriate acceptance activities have been implemented and monitored to ensure the received product meets specified requirements.

Additionally, organisations are required to determine, collect, and analyze appropriate data to demonstrate the ability of suppliers to provide acceptable product. During the audit of the Measurement, Analysis and Improvement process, confirm that analysis of supplier performance data has been performed and considered for corrective or preventive action when necessary.

Task 7 – Effective controls over supplier and products

Confirm that the re-evaluation of the capability of suppliers to meet specified requirements is performed at intervals consistent with the significance of the product on the finished device.

Clause and Regulation

ISO: ISO: ISO 13485:2016: 7.4.1

TGA: TG(MD)R Sch1 P1 2

ANVISA: RDC ANVISA 665/2022: Art. 18, Art. 22

MHLW/PMDA: MO169: 37

FDA: 21 CFR820.50(a)]

Additional country-specific requirements

None

Assessing conformity

Supplier re-evaluation intervals

Organisations must implement the appropriate combination of supplier evaluation, supplier monitoring, and acceptance activities to provide the necessary confidence in the acceptability of supplied product. However, supplier evaluation is

not a “one-time” assessment. The medical device organisation must ensure the continued capability of the supplier to provide product that meets specified requirements. The frequency of re-evaluation must be performed according to the medical device organisation’s procedures and at intervals consistent with the significance of the product or service on the finished device. The frequency of re-evaluation may change based on identified quality problems with the supplied product.

For the supplier(s) the audit team has chosen to review, confirm that the re-revaluation of the supplier was performed commensurate with the risk the supplied product poses to the ability of the finished device to meet specifications.

Links

Measurement, Analysis and Improvement

The frequency and extent of supplier re-evaluation activities may be based, in part, on the performance of the supplier as demonstrated by such activities as statistical monitoring of the supplier, monitoring of complaints and nonconformities related to supplied product, and corrective or preventive actions related to the supplier.

Task 8 – Verification of the adequacy of purchasing information, specified purchase requirements, and written agreement to notify changes, before their communication to the supplier

Verify that the medical device organisation assures the adequacy of purchasing requirements for products and services that suppliers are to provide, and defines risk management activities and any necessary risk control measures.

Confirm that the medical device organisation ensures the adequacy of specified purchase requirements prior to their communication to the supplier and that a written agreement with the supplier is established in which suppliers must notify the medical device organisation about changes in the product.

Clause and Regulation

ISO: ISO: 13485:2016: 4.2.1, 7.4.2, TG(MD)R Sch1 P1 2

ANVISA: RDC ANVISA 665/2022: Art. 18, Art. 24, Art. 26

MHLW/PMDA: MO169: 6, 38

FDA: 21 CFR 820.50(b)

Additional country-specific requirements

Brazil (ANVISA):

Confirm that purchase orders are approved by a designated person. This approval, including date and signature, shall be documented [RDC ANVISA 665/2022: Art. 27].

Assessing conformity

Adequacy of purchasing information

Purchasing information is commonly provided to suppliers in documents such as, but not limited to, specification sheets, drawings, contracts, purchase orders, and quality agreements. The amount of detail required in the purchasing information must be commensurate with the effect of the supplied product on the performance of the finished device.

Risk control measures

The medical device organisation is responsible for the quality and performance of the finished device. The specified requirements for the finished device cannot be met unless the individual parts of the finished device meet specifications. While the medical device manufacturer may require certain risk management activities to be adopted by the supplier to help ensure acceptability of incoming product, the ultimate responsibility for the finished device is borne by the medical device organisation. The medical device organisation is responsible for identifying any risk control measures that are required for the supplied product. For suppliers that provide product and services related to the essential design outputs, the degree of necessary risk control measures is commensurate with the effect of the supplied product on the proper functioning of the finished device.

Some examples of risk control measures related to supplied product include, but are not limited to, requiring the supplier to use quality assurance procedures approved by the medical device organisation, the establishment of inspections or testing of supplied product before shipment to the medical device organisation, requiring each incoming shipment be accompanied by a certificate of conformance, periodic verification of the certificate of conformance by third-party laboratory analysis, implementation of acceptance activities at the medical device organisation based on the risk the supplied product poses to the ability of the finished device to meet specifications, and the verification of validation data by the medical device organisation for validated processes performed by a supplier.

For the supplier(s) files the audit team has selected for review, confirm that risk control measures have been identified when appropriate and the risk control measures have been implemented and are effective. If the auditor(s) observe that supplied product has been identified as an underlying cause of complaints and nonconformities, this can be an indication that the risk control measures are inadequate or ineffective.

Links

None

Task 9 – Documented purchasing information and specified purchase requirements

Verify that the medical device organisation documents purchasing information, including where appropriate the requirements for approval of product, procedures, processes, equipment, qualification of personnel, sterilization services, and other quality management system requirements.

Confirm that documents and records for purchasing are consistent with traceability requirements where applicable.

Clause and Regulation

ISO: ISO 13485:2016: 7.4.2, 7.5.9

ANVISA: RDC ANVISA 665/2022: Art. 24, Art. 25, Art. 113

MHLW/PMDA: MO169: 38, 48, 49

FDA: 21 CFR 820.50(b), 820.65, 820.160]

Additional country-specific requirements

None

Assessing conformity

Documenting purchasing information

Purchasing information must describe the product to be purchased, including (when appropriate) the requirements for approval of product, procedures, processes, and equipment, the requirements for qualification of personnel, and quality management system requirements related to the purchased product.

Where possible, the purchasing information must contain an agreement that the supplier agrees to notify the medical device organisation of changes in products or services that may affect the quality of the finished device. The medical device organisation should approve or reject these changes, based on the impact of the change on the essential design outputs of the finished device.

Purchasing information may be recorded in written or electronic format and must be documented.

Traceability

It is the responsibility of the medical device organisation to establish procedures for traceability. For devices that are not implanted and are not life-supporting or life-sustaining, the medical device organisation has the flexibility to determine which raw materials and components are required to be traceable, commensurate with the risk posed by the device in the event the component does not meet specified requirements.

Medical device organisations that produce finished devices whose failure could result in serious injury or harm to the user, or are implanted or life-supporting or life-sustaining must implement a traceability system. The traceability system must allow for each batch of finished devices to be traced by a control number or similar mechanism throughout the distribution chain. Organisations must provide for the control and traceability of components and materials used in the manufacture of the device when these could cause the finished device to not meet specified requirements.

The determination of which components and raw materials may be required to be traceable may be made by the medical device organisation using risk management tools, such as risk analysis, or by the identification of the components and processes used to fulfill the essential design outputs.

Links

None

Task 10 – Verification of purchased products

Confirm that the verification (inspection or other activities) of purchased products is adequate to ensure specified requirements are met.

Confirm that the medical device organisation has implemented an appropriate combination of controls applied to the supplier, the specification of purchase requirements, and acceptance verification activities that are commensurate with the risk of the supplied product upon the finished device.

Verify that records of verification activities are maintained.

Clause and Regulation

ISO: ISO: 13485:2016: 4.2.1, 7.1, 7.4.3

TGA: TG(MD)R Sch1 P1 2, Sch3 1.4(5)(e)

ANVISA: RDC ANVISA 665/2022: Art. 22, Art. 41, Art. 42, Art. 89

MHLW/PMDA: MO169: 6, 26, 39

FDA: 21 CFR 820.50, 820.80(b)]

Additional country-specific requirements

Brazil (ANVISA):
Verify that the manufacturer has established and maintains procedures to ensure the retention of components, raw materials, in-process products and returned products until inspections, tests or other specified verifications have been performed and documented [RDC ANVISA 665/2022: Art. 91].

Assessing conformity

Establishment of acceptance activities
The medical device organisation must establish an appropriate combination of supplier assessment and receiving acceptance activities to ensure products and services, including sterilization services are acceptable for their intended use. After a supplier has been approved, the necessary acceptance activities for the supplied product must be implemented. The degree of acceptance activities may vary with the type and significance of the product or service on the quality of the finished device and the extent of measures performed by the supplier to ensure product acceptability.

Organisations are expected to define, document, and implement processes and procedures for acceptance activities to verify that supplied products conform to specified requirements. Recognized acceptance activities include, but are not limited to, inspections, tests, reviews of certificates of analysis, and supplier audits. Effective acceptance procedures and systems directly affect the ability of a medical device organisation to demonstrate the process and product meet specifications.

It is important to remember that acceptance activities apply to any incoming component, subassembly, or service, whether a payment occurs or not, and regardless of the medical device organisation's financial or business arrangement with the supplier.

Records of verification activities
The records of verification activities must show the supplied product is in conformity with specified requirements. If nonconformities are found by the medical device organisation, confirm the medical device organisation has appropriately handled the nonconformity according to the medical device organisation's established procedures.

The medical device organisation can address nonconforming product by taking action to eliminate the detected nonconformity (e.g. sorting an incoming lot of components to remove components that do not meet specifications), authorizing its use, release, or acceptance under concession, or by taking action to prevent its original intended use (e.g. allowing the components to be used as training aids to show production personnel the difference between an acceptable and unacceptable component).

For the supplied product(s) the audit team has chosen to review, confirm the records of verification activities have been maintained. One way to perform this task is to request a sample of verification records for the chosen product and confirm the acceptance activities have been documented, including the documentation and appropriate disposition of nonconforming product.

Links

Production and Service Controls

The audit team may encounter instances where product has been deemed acceptable by the successful completion of acceptance activities, but the product is later shown to not meet specified requirements (e.g., failure of the device due to nonconforming component leading to product complaint). This can be an indication that the acceptance activities are not sufficient to identify nonconformities; or were not appropriately conducted.

Confirm that the medical device organisation has taken the appropriate action to determine the suitability of the acceptance activities. For example, the medical device organisation may need to validate the test method used for incoming acceptance to ensure the test method is actually capable of identifying nonconforming product.

Task 11 – Purchasing control activities as source of quality data for the measurement, analysis, and improvement process

Verify that data from the evaluation of suppliers, verification activities, and purchasing are considered as a source of quality data for input into the Measurement, Analysis and Improvement process.

Clause and Regulation

ISO: ISO 13485:2016: 8.4

ANVISA: RDC ANVISA 665/2022: Art. 120

MHLW/PMDA: MO169: 61

FDA: 21 CFR 820.100]

Additional country-specific requirements

None

Assessing conformity

Collection and analysis of data

The medical device organisation is responsible for assuring the supplied product meets specified requirements. In addition to supplier evaluation, the assurance that the supplied product meets specified requirements is accomplished with the implementation of appropriate acceptance activities and monitoring complaints and nonconformities associated with purchased product. The data regarding acceptance activities and nonconformities must be analyzed as appropriate to determine the need for corrective or preventive action.

Links

Measurement, Analysis and Improvement

The medical device organisation must determine the appropriate acceptance activities for supplied product, based on the essential design outputs of the device and the risk the device poses if specified requirements are not met. Confirm as necessary that supplied product was evaluated as to the effect on the essential design outputs. Additionally, verify that the appropriate acceptance activities were implemented based on the potential effect the supplied product poses to the essential design outputs.

Organisations are required to determine, collect, and analyze appropriate data to demonstrate the ability of suppliers to provide acceptable product. During the audit of the Measurement, Analysis and Improvement process, confirm that analysis of supplier performance data from evaluation and monitoring supplier process activities has been performed and considered for corrective or preventive action when necessary.

Task 12 – Top management commitment to the purchasing process

Determine, based on the assessment of the overall purchasing, whether management provides the necessary commitment to the purchasing process.

Clause and Regulation

ISO: ISO 13485:2016: 4.1.3, 4.1.5, 5.2

ANVISA: RDC ANVISA 665/2022: Art. 8°, Art. 9°

MHLW/PMDA: MO169: 5-3, 5-5, 11

Additional country-specific requirements

None

Links

None

Annex 1 – Audit of Product/Process related Technologies and Technical Documentation

Purpose: The requirements in IMDRF/MDSAP WG/N3FINAL:2016 (2nd Ed) for Auditing Organisations that audit medical device manufacturers, and may perform other related functions, include, to the extent possible during on-site audits and in accordance with the applicable regulatory system, aspects of evaluation including:

- product/process related technologies (e.g., injection molding, sterilization); and
- evidence of adequate product technical documentation in relation to relevant regulatory requirements.

It should be noted that:

- IMDRF/MDSAP WG/N3FINAL:2016 (2nd Ed) does not provide additional requirements for product certification (ISO/IEC 17065:2012) or the requirements of product testing (ISO/IEC 17025:2005)

The following is explicitly excluded from the scope of IMDRF/MDSAP WG/N3FINAL:2016 (2nd Ed) due to the lack of regulatory convergence:

- the premarket reviews (e.g., Design Dossier Examinations, Premarket Applications, Shounin Applications, Product Registration/Notifications) typically performed by product specialist(s)
- the final decisions of safety and performance/effectiveness of a medical device made by any Regulatory Authority.

Definitions:

Technical Documentation

Documented evidence normally an output of the quality management system (QMS), which demonstrates compliance of a device to the regulatory requirements for products, and processes.

(Adapted from IMDRF/ MDSAP WG/ N3FINAL:2016 (2nd Ed) – Section 3.5)

Technical Expert

An individual who carries out the following functions at an Audit:

- evaluation of product/process related technologies
- evaluation of Technical Documentation
- evaluation of compliance with Regulations.

IMDRF/ MDSAP WG/ N3FINAL:2016 (Edition 2)

Clause 7.1.2 - An Auditing Organisation shall have access to the necessary administrative, technical, and scientific personnel with technical knowledge and sufficient and appropriate experience relating to medical devices and the corresponding technologies.

Clause 7.1.5 - An Auditing Organisation shall be capable of carrying out all the tasks assigned to it with the highest degree of professional integrity and the requisite technical competence in the specific field, whether those tasks are carried out by the Auditing Organisation itself or on its behalf and under its responsibility.

Clause 9.2.4 - Stage 2 audit objectives shall specifically include evaluation of:

- the effectiveness of the Manufacturer's QMS incorporating the applicable regulatory requirements
- product/process related technologies (e.g., injection molding, sterilization)
- adequate product technical documentation in relation to relevant regulatory requirements

- the Manufacturer's ability to comply with these requirements.

Clause 9.3.2 - Surveillance audit objectives during the audit cycle shall specifically include evaluation of the effectiveness of the Manufacturer's QMS incorporating the applicable regulatory requirements and the Manufacturer's ability to comply with these requirements. In addition:

- new or changed product/process related technologies (e.g., injection molding, sterilization)
- new or amended product technical documentation in relation to relevant regulatory requirements.

Clause 9.4.1 - Recertification audit objectives shall specifically include evaluation of:

- the effectiveness of the Manufacturer's QMS incorporating the applicable regulatory requirements
- product/process related technologies (e.g., injection molding, sterilization)
- adequate product technical documentation in relation to relevant regulatory requirements
- the Manufacturer's continued fulfillment of these requirements.

ISO 13485:2016

Clause 4.2.3 – Medical Device File

For each medical device type or medical device family, the medical device organisation shall establish and maintain one or more files either containing or referencing documents generated to demonstrate conformity to the requirement of this International Standard and compliance with applicable regulatory requirements.

The content of the file(s) shall include, but is not limited to:

- general description of the medical device, intended use/purpose, and labelling, including any instructions for use
- specifications for product
- specifications or procedures for manufacturing, packaging, storage, handling and distribution
- procedures for measuring and monitoring
- as appropriate, requirements for installation
- as appropriate, procedures for servicing.

Clause 7.3.10 - Design and development files

The medical device organisation shall maintain a design and development file for each medical device type or medical device family. This file shall include or reference records generated to demonstrate conformity to the requirements for design and development and records for design and development changes.

Auditing Technical Documentation:

The Medical Device File (ISO 13485:2016 Cl 4.2.3) and the Design and Development Files (ISO 13485:2016 Cl 7.3.10) are to contain or reference documents to demonstrate compliance with requirements of the Standard and with applicable regulatory requirements. For compliance with the requirements of N3 (2nd Ed) these records should contain technical documentation that includes, but not limited to:

- Outputs from the design and development process, such as: design outputs, design verification data with acceptance criteria, design validation data with acceptance criteria, a risk management file, human factors analysis, software validation, clinical evaluation report, electrical safety and electromagnetic compatibility, etc.

- Specific design outputs, design verification data with acceptance criteria, design validation data with acceptance criteria for products where a regulatory authority has specific expectations for the type of evidence to demonstrate compliance with regulatory requirements.
- Inputs to the production and service controls process, such as: device production specifications including appropriate drawings, composition, formulation, component specifications, and software specifications.
- Specifications for a production process including the appropriate equipment specifications, production methods, production procedures, and production environment specifications.
- Quality assurance procedures and specifications including acceptance criteria and the quality assurance equipment to be used.
- Specifications for packaging and labeling, including methods and processes used for validation after transportation and environmental conditioning.
- Procedures and methods for installation, maintenance, and servicing.
- Jurisdiction-specific statements (such as a declaration of conformity, statement on the presence of specific substances, etc.).

The information may be a compilation of documented information or, if the documents constituting the technical documentation are maintained separately, may be a summary that includes an explicit reference to each of these documents.

Auditors are not expected to fully evaluate the data that substantiates the final decisions of safety and performance/effectiveness of a medical device made by any Regulatory Authority. However, the auditor is expected to apply the MDSAP Audit Approach for the review of Technical Documentation when auditing:

- the Design and Development Process (See Tasks #3-17 in Chapter 5)
- the Production and Service Controls Process (See Task #16 in Chapter 6)
- the Jurisdiction-specific statements identified in the Device Marketing Authorization and Facility Registration Process (See Task #2 in Chapter 2)

The Audit Approach requires the auditor to select design documentation and manufacturing process documentation for review. The selection is to be based on information collected earlier in the audit, and taking into account the risks (risk classification) associated with the device, the novelty of technology used in the device and the associated manufacturing processes or sterilization methods, along with any changes to the device or associated manufacturing processes that have been implemented by the Manufacturer since the last on-site audit, including non-reported changes controlled under the QMS. A minimum of one review of a design and development file and related medical device file should be undertaken per audit to verify that the Manufacturer has established evidence of conformity with regulatory requirements. Additional reviews may be undertaken if time permits or the auditor suspects that the technical documentation previously reviewed is not a representative sample. (See tasks #2 in chapters 5 and 6).

Surveillance audits should also confirm that the Manufacturer has arrangements in place to maintain the currency of the technical documentation for all devices. For example:

- a procedure for reviewing the currency of relevant standards and conducting gap analyses as required
- a requirement to assess design changes and the need for further technical testing
- a plan for post-market clinical trials, where necessary, or periodic literature reviews
- updating risk management documents (e.g., occurrence levels in risk analysis) based on post-market data.

The following table summarizes the tasks that an MDSAP auditor will use to review information that constitutes the Technical Documentation.

Information	**Audit Approach: Process, Task#**
Medical device general description, including variants and accessories	Design and Development, task #5, 7
Evidence of compliance with specified regulatory requirements for products or processes.[9] Evidence of inclusion of feedback into risk management for monitoring and maintaining the product requirements as well as product realization or improvement processes	Design and Development, task #5, 7
Information that confirms that design and development outputs for the product are traceable to, and satisfy, design input requirements	Design and Development, task #7
Intended use, and indication of use, of the medical device	Design and Development, task #5, 7, 10, 11
Labelling, (i.e., information that accompanies a medical device that is located on the device, its packaging, the instructions for use and in promotional material)	Design and Development, task #1, 7, 8, 16
Confirmation that the product is a medical device	Device Marketing Authorization and Facility Registration, task #1 Design and Development, task #5
Classification	Device Marketing Authorization and Facility Registration, task #1 Design and Development, task #5
Risk management file	Design and Development, task #8
Pre-clinical data (studies in animal models, testing to support compliance with relevant standards, technical performance tests etc.)	Design and Development, task #10
Clinical evidence	Design and Development, task #11
Manufacturing processes	Design and Development, task #7, 16 Production and Service Controls, task #3, 16
Process validation	Design and Development, task #16 Production and Service Controls, task #7, 8, 9
Evidence of compliance with specified regulatory requirements for marketing authorization.	Device Marketing Authorization and Facility Registration, task #1
Declaration of conformity	Device Marketing Authorization and Facility Registration, task #1

Note: this table may not exhaustively cover all information expected under all jurisdictions.

Auditors are expected to verify:

- the existence and the coherence of the information listed in this table
- the applicability of this information to the medical device subject to marketing authorization

[3] ISO13485:2016 – Clause 0.2

- that the methods implemented throughout the Design and Development to generate this information are sound and commensurate to the risk associated with the medical device; and
- that conclusions are substantiated.

Although the auditors are not expected to make final device safety and effectiveness decisions based on a review of technical documentation, if an auditor suspects that device safety and effectiveness concerns exist, or that the evidence supporting compliance with safety and effectiveness requirements is lacking, the concerns should be explicitly described in the audit report. If an auditor suspects a public health threat, the Auditing Organisation must submit an early awareness communication notice ("MDSAP 5-day Notice") according to MDSAP AU P0027 Post-Audit Activities and Timeline Policy.

The depth and extent of this review should be commensurate with the classification of the medical device, the novelty of the intended use, the novelty of the technology or construction materials, and the complexity of the design and/or technology.

Expectations from participating Regulatory Authorities:
Each participating regulator may have different requirements for the review of technical documentation and for the assessment of the adequacy of that technical documentation at audit.

If inadequacies are identified, nonconformities should be raised in the normal manner, using the most specific and relevant clause of ISO 13485, [see especially ISO 13485:2016 - §4.2.3 and §7.3.10] including those raised against technical documentation under country specific requirements [for example, see ISO 13485:2016 - §7.2.1.c, §7.3.3.b, §7.3.7, §4.1.1]. Refer to MDSAP AU P0037 for further guidance on the selection of appropriate clause and the grading of nonconformities. NCs from the review of technical documentation shall be included in the Nonconformity Grading and Exchange Form (MDSAP AU F0019.2).

Further guidance on the expectations for the evidence of compliance with regulatory requirements is provided in the following sections.

Additional country-specific requirements

Australia – TGA

Auditing Technical Documentation:
The evidence of conformity with product requirements for Australian Class I (supplied sterile), Class I (with a measuring function), Class IIa and Class IIb medical devices, and Class 1-3 IVDs, is assessed by the TGA on a sampling basis prior to market authorization (aka "Application audit"). Technical documentation review is expected to be performed in the context of audit to increase the pool of sampled devices and strengthen the sampling-based approach. Technical documentation review should take into consideration the provisions of IMDRF/MDSAP WG/N3 – 9.3.1. This documentation shall contain sufficient detail to allow for an evaluation of the data and for the purpose of demonstrating:

- fulfillment of the requirement
- where an appropriate standard exists, fulfilment of the requirements of the relevant Standard that the Manufacturer has chosen as the means for demonstrating compliance with regulatory requirements for products and processes.

In the case of Class III, Active Implantable and Class 4 In Vitro Diagnostic medical devices that have been subject to a Design Examination separately from the QMS audit, the on-site audit should ensure that the technical documentation for these devices is maintained.

The technical documentation should contain, or reference, evidence of compliance with the Essential Principles and the following requirements. An Essential Principles checklist[10], although not mandatory, is often used as an index to identify the applicable Essential Principles, any standard or validated method that has been used to demonstrate compliance, and a reference to the document that contains the evidence of compliance.

The assessment of each set of technical documentation selected for compliance with the Essential Principles, as a minimum, should consist of a review of:

- A detailed description of the product, including the intended use, intended user, risk classification and assigned Global Medical Device Nomenclature (GMDN) code. For IVD medical devices, the description should also include specimen types, a list of kit components, methodology and any instrumentation to be used
- the inclusion of information gathered in feedback processes (e.g., complaints, adverse event reporting or recalls for product correction) as a potential input into risk management for monitoring and maintaining the product requirements as well as the product realization or improvement processes
- an index of the compilation of documents, or if documentation is not collated, a reference to the relevant documentation
- a risk management file (e.g., select a particular risk and confirm that it has been managed in accordance with the requirements of ISO 14971)
- selected report(s) of pre-clinical data and/or bench testing (including studies in animal models, testing to support compliance with relevant standards, technical performance and safety tests for electrical safety, mechanical safety, radiation safety etc.) identified by the Manufacturer as evidence of compliance with relevant Essential Principles
- a selected clinical evaluation report to confirm that it is current and was prepared by an appropriately qualified expert (See TG(MD)Regs Sch 3 Part 8)
- any other documentation required for the type of device (e.g.- special requirements for devices incorporating medicinal substances or materials of animal origin);
- the information that accompanies a device (labelling, instructions for use, patient implant cards and leaflets)
- the declaration of conformity, for example, to comply with TG(MD)Reg Sch 3 Part 1 Clause 1.8 (this may be in a draft form for devices that do not yet have marketing authorization).

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[4] ISO13485:2016 – Clause 0.2

Essential Principles, Canada - Safety and Effectiveness Requirements

f indexing their evidence of conformity to requirements. The checklist is not mandatory; however, it provides a succinct way of identifying the relevant evidence. A sample template is available at http://www.tga.gov.au and by searching for "Essential Principles Checklist"

Brazil – ANVISA
Brazilian regulations require that product registration / market authorization is entirely performed by ANVISA for all medical device classes.

ANVISA expects that the Auditing Organisation follows the Audit Approach for reviewing technical documentation, including the Brazilian specific requirements defined in the document MDSAP AU P0002 – Audit Approach. There are no additional requirements to be reviewed during an MDSAP audit.

Canada - Health Canada
The Medical Devices Directorate, Health Canada, has assigned the responsibility for the review of technical documentation to the Bureau of Evaluation. For Health Canada, the objective of the audits conducted by MDSAP Auditing Organisations is to determine that Manufacturers who intend to license their devices in Canada have implemented a QMS in conformity with the requirements of the international standard ISO 13485 and Part 1 of the Canadian Medical Devices Regulations. Similarly, a holder of a medical device license is to maintain an effective QMS. Health Canada expects Auditing Organisations to confirm during their audits that the Manufacturer maintains evidence of safety and effectiveness and not to make a determination that the devices are safe and effective.

Japan – MHLW/PMDA
The assessment of product requirements is performed prior to market authorization by the regulator or registered certification bodies, hence technical documentation review, as assessment of conformity to the Essential Principles of Safety and Performance of Medical Devices, is not performed in the context of MDSAP audit.

USA – FDA
The US medical device regulations do not require a technical documentation as defined in the present document, although most data composing the technical documentation are direct output of the Design History File (820.30(j)) and the Device Master Record (820.181).

Annex 2 - Audit of Requirements for Sterile Medical Devices

Overview: The control of the sterility of a medical device is the result of a series of controlled processes including (but not limited to):

Design and Development:

a) device cleanliness and sterility requirements
b) compatibility of the device with the sterilization process
c) transport, storage, and presentation of the device at point of use
d) compatibility of the device packaging with the sterilization process
e) ability of the device to be sterilized or re-sterilized
f) shelf-life and device life user requirements
g) rationale for adding the device to a product family covered by a validated sterilization process

Production and Process Controls, as applicable:

a) process validation of the cleaning, sterile barrier packaging, and sterilization processes
b) routine monitoring and measurement of the cleaning, packaging and sterilization processes
c) routine acceptance criteria of the cleaning, packaging and sterilization processes
d) (re-)qualification, (re-)verification, (re-)calibration and maintenance of the cleaning, packaging and sterilization equipment
e) environmental control of production areas (cleanroom design and monitoring)
f) storage of device parts, components, and packaging material
g) storage of finished sterile product and management of shelf life
h) handling process of non-sterile device for re-sterilization
i) lot / batch release of terminally sterilized devices

Purchasing, depending on the purchased product or service:

a) Determination of criteria the supplier must meet to be selected, with regards to the control of the sterility of the device
b) Selection and monitoring of suppliers considering the identified criteria
c) Purchasing information
d) Verification of the purchased product/service (and associated documentation)

Therefore, the audit of the control of the sterility of a medical device requires a holistic approach.

Competencies:
It is up to the Auditing Organisation to determine the competencies required to achieve the audit objectives and to assign a competent audit team. However, the AO should identify auditors and/or technical experts having the competencies identified below. The subsequent table identifies the competencies required to audit various aspects of sterilization.

The auditing of activities and processes contributing to the sterility of a medical device may involve the following competencies:

Microbiology:

a) Ability to assess the validation of sterilization processes and methods regardless of the availability of an established standard (or the lack of such a standard)
b) Ability to assess the validation of environmental and microbial contamination controls
c) Ability to assess the validation of packaging activities and sterile barrier systems
d) A person deemed to have this competency would likely be educated as a medical microbiologist.

Packaging and Sterile Barrier Systems:

a) Ability to assess the validation of activities and processes for packaging and sterile barrier systems.

Environmental and Contamination Control:

a) Ability to evaluate the adequacy of environmental and microbial contamination control programs.

Routine Sterilization:

a) Ability to assess the validation of sterilization processes and methods where an existing established standard on the method exists other than aseptic processes
b) Ability to verify the implementation of non-standard sterilization activities and processes previously audited by someone having the microbiology competency
c) Ability to assess the implementation of activities and processes for packaging and sterile barrier systems previously audited by someone having the packaging and sterile barrier systems or microbiology competency
d) Ability to assess the implementation of environmental and microbial control activities previously assessed by someone having the microbiology or environmental and contamination control competency.

An auditor may possess several of these competencies.

The following table summarizes the competencies required to audit the requirements for sterile medical devices:

Topic being evaluated	**Microbiology**	**Packaging and Sterile Barrier Systems**	**Environmental and contamination control**	**Routine Sterilization**
Sterilization process (re-) validation according to well-established standards (excluding aseptic processes)	X			X
Sterilization process (re-) validation according to less common standards, or using less common sterilant, sterilization technologies, validation methods (including aseptic processes)	X			

Packaging process validation and sterile barrier systems	X	X		
Environmental and microbial contamination controls	X		X	
Routine implementation of sterilization processes according to previously audited validated processes	X			X
Routine implementation of environmental controls and monitoring (including maintenance)	X		X	X
Routine implementation of packaging activities according to previously validated processes	X	X		X

Audit of the Requirements for Sterility and Audit Cycle Considerations:
All ISO 13485 and regulatory requirements for sterile medical devices must be audited at least once during the certification cycle. While Auditing Organisations have flexibility in deciding when these requirements are audited during the certification cycle, they should ensure that the requirements for sterility of a device have been audited before including this device in the scope of certification.

All sterilization methods used by a medical device organisation should be covered throughout the certification cycle.

Objectives for the audit of requirements for sterile medical devices should include, but not be limited to, verification that:

- all processes that contribute to a device's sterility are controlled through the medical device organisation's QMS and validation has been completed, where applicable (e.g., cleaning, disinfection, aseptic processing, sterile barrier systems, terminal sterilization, storage)
- criteria for re-validation are defined and are followed, (e.g., at defined periodicity, following significant changes and trends)
- processes are implemented and monitored to ensure compliance to their validated parameters
- routine environmental and product cleanliness controls are implemented and monitored
- results are consistent from batch to batch
- batch records (e.g., a device history file) are maintained for each sterilization batch per an approved device master record
- lot release is performed for each batch according to a procedure and by a designated person
- adequate control of suppliers is observed where sterilization is outsourced (process for selection of critical suppliers defined and followed, valid agreements, supplier audits, etc.)

In the absence of significant changes with potential impact on the validated status or new (re)validation activities since the previous audit, the audit should be focused on records review to determine that the validated processes are followed, monitoring is performed, batch records are maintained.

While some aspects may be audited remotely (e.g., review of sterilization process validation documentation), the audit of requirements for sterile medical devices must be conducted on-site.

The outcome of such remote review activities must serve as input to the on-site audit and be incorporated or attached to the MDSAP audit report. The off-site assessment of the controls of the product sterility should not prevent the on-site audit team from following audit trails, including audit trails necessitating the review of documents that had previously been assessed remotely.

The audit of processes for validation of sterilization and sterile barrier systems performed according to well-established standards (e.g., steam sterilization, 25 kGy gamma irradiation, Ethylene Oxide in chambers with traditional release) can be performed by someone having either the microbiology competency or the routine sterilization competency.

The audit of a validation performed according to less common standards, or using less common sterilant / sterilization technologies / validation methods (e.g., Ethylene oxide sterilization in a bag, ethylene oxide in chambers with parametric release, plasma sterilization, low dose gamma sterilization) should be performed by a person having the microbiology competency. This also applies to the evaluation of aseptic process validation or to the sterilization process validation of the microbiologic safety of devices incorporating substances, cells, tissues of animal or human origin.

Routine implementation of sterilization processes according to previously audited validation studies may be conducted by a person having the routine sterilization competency. This applies to all previously validated and audited sterilization processes including processes conducted according to less common standards or using less common sterilant/sterilization technologies/validation methods.

If the requirements for sterile medical devices are audited separately by a competent auditor or technical expert, this shall cover all the applicable requirements and the results of this audit shall be part of the MDSAP audit report. This must not prevent the MDSAP audit team from following leads relative to requirements for sterile medical devices. Any nonconformities resulting from the audit of sterile medical devices and sterilization processes shall be graded in accordance with MDSAP policies regarding grading of nonconformities.

Annex 3 - Medical Device Adverse Events and Advisory Notices Reporting Process Quick Reference

The following table is intended to be a quick reference guide for timeframes for submitting reports for individual adverse events and advisory notices. This table is not a substitute for knowledge and understanding regarding criteria required to be reported in the participating MDSAP jurisdictions, or a substitute for the information contained in MDSAP Audit Approach **Chapter 4 - Process: Medical Device Adverse Events and Advisory Notices Reporting**.

Jurisdiction	Individual Adverse Events	Advisory Notices
Australia	Manufacturer to report to the Sponsor or the TGA, as soon as practicable, if an event might have led to death or a serious deterioration in health	Manufacturer to report to the Sponsor or the TGA, as soon as practicable, any technical or medical reason for a malfunction or deterioration that has led the manufacturer to take steps to recall
Brazil	Must report within 72 hours in case of death, public health threat or counterfeiting Must report within 10 days in case of serious adverse events not involving death and non-serious adverse events, the re-occurrence of which has the potential to cause a serious adverse event to a patient, user, or other person Must report within 30 days in case of malfunction that could lead to a serious adverse event Must report within 10 days in case of death, public health threat or counterfeiting occurred in other countries and associated with health products registered in its name in Brazil	5 calendar days from the decision to start the field action
Canada	For events that occur in Canada: 10 days if the event led to the death or serious deterioration in health 30 days if the event might lead to death or serious deterioration if the event were to recur.	On or before undertaking the recall

Jurisdiction	Individual Adverse Events	Advisory Notices
	For occurences that are captured under the Foreign Risk Notification requirements (61.2-61.3): 72 hours after receiving or becoming aware of a notifiable action	
Japan	Registered Manufacturing Sites must report any adverse event which meets the criteria specified by **the Ordinance for Enforcement of PMD Act Article 228-20** to the Marketing Authorization Holder as soon as possible. MAHs must report any adverse event which meets the criteria specified by **the Ordinance for Enforcement of PMD Act Article 228-20** to the RA within the timeframe specified by the ordinance.	As soon as possible after the action
United States	5 calendar days if FDA has issued a 5-day notice 30 calendar days reports of death or serious injury. Quarterly summary reporting is allowable for malfunction reports for most product codes.	10 working days of initiating the correction or removal

Annex 4 – Japan's QMS Ordinance Revision - Tables

The following table shows the correspondence between MHLW MO 169 Chapter 2 as in 2021 (aligned with ISO 13485:2016).

Correspondence between ISO13485:2016 and MHLW MO 169 Chapter 2, as amended in 2021

ISO 13485:2016	**MHLW MO 169, Chapter 2**	**Note for understanding the requirements of MHLW MO 169 Chapter 2, as amended in 2021**
Clause 1 Scope	Section 1 General Rules	
Clause 1, paragraph 4-5	Article 4	Article 4.1 specifies that Class 1 medical devices are exempted from the requirements of design and development, Article 30 to Article 36-2. Article 4.2 and 4.3 specifies the rule of exclusion and non-application of the requirements. These articles are identical to the description of ISO 13485:2016 clause 1, paragraph 4 and 5.
Clause 4 Quality management system	Section 2 Quality management system	
Clause 4.1.1	Article 5-1	Roles undertaken by the organisation are Marketing Authorization Holder provided by Article 23-2.1 of PMD Act, Registered Manufacturing Site provided by Article 23-2-3.1 and 23-2-4.1 of PMD Act, Seller of pharmaceutical products provided by Article 24.1 of PMD Act, Seller and Leaser of specially-controlled medical devices provided by Article 39.1 of PMD Act, Repairer of medical devices provided by Article 40-2.1 of PMD Act, or Seller and Leaser of controlled medical devices provided by Article 39-3.1 of PMD Act.
Clause 4.1.2	Article 5-2	
Clause 4.1.3	Article 5-3	
Clause 4.1.4	Article 5-4	
Clause 4.1.5	Article 5-5	
Clause 4.1.6	Article 5-6	
Clause 4.2.1	Article 6	

ISO 13485:2016	MHLW MO 169, Chapter 2	Note for understanding the requirements of MHLW MO 169 Chapter 2, as amended in 2021
Clause 4.2.2	Article 7-1	
Clause 4.2.3	Article 7-2	
Clause 4.2.4	Article 8	The retention period of obsolete documents required by the ordinance is specified by Article 67 of MHLW MO 169.
Clause 4.2.5	Article 9	The record retention period required by the ordinance is specified by Article 68 of MHLW MO 169.
Clause 5 Management responsibility	Section 3 Management responsibility	
Clause 5.1	Article 10	
Clause 5.2	Article 11	
Clause 5.3	Article 12	
Clause 5.4.1	Article 13	
Clause 5.4.2	Article 14	
Clause 5.5.1	Article 15	
Clause 5.5.2	Article 16	
Clause 5.5.3	Article 17	
Clause 5.6.1	Article 18	
Clause 5.6.2	Article 19	The organisation is not required to input “reporting to regulatory authorities”, the item specified in ISO 13485:2016 5.6.2 c), to management review, when the organisation is the person operating the registered manufacturing site.
Clause 5.6.3	Article 20	
Clause 6 Resource Management	Section 4 Resource Management	
Clause 6.1	Article 21	
Clause 6.2, paragraph 1 and 2	Article 22	

ISO 13485:2016	MHLW MO 169, Chapter 2	Note for understanding the requirements of MHLW MO 169 Chapter 2, as amended in 2021
Clause 6.2, paragraph 3	Article 23	
Clause 6.3	Article 24	
Clause 6.4.1	Article 25-1	
Clause 6.4.2	Article 25-2	
Clause 7 Product realization	Section 5 Product realization	
Clause 7.1	Article 26	
Clause 7.2.1	Article 27	
Clause 7.2.2	Article 28	
Clause 7.2.3	Article 29	
Clause 7.3.1 and 7.3.2	Article 30	
Clause 7.3.3	Article 31	
Clause 7.3.4	Article 32	
Clause 7.3.5	Article 33	
Clause 7.3.6	Article 34	
Clause 7.3.7	Article 35-1	Clinical evaluations and/or evaluation of performance of the medical devices are required to be implemented as part of design and development validation, in the case that the medical device is designated by 23-2-5.3 or 23-2-9.4 of PMD Act.
Clause 7.3.8	Article 35-2	
Clause 7.3.9	Article 36-1	
Clause 7.3.10	Article 36-2	
Clause 7.4.1	Article 37	
Clause 7.4.2	Article 38	

ISO 13485:2016	MHLW MO 169, Chapter 2	Note for understanding the requirements of MHLW MO 169 Chapter 2, as amended in 2021
Clause 7.4.3	Article 39	
Clause 7.5.1	Article 40	
Clause 7.5.2	Article 41	
Clause 7.5.3	Article 42	
Clause 7.5.4	Article 43	
Clause 7.5.5	Article 44	
Clause 7.5.6	Article 45	
Clause 7.5.7	Article 46	
Clause 7.5.8	Article 47	
Clause 7.5.9.1	Article 48	
Clause 7.5.9.2	Article 49	The requirements of Article 49.2 and Article 49.3, which are identical to the requirements of ISO 13485:2016 7.5.9.2 paragraph 2 and 3, are not applied, when the organisation is the person operating the registered manufacturing site.
Clause 7.5.10	Article 51	
Clause 7.5.11	Article 52	
Clause 7.6	Article 53	
Clause 8 Measurement, analysis and improvement	Section 6 Measurement, analysis and improvement	
Clause 8.1	Article 54	
Clause 8.2.1	Article 55-1	
Clause 8.2.2	Article 55-2	This article is identical to the requirement of ISO 13485:2016 8.2.2. However, it should be noted that the organisation is required to determine the need to notify the information to the Marketing Authorization Holder instead of the regulatory authorities, when the organisation is the person operating the registered manufacturing site.

ISO 13485:2016	MHLW MO 169, Chapter 2	Note for understanding the requirements of MHLW MO 169 Chapter 2, as amended in 2021
Clause 8.2.3	Article 55-3	This article is identical to the requirement of ISO 13485:2016 8.2.3. However, it should be noted that the organisation is required to notify the information to the Marketing Authorization Holder instead of the regulatory authorities, when the organisation is the person operating the registered manufacturing site. Record of the notification shall also be maintained.
Clause 8.2.4	Article 56	
Clause 8.2.5	Article 57	
Clause 8.2.6, paragraph 1-3	Article 58	
Clause 8.2.6, paragraph 4	Article 59	
Clause 8.3.1	Article 60-1	
Clause 8.3.2	Article 60-2	
Clause 8.3.3	Article 60-3	
Clause 8.3.4	Article 60-4	
Clause 8.4	Article 61	
Clause 8.5.1	Article 62	
Clause 8.5.2	Article 63	
Clause 8.5.3	Article 64	

Annex 5 – Acceptable exclusions from an organisation's scope of certification

GHTF document N3 clause 8.2.2 requires that "the Auditing Organisation shall not exclude any processes, products, or services from the audit scope or the scope of the certificate, unless the regulations administered by the recognizing Regulatory Authority(s) permit the exclusion". This requirement is used to justify that an organisation participating in MDSAP must be audited for a scope of certification that includes all the jurisdictions where the medical devices are distributed, and all medical devices being distributed in these jurisdictions. See item 88 in the **Question and Answers document**.

Annex 5

Annex 5The activities/processes, products or facilities that are eligible for exclusion from an MDSAP Program are outlined in the following table. A device may be excluded from the scope of the MDSAP audit only if it meets the corresponding exclusion criteria from all the jurisdictions applicable to the audit. A jurisdiction may be excluded only if none of the medical devices are distributed in this jurisdiction, or all medical devices distributed in this jurisdiction can be excluded.

Jurisdiction	Consideration	Comments
Australia	Class I medical devices (non- sterile, no measuring function) are not required to have a certified quality management system. Class 1 IVD's are not required to have a certified quality management system. Export only medical devices and IVD's are not required to have a certified quality management system.	TG(MD)R Schedule 3 Part 6 establishes obligations / requirements for manufacturers of Class I medical devices (non-sterile, no measuring function) that includes process definition, adverse event and recall reporting. By default, a certified QMS is not required by legislation for Class I medical devices (non-sterile, no measuring function) or Class 1 IVD's. However, a manufacturer may: - voluntarily choose to apply a more onerous conformity assessment procedure (e.g., Schedule 3 Part 1 or Part 4); OR - request an Auditing Organisation to include Class I medical devices (non-sterile, no measuring function) within the scope of an MDSAP ISO13458 certification. In these circumstances, the Auditing Organisation should treat the requirements of the relevant Conformity Assessment Procedure (Part 1, 4 or 6) as

Annex 5

Jurisdiction	Consideration	Comments
		regulatory requirements when establishing audit criteria.
Brazil	Class I and Class II medical devices are not subject to GMP Certification*. * However, ANVISA Resolution RDC 15/2014 still require that the manufacturer of the finished device have an effective QMS in place.	If all devices in the scope of certification are class I or II, or if the audited facility's contribution to the scope of certification only applies to class I or class II medical devices, the audit at that facility may disregard the requirements of the Brazilian regulation for registration purposes.
Canada	Class I medical devices are not required to have a certified quality management system.	If all devices in the scope of certification are class I or if the audited facility's contribution to the scope of certification only applies to class I medical devices, the audit at that facility may disregard the requirements of the Canadian regulation.
Japan	Class I medical devices are not required to have a certified quality management system.	If all devices in the scope of certification are class I or if the audited facility's contribution to the scope of certification only applies to class I medical devices, the audit at that facility may disregard the requirements of the Japanese regulation.
United States	Some Class 1 medical devices are "GMP-exempt", i.e., not subject to the US quality system regulation.	If all devices in the scope of certification are GMP-exempt or if the audited facility's contribution to the scope of certification only applies to GMP-exempt medical devices, the audit at that facility may disregard the requirements of the US Quality System regulation (21 CFR 820), with the exception of the requirements for maintaining complaint files and recordkeeping. Additionally, requirements still apply for compliance to Medical Device Reporting (21 CFR 803), Medical Devices; Reports of Corrections and Removals (21 CFR 806), and Establishment Registration and Device Listing for Manufacturers and Initial Importers of Devices (21 CFR 807).

Annex 5

Summary of Changes from Prior Revisions

Changes from version 008 to 009

Guidance for country specific requirements for Australia (TGA) for

Management - Task 5 & Task 8
Device Marketing Authorization and Facility Registration – Task 1, Task 2 & Task 3
Measurement, Analysis and Improvement – Task 7 & Task 12
Medical Device Adverse Events and Advisory Notices Reporting – Task 1 & Task 2
Purchasing – Task 5
Annex 4

have been edited or removed. The responsibility for ensuring compliance with some applicable regulatory requirements for medical devices is specifically imposed on the Australian Sponsor by the TGA. (ISO13485:2016 Cl 3.10 – Note 1). Consequently, these requirements are not auditable under the MDSAP unless they are identified, in whole or in part, as customer requirements.

Removed references to MHLW MO169 harmonized to ISO 13485:2003 throughout the document.

Removed colored boxes and colored font throughout to comply with U.S. requirements for Section 508 of the 1998 amendment to the Rehabilitation Act of 1973.

Changes from version 007 to 008

Overview

Audit Sequence

Added the option to audit the Production and Service Controls process following the Measurement, Analysis and Improvement followed by the Design and Development process as a reasonable deviation from the MDSAP audit sequence on page 9

Management Process

Task 10

added clarification that AOs should also consider private-labelled medical devices when verifying that products that have received marketing authorization are imported or sold in Canada.

Measurement, Analysis, and Improvement Process

Task 6

added Canadian regulatory reference.

Medical Device Adverse Events and Advisory Notices Reporting

Task 1

removed hyperlinks to Canadian guidance documents.

Task 2

Correct hyperlink to webpage for TGA Recalls

Annex 5

Design and Development Process
Task 10

Removed the Australian specific requirement. Standards that are used to demonstrate compliance with the Australian Essential Principles are not mandatory.

Production and Service Controls
Task 24

Removed the phrase “as per ISTA 2A”

Annex 1

Removed a reference to an Essential Principles Checklist (See Annex 1 - Additional country-specific requirements, Australia – TGA, Auditing Technical Documentation, for a description of the use of an Essential Principles Checklist)

Changes from version 006 to 007

Overview

Added reference to MDSAP AU P0037 - Guidelines on the use of GHTF/SG3/N19:2012 for MDSAP purposes on page 10
Added reference to new Annex 6 on page 13

Chapter 1 to Chapter 7

- Update Australian regulatory clause references following updates to the Therapeutic Goods Act 1989 and Therapeutic Goods (Medical Devices) Regulations 2002.
- Update Brazilian regulatory clause references
- Update Japanese regulatory clauses references

Device Marketing Authorization and Facility Registration
Task 3

- Clarify FDA premarket notification requirements for changes

Measurement, Analysis and Improvement
Task 12

- Update requirements for Health Canada

Task 15

- Update regulation reference for Brazil

Medical Device Adverse Events and Advisory Notices Reporting
Task 1

- Update requirements for Health Canada

Task 2

- Clarify Australian recall reporting requirements.
- Update regulation references for Brazil
- Update requirements for Health Canada

Production and Service Controls
Task 9

- Amendment to the Australian country specific requirements and legislative links

Annex 1
- Change GHTF SG3 N19 reference to MDSAP AU P0037.
- Amendment to the Australian country specific requirements to include updated regulatory references.

Annex 4
- Update to Australian regulatory references relating to the maintenance of distribution records.
- Update to the Clarification on the use of MDSAP in Australia section to remove requirements related to Regulation 4.1 (which has been repealed) and to reference TGA guidance on use of comparable overseas evidence and related legislative instruments.

Annex 5Annex 6
- Explains acceptable exclusions of medical devices or regulations from the scope of certification.

<u>Changes from version 005 to 006</u>

Chapter 1 to Chapter 7
- Added clause number(s) of the new MHLW MO169 in the case that the number(s) is/are different from those for the old ordinance.

Management Process
Task 1

- Added footnote to explain the meaning of the word, “Old”, in the sections of Clause and Regulation references for Japanese requirements – page 21

Purchasing
Task 5

- Deleted a task related to a Japanese country specific requirement, as the requirement is deleted in the new ordinance – page 168

Annex 5
- Added new Annex that has tables showing Japan’s new and old QMS ordinance and the relationship between ISO 13485 – page 211

Changes from version 004 to 005

Foreword/Use of this document

- Added statement regarding the combination of the MDSAP Audit Approach and Companion Document, formerly separate documents, into this single document – page 5
- Added statement regarding special access programs – page 7

Audit Sequence

- Clarified that order in which processes are to be audited is fixed, however the sequence of audit tasks within a process may be arranged to allow for an efficient audit; clarified that reasonable exceptions are allowed for following the audit sequence – pages 8-9

Conducting the Audit

- Added clarifying language as to the assessment of the medical device organisation's application of risk management principles – page 9

Navigating the Audit Sequence

- Clarified use of clause 4.2.1(e) in conjunction with regulatory requirements – page 10

Terminology

- Added language for "medical device organisation", "outsourced" process, product or service, "suppliers", "critical suppliers" – throughout the document as appropriate.

Annexes

- Reference to Annex 1 changed – page 12
- Introduction of two new annexes to summarize country specific requirements for:
    - reporting timeframes for adverse events and advisory notices – page 12
    - written agreements – page **Error! Bookmark not defined.**

MDSAP Audit Cycle

- Added statement regarding Stage 1 audits for re-certification audits in certain circumstances– page 15
- Added paragraph regarding sampling during audits – page 15

Surveillance Audits

- Added reference to Appendix 1 of MDSAP AU P0008 – page 14

Management Process

Task 1 – Assessing conformity

- added text under Quality System Procedures and Instructions heading regarding expectations for the term "documented" - page 18;

- added text under Quality Management System Planning heading regarding evidence of quality management system planning – page 19

Task 5 – Added text for Australia country-specific requirement:

- Reference to EP13A for patient implant cards – page **Error! Bookmark not defined.**
- Clarification of the inclusion of Sponsors activities in the medical device organisation's internal audit. – page 23

Device Marketing Authorization and Facility Registration Process
Task 1

- Move the matters that relate to Australian requirements for the written agreement to Annex 4 – page **Error! Bookmark not defined.**;
- "Note" to "Assessing conformity"; added text regarding special attention should be paid to instances where devices are being marketed to jurisdictions where marketing authorization has not been granted – page 33;
- corrected expiry dates for Brazil for Registration and Notification – page 34

Task 2

- Clarifying text for Australia country-specific requirements – page **Error! Bookmark not defined.**;
- Corrected expiry dates for Brazil for Registration and Notification – page 36

Task 3

- Added text within the task to emphasize the link between design changes and the need to assess for market authorization – page 37;
- added text to the Australia country-specific requirement regarding notifying TGA of changes in cases where the Manufacturer also holds a TGA Conformity Assessment Certificate – page 38;
- corrected a reference for Japan to PMD Act 23-2-5.12 – page 40

Device Marketing Authorization and Facility Registration
Task 2

- Changed "manufacturer should" to "manufactures must" maintain a list of Australian Sponsors and the products ... – page **Error! Bookmark not defined.**
- Additional reminder that Sponsors are required to have a written agreement with manufacturers – page **Error! Bookmark not defined.**

Measurement, Analysis and Improvement Process
Task 2

- Added statement that information from the organisation's analysis of quality data should be used to inform the audit team's decision as to specific products and processes to audit during Design and Development, Production and Service Controls, and Purchasing processes – page 57

Task 7

- Corrected text for country-specific requirements for Australia, added text to the Australia country-specific requirement regarding notifying TGA of changes in cases where the Manufacturer also holds a TGA Conformity Assessment Certificate – page 51

Task 12

- Added criteria for selection of complaints for review – page 71
- Added post-marketing systems as experience to be gained from the post-production experience – page 56;
- added "postmarket surveillance activities" under the "Selecting records" page 59
- added "Risk management" headings to "Assessing conformity" for this task – page 59;
- added text that information from reviewing post-production sources, including complaints and postmarket surveillance reports, should guide the audit team in selecting designs to review and production processes to audit – page 60

Task 14

- Task was rewritten to focus on the audit of the organisation's process for evaluating complaints for potential individual adverse event reports – pages 75-76

Task 15

- Task was rewritten to focus on audit of the organisation's processes for evaluating quality issues for potential advisory actions – page 77

Medical Device Adverse Events and Advisory Notices Process

Task 1

- Added Note for Canada that requirement to report incidents meeting the requirements of section 59.(1) that occur outside of Canada does not apply unless the Manufacturer has indicated, to a regulatory agency of the country in which the incident occurred, the Manufacturer's intention to take corrective action, or unless the regulatory agency has required the Manufacturer to take corrective action - page **Error! Bookmark not defined.**;
- for United States, added allowance for quarterly summary reporting for malfunction MDRs – page 69

Design and Development Process

Task 5

- Post-production feedback is to be used for maintaining product requirements and improving product realization processes - page 78
- Under "Assessing conformity", "Design inputs" heading, added text relating design inputs to manufacturing processes – page 79

Task 7

- Under “Assessing conformity”, “Design outputs” heading, added text that design outputs can include documents such as diagrams, drawings, specifications, and procedures for both products and processes – page 81

Task 13

- Added 8.2.1 as a relevant clause for design changes – page 88
- Added text to the Australia country-specific requirement regarding notifying TGA of changes in cases where the Manufacturer also holds a TGA Conformity Assessment Certificate – page 89

Production and Service Controls Process

Task 1

- Under “Assessing conformity”, “Unique Device Identifier” heading, removed the phase-in dates for device classes – page 96

Purchasing

Task 5

- added text for EP13A for patient implant cards for Australia – pages **Error! Bookmark not defined.**

ANNEXES

Annex 1

- Change of Title to reflect the general content of this section.
- General requirements for Assessing Technical Documentation - Added some clarifying text for the expected output from design control for technical documentation – page 141; and the monitoring of the update of risk management documents – page 142.
- Australian minimum requirement for assessing technical documentation – Added the inclusion of information gathered in feedback processes – page 145; and patient implant cards – page 145

Annex 2

- Clarified requirements for grading nonconformities found during audit of sterilization processes – page 195

Annex 3

- Quick reference guide for reporting timeframes for adverse events and advisory notices – page 151

Annex 4

- Clarification of when Written Agreements may be required to support regulatory requirements and the topics that may need to be included – page **Error! Bookmark not defined.**