HEALTH SCIENCES AUTHORITY

REGULATORY GUIDANCE

December 2017

MEDICAL DEVICE GUIDANCE

GN-21: Guidance on Change Notification for Registered Medical Devices

Revision 4.2

HSA Health Sciences Authority

CONTENTS

PREFACE

R3.1 ►This document is intended to provide general guidance. Although we have tried to ensure that the information contained here is accurate, we do not, however, warrant its accuracy or completeness. The Health Sciences Authority (HSA) accepts no liability for any errors or omissions in this document, or for any action/decision taken or not taken as a result of using this document. The information contained in this document should not be a substitute for professional advice from your own professional and healthcare advisors. ◄

REVISION HISTORY

Guidance Version (Publish Date) *[3 latest revisions]*	Revision
R3.2►GN-21: Revision 3.2 (7 May 2015)	R3.2
R4 ►GN-21: Revision 4 (1 December 2015)	R4
R4.1►GN-21: Revision 4.1 (1 September 2016)	R4.1
R4.2 ►GN-21: Revision 4.2 (01 December 2017)	R4.2

**Where applicable, changes and updates made in each document revision are annotated with or within the arrow symbol "►". Deletions may not be shown.*

1. INTRODUCTION

1.1. Purpose

Medical devices undergo changes as part of their product life cycle. This guidance document is intended to aid registrants in determining whether a Change Notification has to be submitted for a medical device that is registered on the Singapore Medical Device Register (SMDR). Under the *Health Products (Medical Devices) Regulations 2010*, registrants are required to notify changes concerning registered medical devices to the Authority.

1.2. Background

Medical devices are classified into four risk classes (A to D) based on the classification rules set out in *GN-13: Guidance on the Risk Classification of General Medical Devices* and *GN-14: Guidance on the Risk Classification of In-Vitro Diagnostic Medical Devices*. Class A represents the lowest risk medical devices and Class D represents the highest risk medical devices.

These guidelines to Change Notification are based on the principles of safety, quality and efficacy of medical devices supplied in Singapore. Changes to a medical device can affect its safety, quality or efficacy and must be approved prior to the modified device being supplied in Singapore, unless otherwise indicated.

1.3. Scope

This guidance document applies to all medical devices registered on the SMDR. It sets out points for consideration by the registrant when a registered medical device is in the process of modification. Owing to the various possible scenarios for changes made to a device, it is not the intention of this guidance document to describe every permutation and type of change that can occur. The registrant and/or the product owner may contact the Medical Devices Branch at hsa_md_info@hsa.gov.sg, for any clarifications regarding the classification of specific changes to a registered medical device.

This guidance document is also applicable to situations when a registered device undergoes any changes or proposed changes, including labelling changes, as a result of a reportable Adverse Event (AE) or an on-going Field Safety Corrective Action (FSCA).

1.4. Definitions

Definitions that do not indicate they are set out in the *Act* or *Regulations* are intended as guidance in this document. These definitions are not taken verbatim from the above legislation and should not be used in any legal context. These definitions are meant to provide guidance in layman terms.

ACCESSORY: An article that is intended specifically by its product owner to be used together with a particular medical device to enable or assist that device to be used in accordance with its intended purpose. An accessory typically is intended to be used for one or more of the purposes as described in the definition of medical device and therefore should be considered a medical device.

CONTROL MECHANISM: for the purpose of this guidance document, a means for verifying or checking that the specifications or outputs of the medical device meet a standard or predetermined result.

LABEL (*as set out in the Act*): in relation to a health product or an active ingredient, means any written, printed or graphic representation that appears on or is attached to the health product or active ingredient or any part of its packaging, and includes any informational sheet or leaflet that accompanies the health product or active ingredient when it is being supplied.

INTENDED PURPOSE/INTENDED USE *(as set out in the Regulations)*: in relation to a medical device or its process or service, means the objective intended use or purpose, as reflected in the specifications, instructions and information provided by the product owner of the medical device.

MEDICAL DEVICE: means a medical device as described in the First Schedule of the Act.

OPERATING PRINCIPLE: For the purpose of this guidance document, the means by which a medical device produces or brings about a desired or appropriate effect.

PRODUCT OWNER (*as set out in the Regulations*): in relation to a health product, means a person who —

(a) supplies the health product under his own name, or under any trade mark, design, trade name or other name or mark owned or controlled by him; and

(b) is responsible for designing, manufacturing, assembling, processing, labelling, packaging, refurbishing or modifying the health product, or for assigning to it a purpose, whether those tasks are performed by him or on his behalf.

QUALITY MANAGEMENT SYSTEM: for the purpose of this guidance document, means certification to ISO 13485 or its equivalent.

REGISTRANT (*as set out in the Act*): in relation to a registered health product, means the person who applied for and obtained the registration of the health product under the *Act*.

R4 ► INDIRECT CONTACT: In relation to the nature of body contact of medical device, includes devices that contact the blood path at one point and serve as a conduit for entry into the vascular system. E.g. blood transfusion tubes, blood bags, etc. ◄

2. HOW TO USE THIS GUIDANCE

When several simultaneous changes are being implemented on a registered device, this guidance document should be used to assess each change separately. If a Change Notification is required, the registrant shall describe how the modified device differs from the previously registered device (or device type) using Annex 2.

Registrants are reminded that the determination of documents and the category of Change Notification (e.g. notification, technical) should be made through reference to all change types for the registered device included in the application. Changes to accessories of registered medical devices will also come within the purview of this document.

Some changes that will NOT qualify for Change Notification and require the submission of a NEW Pre-market Product Registration include:

- Change to the intended purpose of a registered medical device;
- Change to the risk classification of a registered medical device;
- Addition of model that do not fulfil the grouping criteria, including permissible variants, as listed in the GN-12 guidance documents on Grouping of Medical Devices for Product Registration;
- Change to the medicinal substance in a device that incorporates a medicinal product in an ancillary role;
- R4 ► Addition of medical devices with device proprietary names different from the registered devices, into a device listing.

  Unless the devices with different proprietary names qualify to be listed together under one SMDR listing based on GN-12 guidance documents on Grouping of Medical Devices for Product Registration.

The registrant and/or the product owner should contact the Medical Devices Branch, if there are any queries on whether a change in the registered device may require a new product registration.

CATEGORIES OF CHANGES

Changes to registered medical devices that require the submission of a Change Notification are classified into four categories namely:

1) **Technical Changes** for Class C and D medical devices affect the safety, quality or efficacy of these medical devices. These require HSA's approval prior to implementation of the change(s) in Singapore.

2) **Review Changes** (closed list of changes) for Class A and B medical devices affect the safety, quality or efficacy of these medical devices. These require HSA's approval prior to implementation of the change(s) in Singapore and are as follows:
   (i) Change(s) to indications for use of the registered medical device (except reduction of indications for use not arising due to device safety, quality or efficacy concerns);
   (ii) R4 ► Addition of new model(s) (except addition of new models falling under 6Aii/6Aiii/6Aiv of the Flowchart 6A) to a registered medical device listing;
   (iii) Removal and/or revision of warnings, precautions and contraindications;
   (iv) Modification of approved method of use, including change from "Professional use only" to "Home use".

3) **Administrative Changes** include changes to the administrative documents and information submitted at the point of registration of the medical device. These require HSA's approval prior to implementation of the change(s) in Singapore.

4) **Notification Changes** may be implemented immediately upon receipt of the acknowledgement email from HSA after submission via MEDICS, unless the change is in the context of, or is a consequence of a reportable Adverse Events (AEs) or Field Safety Corrective Actions (FSCAs).

R4.1 ► The implementation of such changes can only proceed after the FSCA/local AE cases have been reported to MDB.

NOTE: 'Notification' changes which are incorrectly classified will be rejected upon review and further supply of the affected device will be prohibited. Subsequent supply will be subject to approval of the change in the correct Change Notification category.

R4 ►**Table 1 - Categories of Change Notification for Class A, B, C and D listings**

Risk Classification	Technical Changes	Review Changes	Administrative Changes	Notifications
Class A		√*	√	√
Class B		√*	√	√
Class C	√		√	√
Class D	√		√	√

**Closed list of changes*

2.1. Addition and Changes to Non-sterile Class A Medical Devices in a Closed System

Non-sterile Class A medical devices that are specifically intended for use with a registrable medical device in a closed SYSTEM should be included in the product registration of that SYSTEM. Upon successful registration of the medical device SYSTEM, these non-sterile Class A devices would be listed on the SMDR. For such non-sterile Class A devices that are listed together with other registrable medical devices as a closed SYSTEM on the SMDR, a Change Notification submission would be required only when there are changes to the listing information of these devices on the SMDR. There will be no processing fees for these Change Notifications.

R4.2 ► -- ◄

2.2. Changes to Medical Devices due to an AE and/or FSCA

Changes to medical devices may arise from the occurrence of AEs or FSCAs. The proposed changes to the medical devices in these situations are intended to have an impact on the safety, quality and/or efficacy of the medical device. These changes to the medical devices require a Change Notification and may only be implemented after HSA's review and approval.

R4 ► Documents and information to be submitted in support of proposed changes may include the following information:

- Product owner's Field Safety Notice (FSN) or Dear 'Healthcare Professional' Letter (DHCPL) and/or other risk communication documents;
- Product owner's Health Hazard Evaluation (HHE);
- Product owner's Root Cause Analysis (RCA);
- Product owner's Corrective and Preventive Action (CAPA) to reduce likelihood of recurrence of device issue;
- Product owner's CAPA effectiveness/ validation.

If there is no change to the aforementioned documents submitted under FSCA reporting, applicant is not required to re-submit them in the Change Notification application. The FSCA reference number should be indicated within the Annex 2 to GN-21: Summary Table of Change Notification for reference. In situations where some of the above documents have yet to be submitted to HSA, or where further information is required, HSA may request for them.

The determination of the category of change for Change Notification applications submitted in the context of, or as a consequence of or arising from open reportable AEs or on-going FSCAs shall be based on the type of change as per the flowcharts in the Section 4 of this document.

Changes submitted in the context of, or as a consequence of or arising from open reportable AEs or on-going FSCAs would require prior approval from HSA before implementation. This clause applies to all registered medical devices (Class A to D) regardless of the category of change selected. Exception to this clause shall require the registrant to possess a written advice from HSA that states otherwise. ◄

3. CHANGE TYPE ASSESSMENT FLOWCHARTS ◄ R4

The twelve flowcharts detailed in this section present guiding principles for identification of the category of Change Notification applicable for each proposed type of change to the registered medical devices.

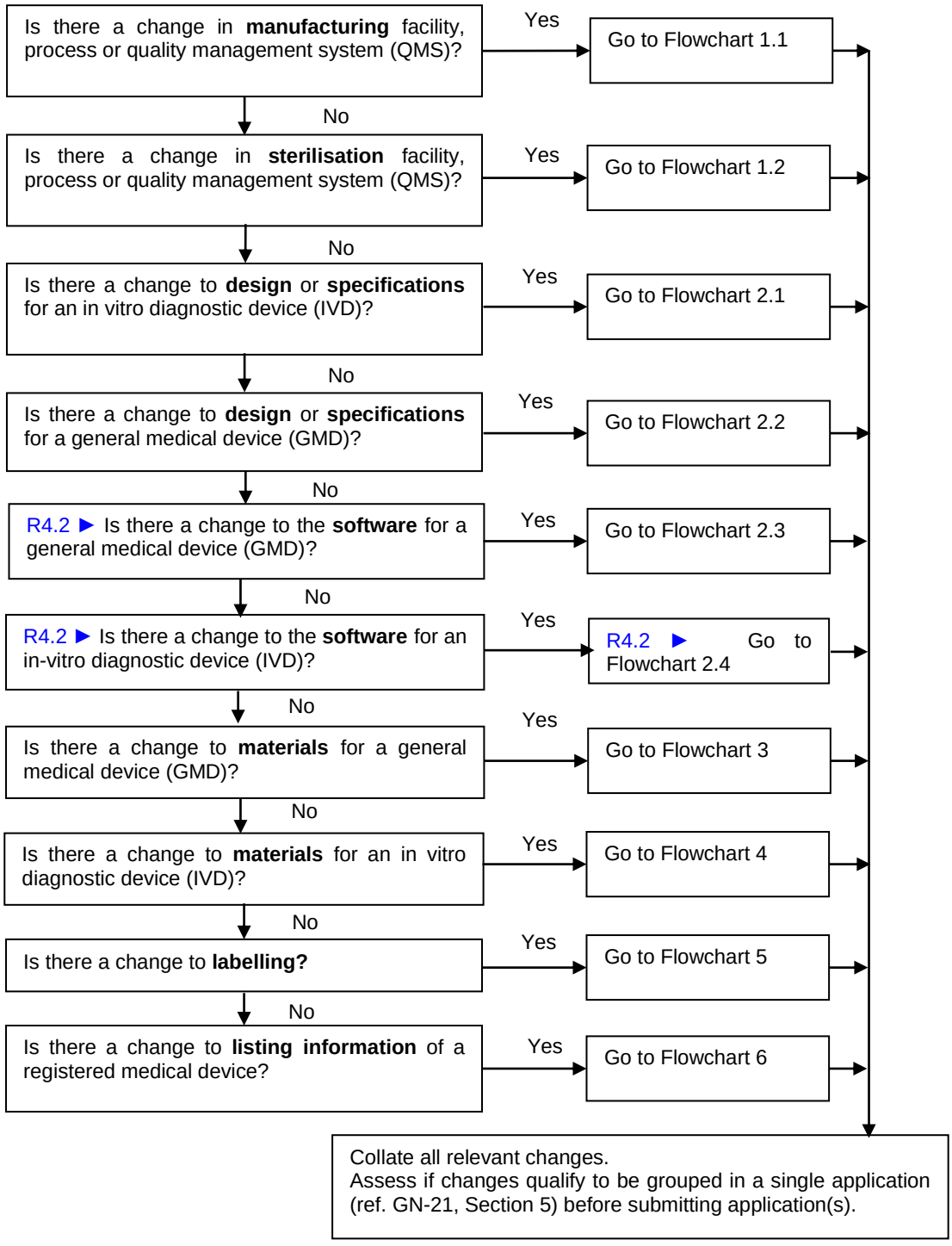
The “Main Flowchart” shall be used to determine the applicable flow chart for a specific change. Examples of changes are included in the flowcharts for ease of reference. Please note that the examples are not meant as an exhaustive list.

Full description of each final change type in the flowcharts can be found in Annex 4 to GN-21: Change Types Submission Reference List. This change type should be indicated in MEDICS and Annex 2 to GN-21: Summary Table during submission of CN application.

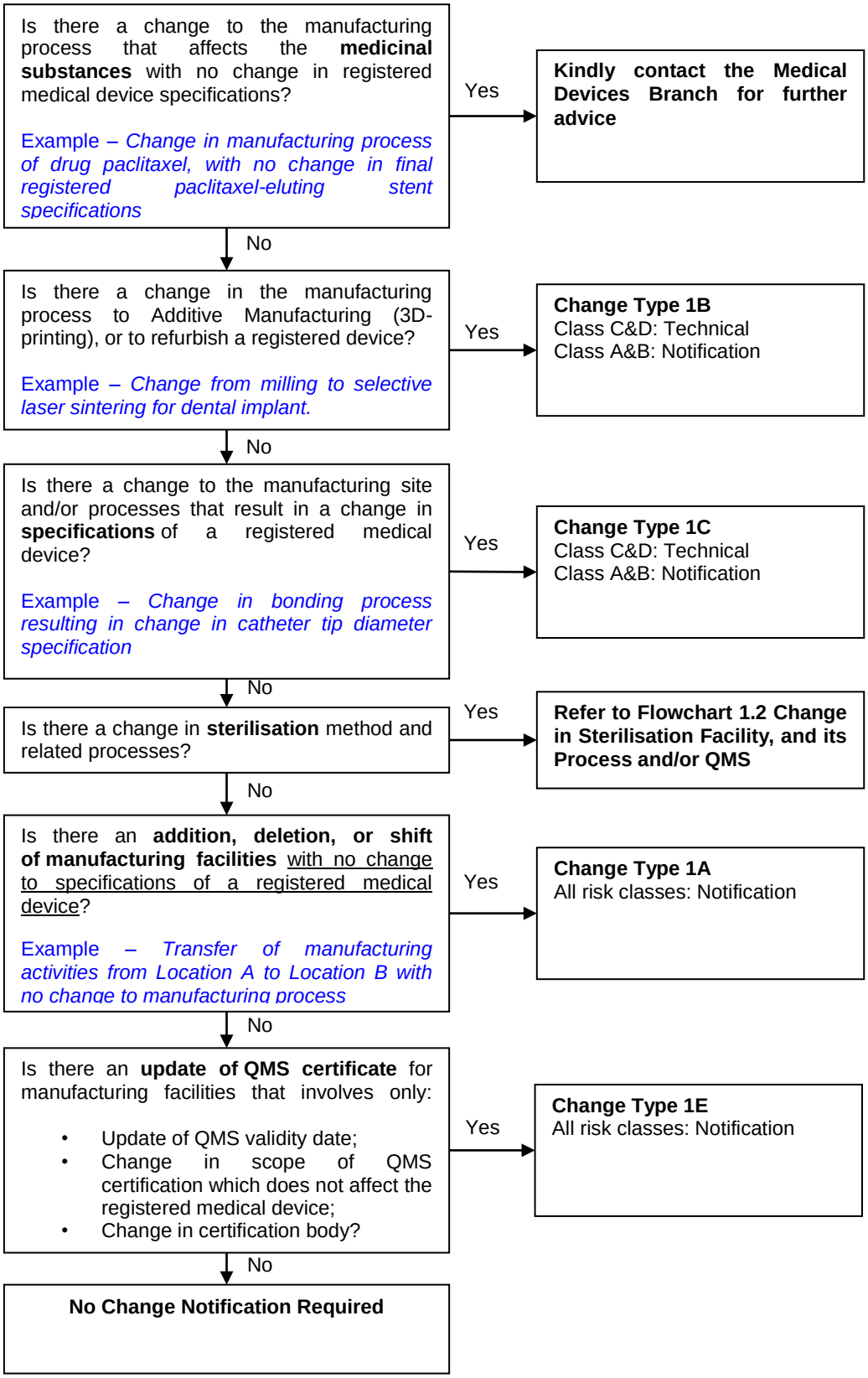
Main Flowchart

This flowchart describes the general types of changes that can be made to a medical device, and leads to more detailed categorisation in flowcharts 1.1 to 6.

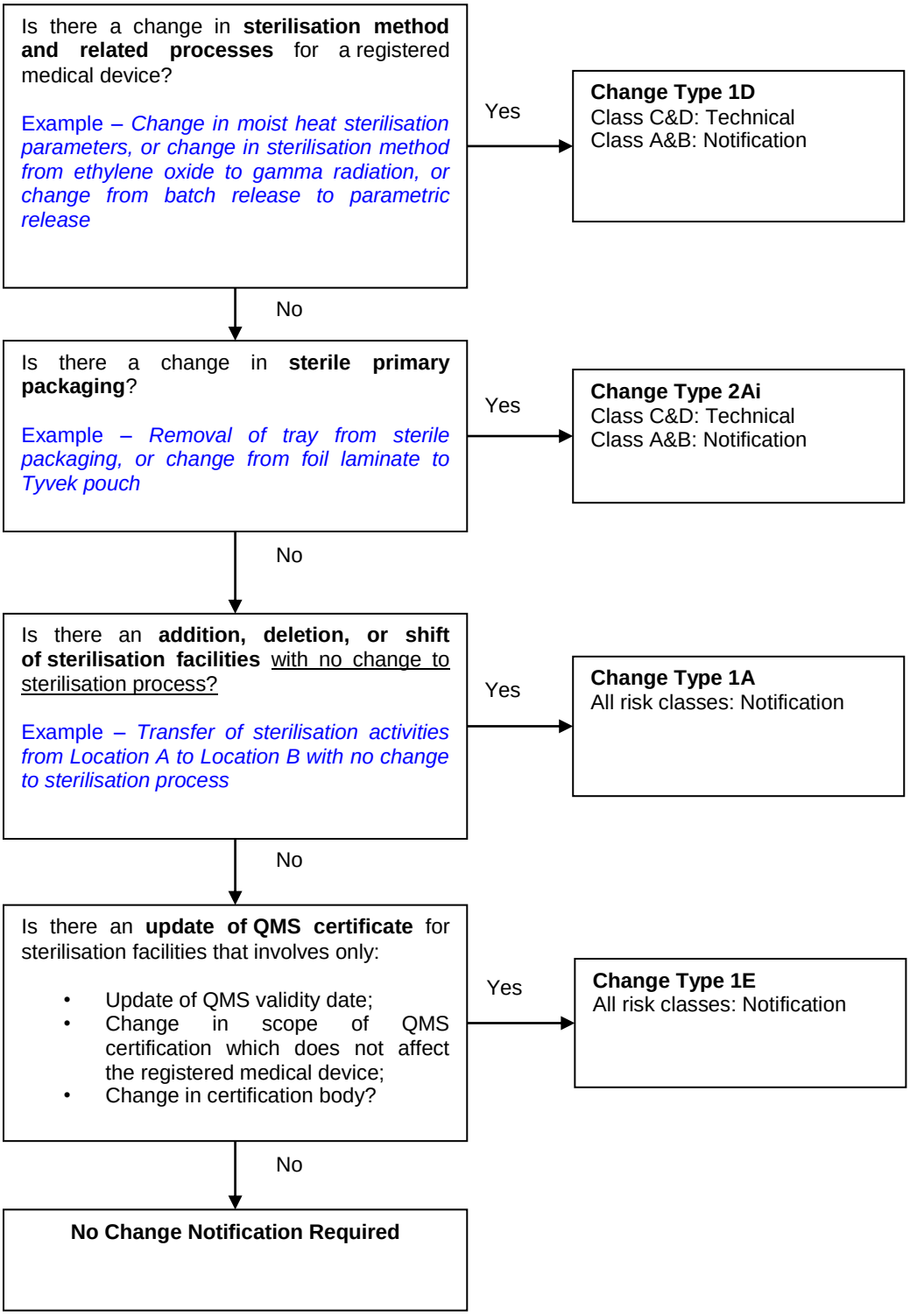
Applicants are advised to proceed through the entire flow, and identify all relevant changes impacting the medical device and SMDR listing prior to submission.



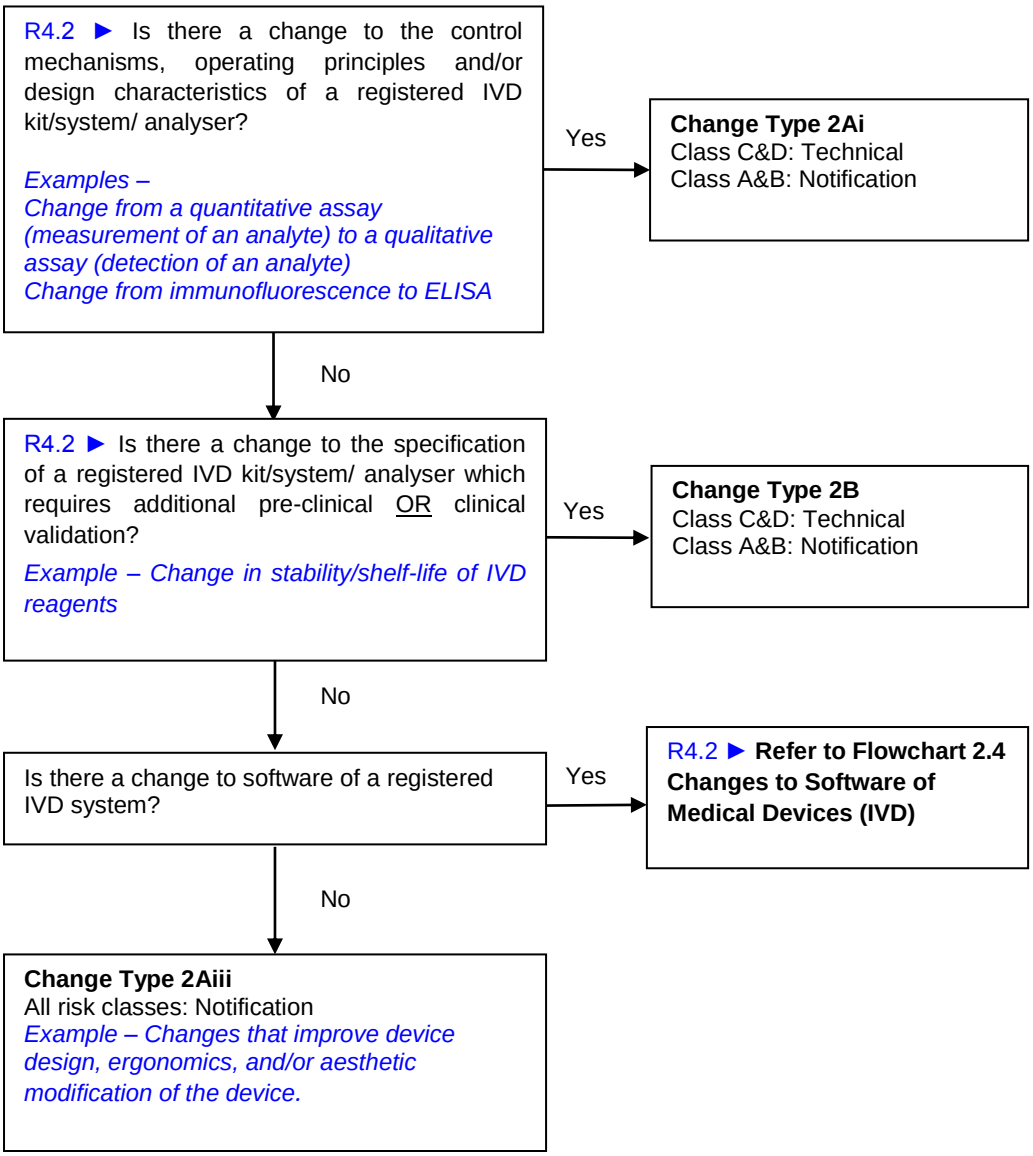
Flowchart 1.1: Change to Manufacturing Facility and its Process and/or Quality Management System



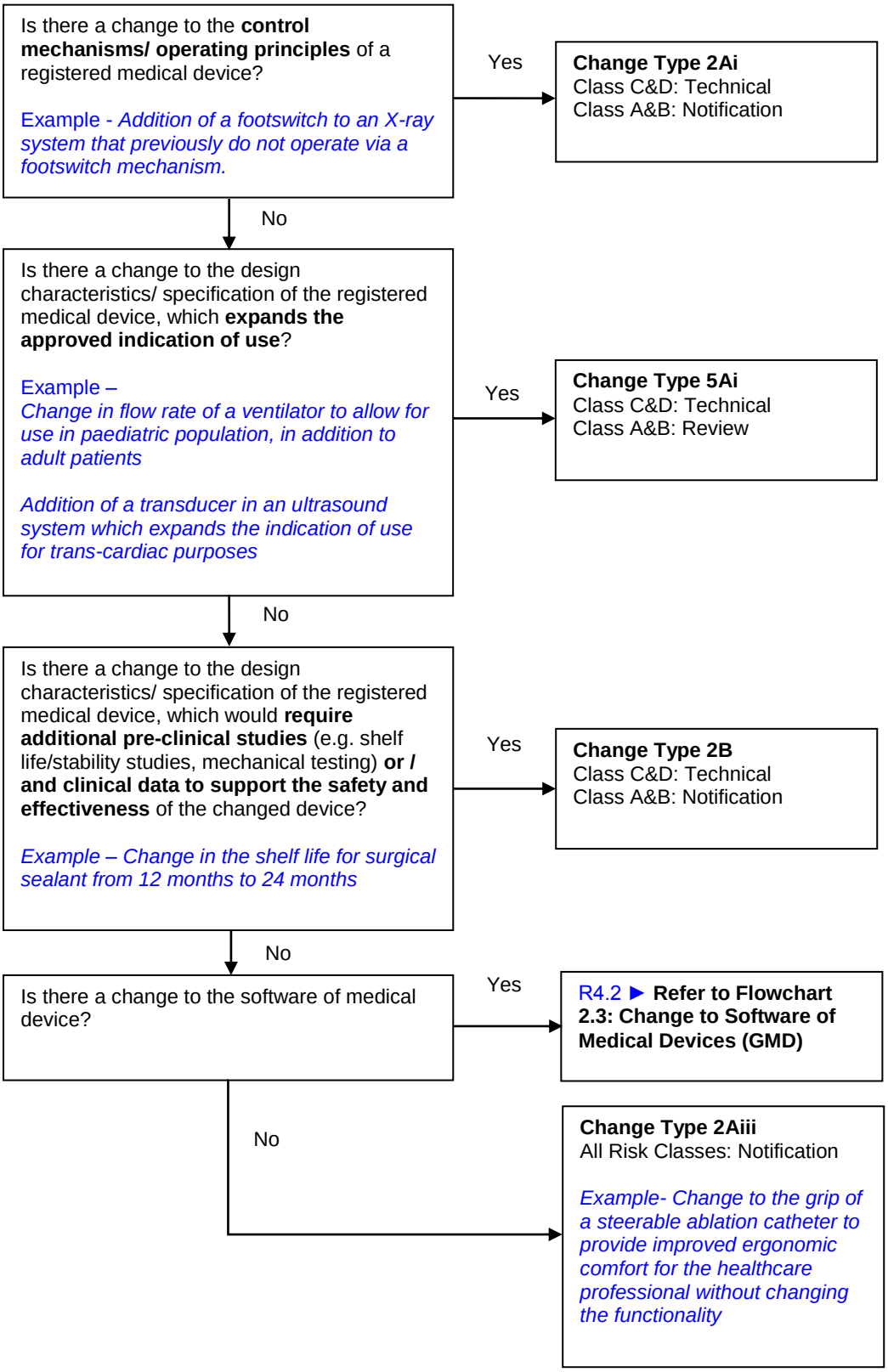
Flowchart 1.2: Change to Sterilisation Facility and its Process and/or Quality Management System



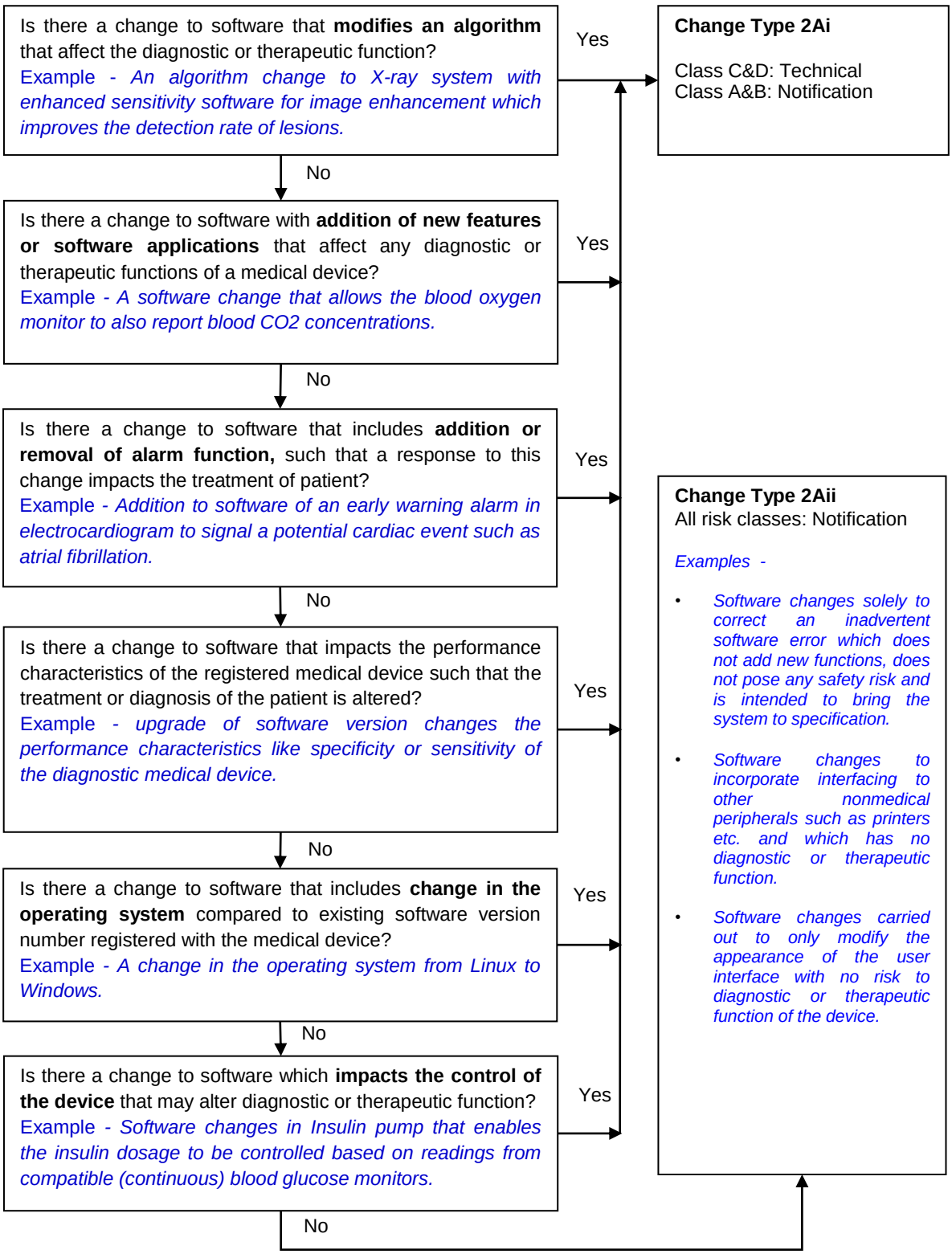
Flowchart 2.1: Changes in Design or Specifications of an In-vitro Diagnostic (IVD) Medical Device



Flowchart 2.2: Change to Design and/or Specifications of General Medical Devices

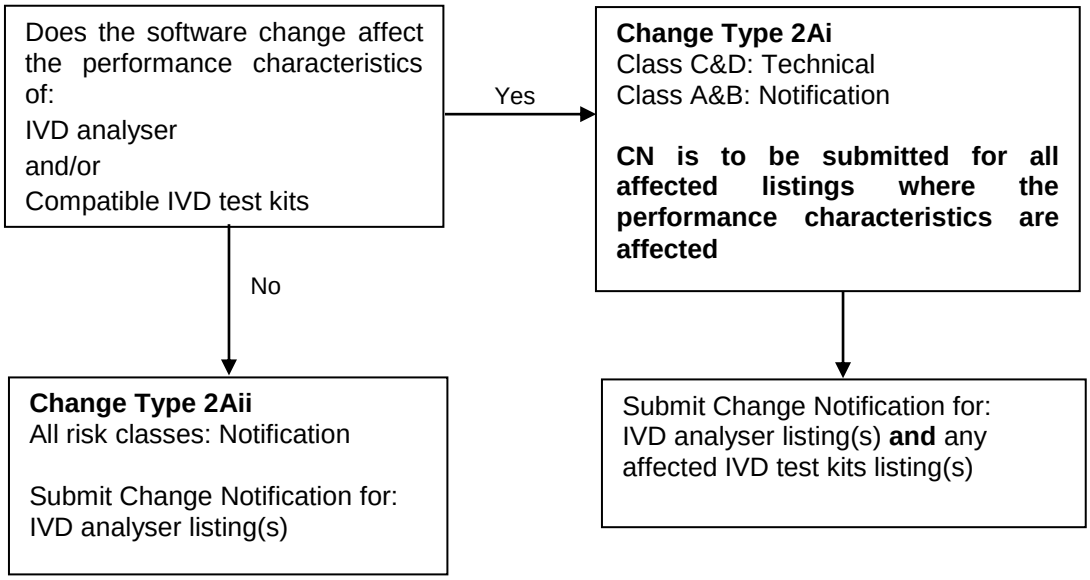


R4.2 ► Flowchart 2.3: Change to Software of General Medical Devices (GMD) ◄



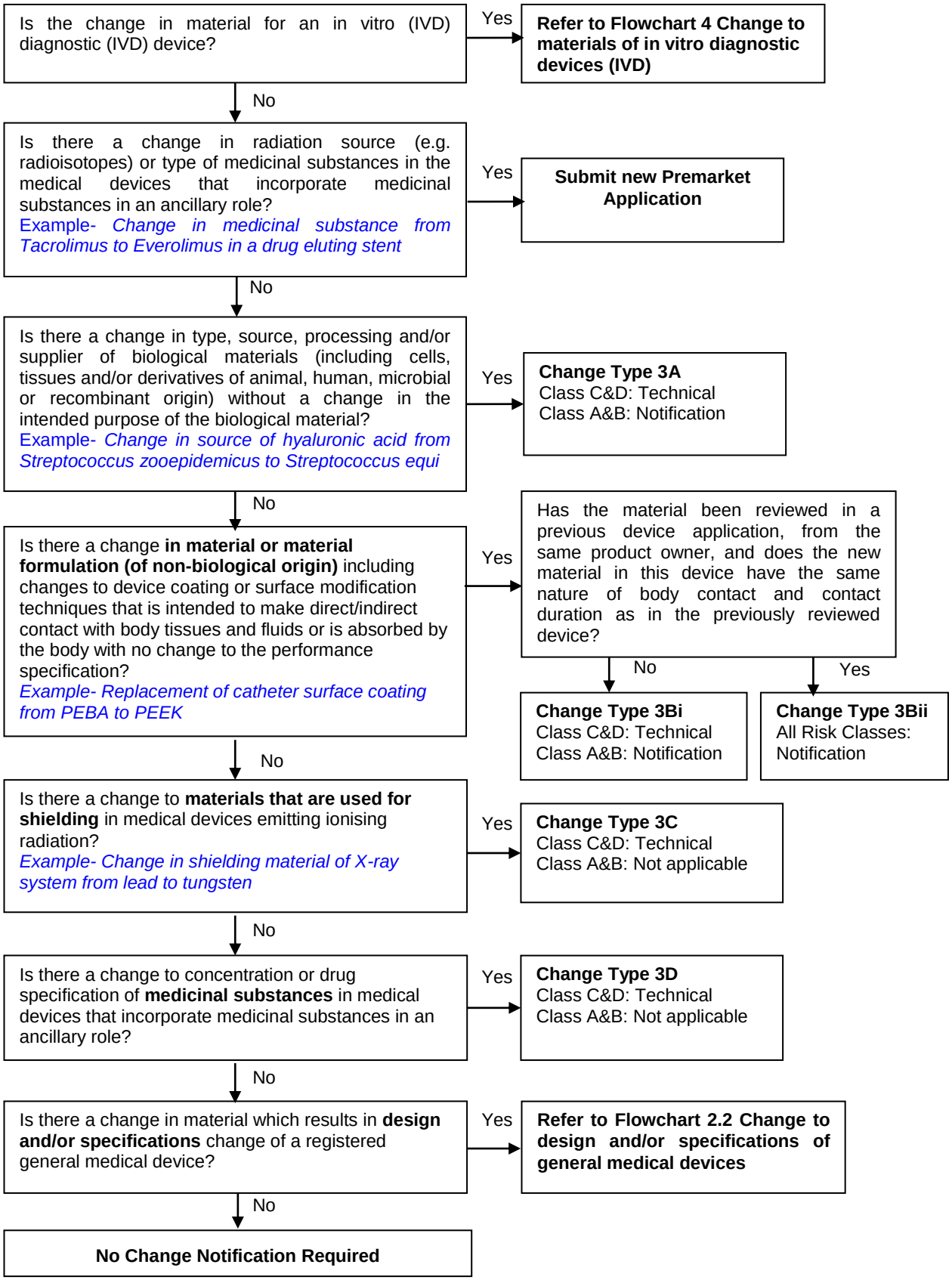
**** Software refers to Standalone software and/or Software embedded in medical device system.***

R4.2► Flowchart 2.4: Change to Software of In-vitro Diagnostic Devices (IVD)

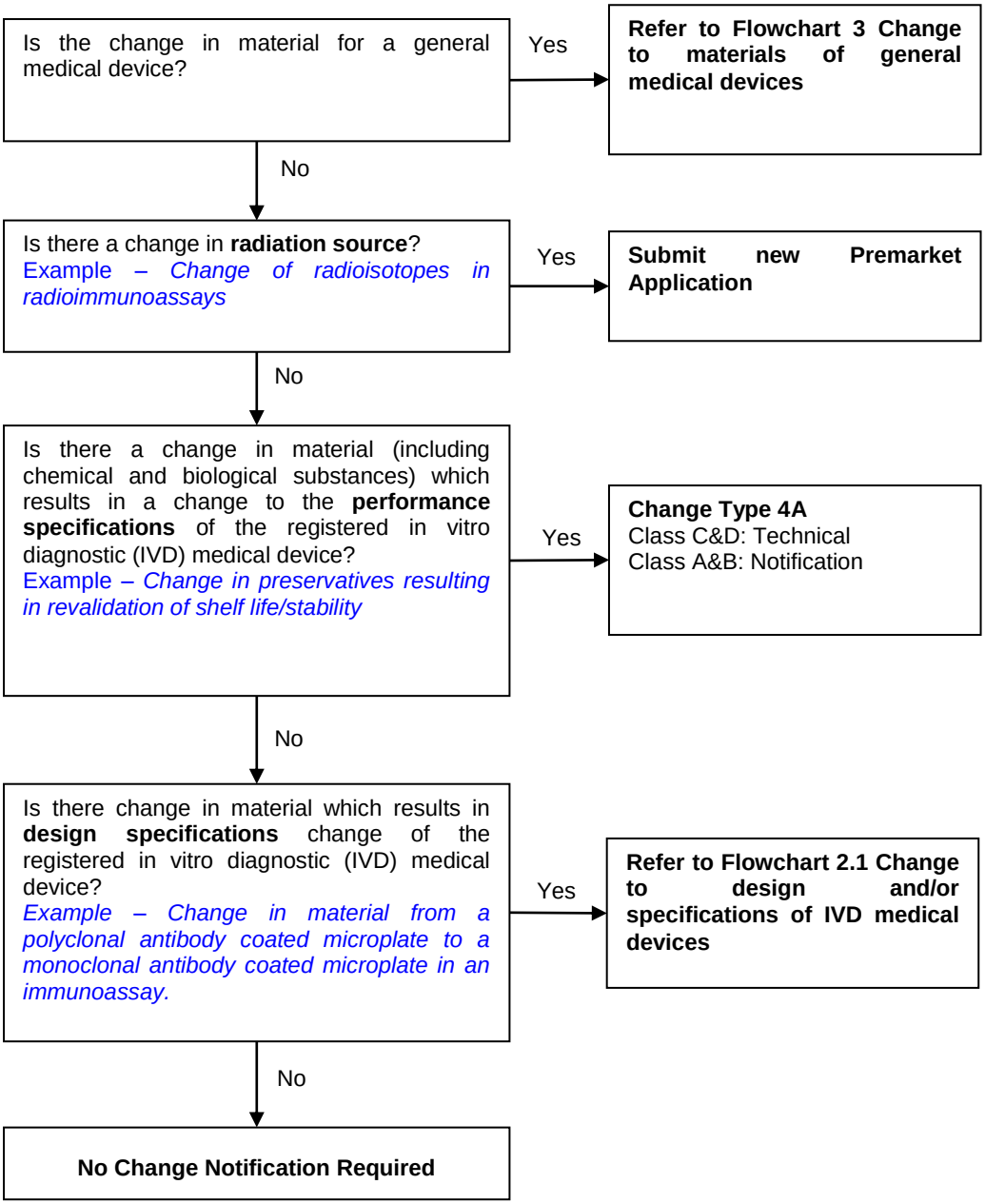


◄

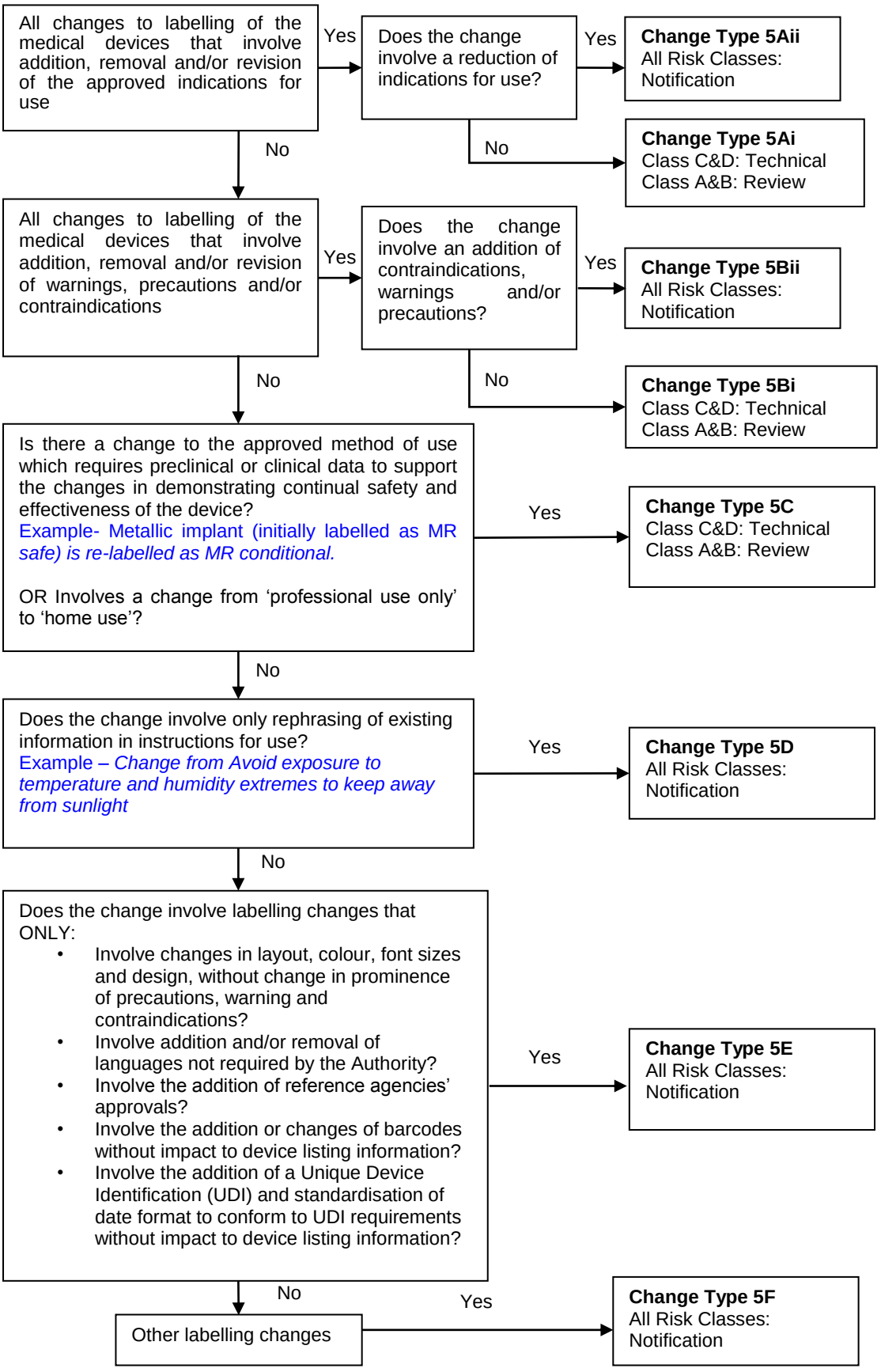
Flowchart 3: Change to Materials of General Medical Devices



Flowchart 4: Change to Materials of In Vitro Diagnostic Medical Devices

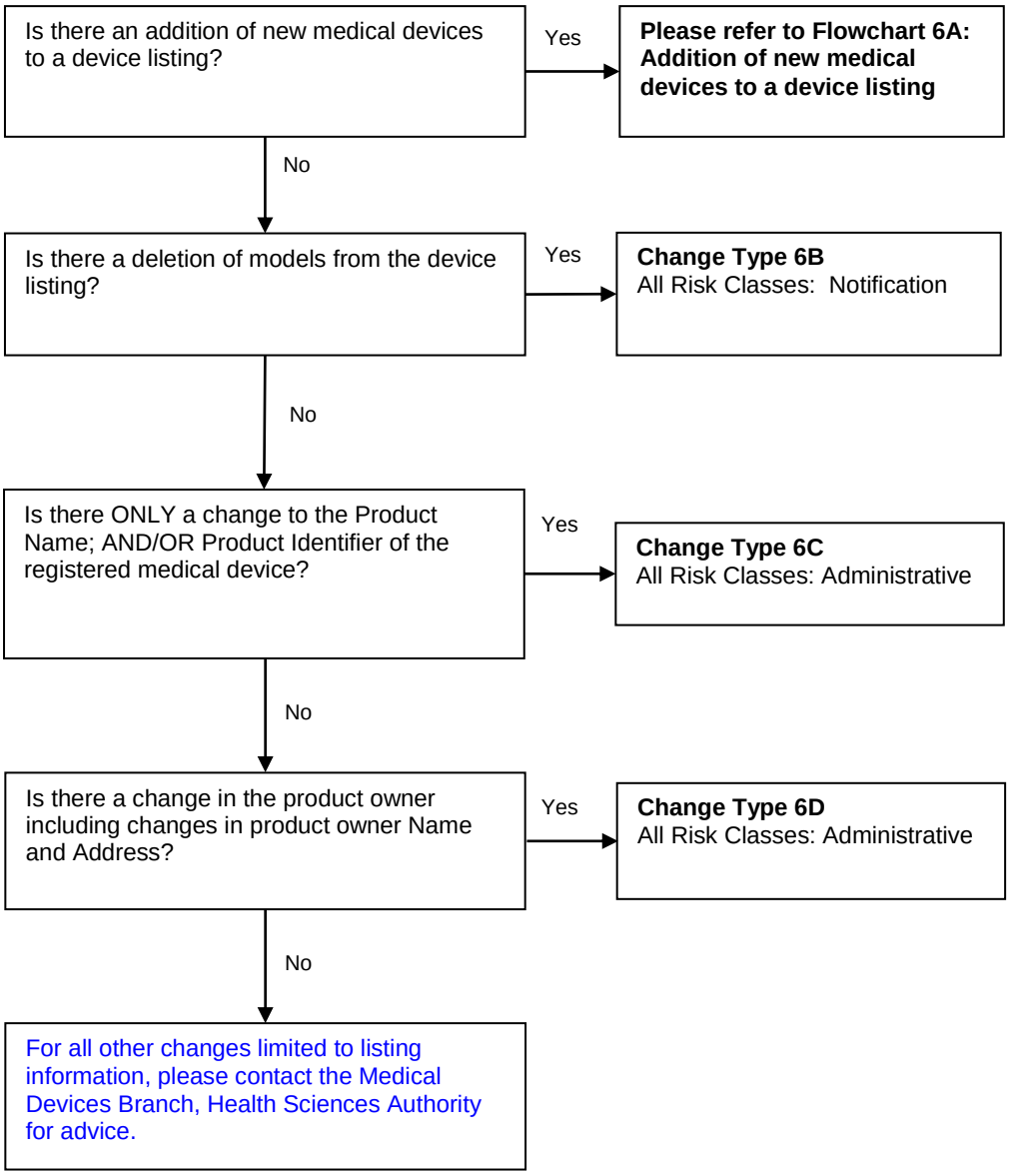


Flowchart 5: Changes to Labelling

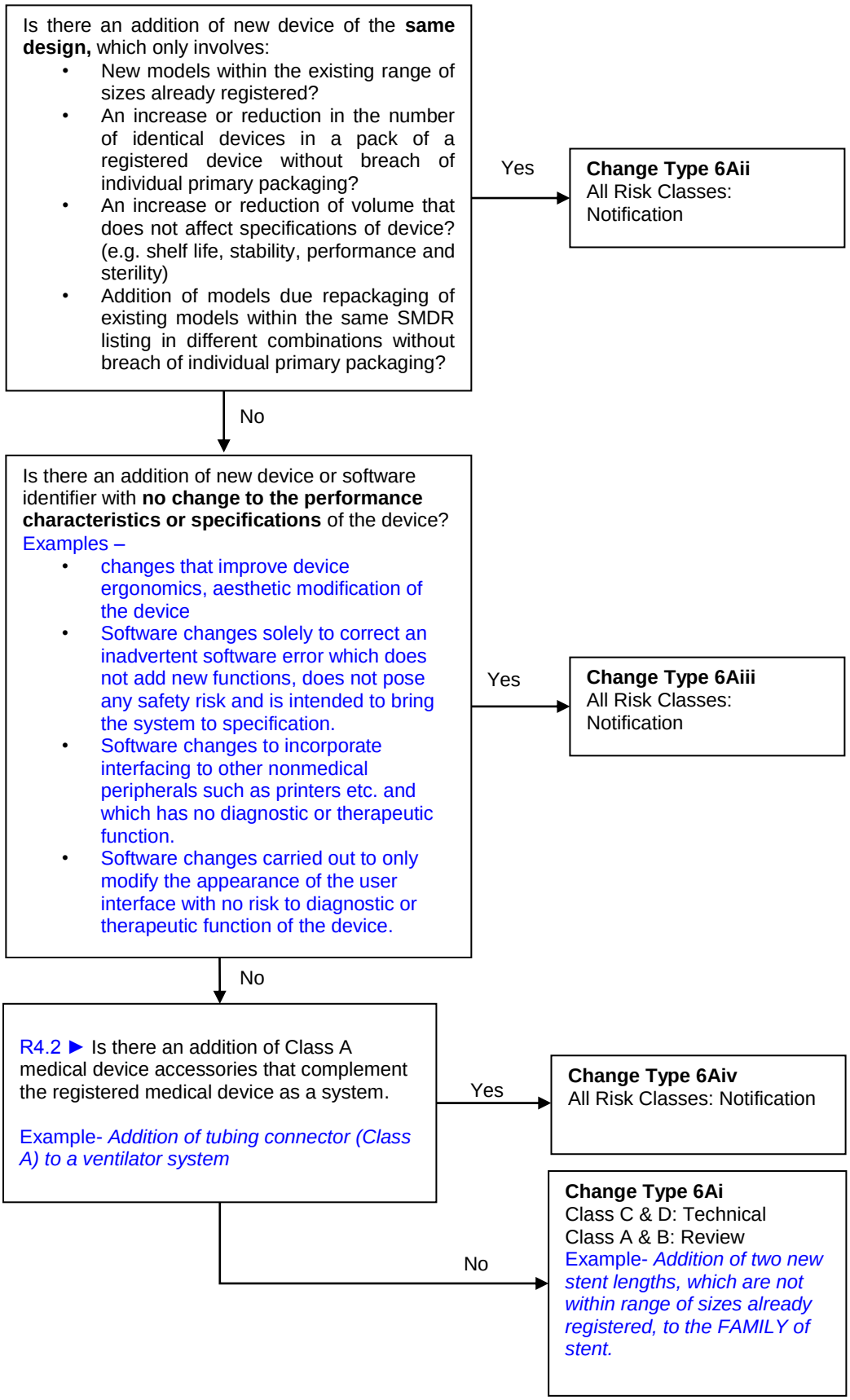


Flowchart 6: Changes to Registered Medical Devices Listing Information

** This refers to the primary change under this category. For consequential changes to the device listing information, please refer to other flowcharts.*



Flowchart 6A: Addition of New Medical Devices to a Device Listing



APPLICATION PROCESS FOR CHANGE NOTIFICATION

Upon identifying all applicable categories of changes based on the flowcharts in Section 4, the changes may be grouped as per guidelines below, and submitted as a single Change Notification application for the medical device listing(s).

NOTE

1. *For changes within **one dossier** and involving listings of **a single risk class**:*
   Multiple changes (Notification, Administrative, Review and Technical changes) will be considered in one CHANGE NOTIFICATION application if they are submitted together. Fees and assessment done will follow the highest change category in that application.

2. *For changes in **two or more dossiers** involving listings of **a single risk class**:*
   a) *Applicants can submit one CHANGE NOTIFICATION application on MEDICS for (i) identical administrative and notification changes to multiple SMDR listings or (ii) where the same new product is added to multiple SMDR listings, if the changes are submitted together. Non-identical changes in any one listing may result in the entire CHANGE NOTIFICATION application being rejected.*

   b) *Applicants can submit one CHANGE NOTIFICATION application for technical changes to the same medical device that is part of multiple device listings (as part of a FAMILY, SYSTEM, GROUP, TEST KIT). Product identifiers listed in each of the SMDR device listings selected must be the same.*
   Example:
   A change in design (Technical change) to a Calibrator (Product identifier: AB1234) that is listed as part of the following SYSTEMS that have been listed separately on SMDR:

SMDR device listing number	***Name of device listing***	***Models listed on SMDR***
DE12345	*APEX Troponin Test system*	*APEX Troponin test strip (AT987)* *APEX wash buffer (AT654)* ***APEX calibrator (AB1234)***
DE98765	*APEX CK-MB Test System*	*APEX CK-MB test strip (AC786)* *APEX wash buffer (AC423)* ***APEX calibrator (AB1234)***

   Change to the APEX calibrator (AB1234) in SMDR listings, DE12345 and DE98765, can be submitted in one CHANGE NOTIFICATION application.

   c) *Non-identical administrative changes and technical changes that do not fall under the categories above: Applicant to submit separate CHANGE NOTIFICATION application for each change on MEDICS.*

3. ***Identical changes** involving **SMDR listings of different risk classes** may be submitted in one CHANGE NOTIFICATION application only for the following categories of change.*
   - *Change in product owner (6D)*
   - *Change in manufacture and/or sterilisation site (1A)*
   - *Change only involves an update of QMS certificate validity date (1E)* ◄ *R4*
   - *Addition of identical Class A accessories (6Aiv)*

4. ***Identical changes*** *arising from open Field Safety Corrective Actions (**FSCAs**) or reportable Adverse Events (**AEs**) involving **SMDR listings of different risk classes,** please seek advice from MDB on applicable requirements prior to the submission of the application on MEDICS.*

Please note that it is not possible to submit a new Change Notification application if there is a pending Change Notification application for the same product. The registrant has the option of either:

a. Withdrawing the pending Change Notification application and submitting a new change notification application, or
b. Submitting a new Change Notification application once the pending Change Notification application is completed.

Single applications submitted with changes belonging to multiple categories (**Notifications, Administrative, Technical** and **Review** changes) shall be classified based on the most stringent category of change in that application, and evaluated accordingly. The fees and Turn-Around-Time (TAT) will follow the most stringent category applicable.

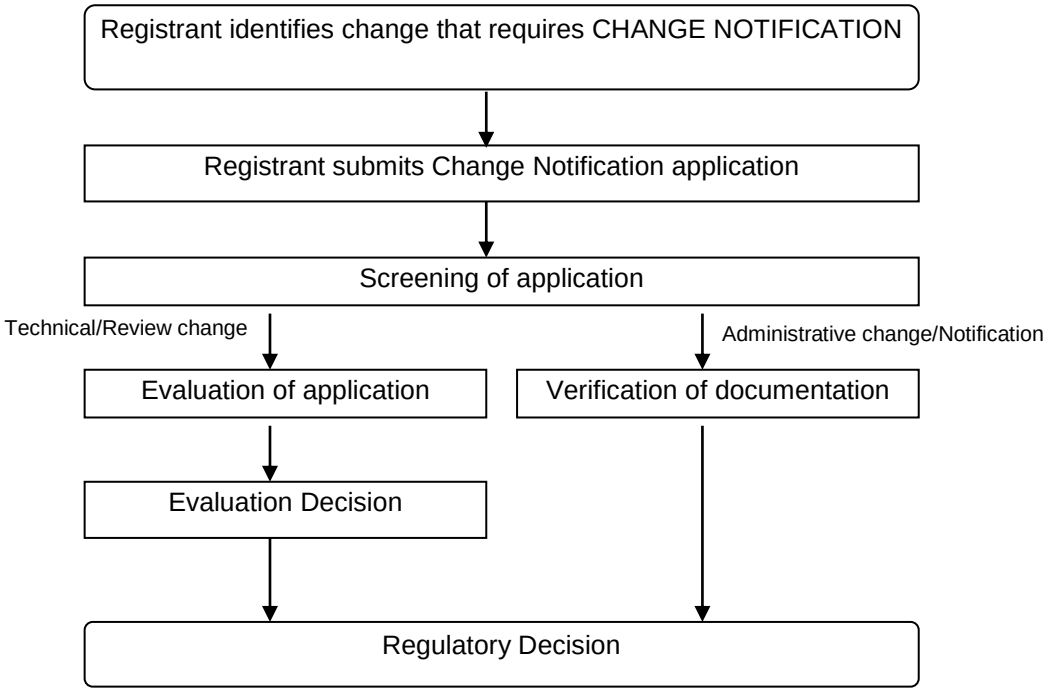
3.1. Requirements for Change Notification

Applicant is required to submit the following:

a. All supporting documents listed in Annex 1 as applicable for the change types.
b. Duly completed Annex 2 to GN-21: Summary Table of Change Notification
c. Duly signed Annex 3 to GN-21: Medical Device Safety and Performance Declaration

Registrants are reminded that the determination of documents required for Change Notification should be made with reference to all submitted changes, and not solely on one category of change.

The application process for the assessment of Change Notification application for registered Class A to D medical devices is summarized below:



Upon the successful submission of the Change Notification application on MEDICS, no further amendment of the application will be allowed unless otherwise advised by HSA. As application fees and TATs for Change Notification applications are based on a per-application basis, HSA recommends the judicious grouping of different categories of changes that affect each device listing, before submission of each Change Notification. Refer to Section 6 and Section 7 of this guidance document for the TATs and the fees applicable for each Change Notification category.

An application for changes categorised as **'Technical Change'** or **'Review Change'** will be evaluated. An evaluation decision is made based on the outcome of the Authority's evaluation of the submitted information. The decision can be one of the following:

- The Change Notification is **approvable** – where Authority assessed that the changes made to the registered medical device meet prevailing requirements of safety, quality and efficacy for its intended purpose and may be registered for local supply; or

- The Change Notification is **non-approvable** – where the response provided by the applicant fails to address the deficiencies highlighted during the input request, or failure to adhere to specified time as stated in input request or provide information requested for within reasonable timeframe, or where changes made to the registered medical device does not meet prevailing requirements of safety, quality or efficacy for its intended purpose.

3.2. Implementation and Supply ◄ R4

Changes to the registered devices may be implemented upon approval of the respective Change Notification applications by the Authority.

R4 ► Upon approval of the Change Notification application, companies may concurrently supply both the original registered medical device and the changed medical device (subject of the Change Notification) only if both versions of the medical device conform to the Essential Requirements for Safety and Performance for medical devices as stipulated in the First Schedule of the Health Products (Medical Devices) Regulations.

Companies shall ensure that appropriate mechanisms are in place to differentiate and identify the changed device from the original version based on device or manufacturing attributes (e.g. through batch/ lot/ serial number and manufacturing date), and maintain relevant inventory records on file to ensure traceability of both versions as part of their quality management system (QMS) requirements. All relevant records on file shall be made available to the Authority upon request.

This concurrent supply of the unchanged original device may not be applicable for changes to medical devices implemented as a consequence of reportable **AEs or FSCAs**. Such changes typically impact the safety, quality and/or efficacy of the medical device and any further supply of the affected and/or corrected stocks shall be solely based on the written advice from HSA to the registrant in the context of the respective **AE or FSCA** cases.

For the concurrent supply of old-label and new-label stock in the context of **change(s) in product owner (6E)** Change Notifications, companies will additionally be required to inform HSA of the proposed timeline for phasing out of old inventory stock with old product owner contact information from the market at the point of submission of the CN. Company should ensure there is appropriate communication to the affected consignees on any change in the product owner contact information in the interim, for the proposed period of concurrent supply. Concurrent supply for this scenario may be allowed by the Authority for stipulated timeline upon review of the information provided.

In the context of **change in manufacture and/or sterilisation site (1A)** change notifications that is to replace existing sites for the registered device with new sites, companies who require concurrent supply of the devices from the old and new sites will additionally be required to inform HSA of the proposed timeline for phasing out of the manufacturing activity in the old site which should be supported by valid QMS certificate for the old site. Concurrent supply for this scenario may be allowed by the Authority for stipulated timeline upon review of the information provided. ◄

4. CHANGE NOTIFICATION TURN-AROUND-TIME (TAT)

Applicants should ensure that the dossiers are complete before submission. Incomplete submissions and untimely responses to queries will result in unnecessary delays to the review process and inevitably prolong the overall processing timeline.

Table 3 - Change Notification TAT for Class A (sterile) listings

Risk Classification	TAT for Change Notification (in working days)
Class A (sterile)	20

Table 4 - Change Notification TAT for Class B, C and D listings

Risk Classification	TAT for Change Notification (in working days)		
	Review Changes	Administrative Changes	Technical Changes
Class B	45	30	Not applicable
Class C	Not applicable	30	75
Class D*	Not applicable	30	90

**For TATs with regards to changes to the medicinal product in Class D medical devices that incorporate a registrable medicinal product in an ancillary role, please contact HSA.*

The target TAT for Change Notification applications commences from the date of submission of the application and does not include 'stop-clock time' due to input requests for clarifications and additional information. The TATs published in Tables 3 and 4 above shall be applied based on the highest category of change selected for that application (e.g. if a **Technical** Change

and an **Administrative** Change for a Class C medical device listing are submitted in one application, the TATs for a **Technical** Change for a Class C medical device shall apply). TATs shall apply to each application on a per-application basis.

5. CHANGE NOTIFICATION FEES

The fees applicable for the Change Notification applications are summarized in Table 5 below. Fees chargeable for applications that includes multiple changes will depend upon the highest category of change selected (e.g. if a **Technical** Change and an **Administrative** Change for a Class C medical device listing are submitted in one application, the fees for a **Technical** Change for a Class C medical device shall apply).

All fees are **non-refundable** once the application has been submitted via MEDICS. Withdrawal or rejection of the application will result in **forfeiture** of the fees charged.

Table 5 - Change Notification Fees

<table>
<tr><th>Risk Class</th><th>Notification Change</th><th>Administrative Change</th><th>Review Change</th><th>Technical Change</th></tr>
<tr><td>Class A (Sterile)</td><td rowspan="4">Not applicable</td><td>$25</td><td>$25</td><td rowspan="2">Not applicable</td></tr>
<tr><td>Class B</td><td>$500</td><td>$500</td></tr>
<tr><td>Class C</td><td>$500</td><td rowspan="2">Not applicable</td><td>$1700</td></tr>
<tr><td>Class D
(including devices incorporating medicinal products in an ancillary role)</td><td>$500</td><td>$2800</td></tr>
</table>

ANNEX 1 to GN-21: Change Notification Submission Requirements ◄ R4

This is provided to assist the registrant in determining the required documents for types of changes proposed.

NOTE:

All the required documents must be submitted for the relevant sections of the CSDT to support the proposed changes to the device. The documentary requirements are meant to cover the broadest aspect for each category of change. If any required documents as defined in the respective category in this checklist are not available or applicable for the change proposed, please provide a clarification or justification as appropriate. Please also refer to GN-15 for the relevant templates/documents which may be required for the registered devices.

Mandatory documents to be submitted for all Change Notification application:

- **Completed Annex 2 to GN-21: Summary Table of Change Notification;**
- **Completed Annex 3 to GN-21: Medical Device Safety and Performance Declaration.**

Additional documentary requirements for Class B, C and D devices are listed below. Additional documentary requirements for Class A devices are separately listed in the last section of Annex 1.

Documentary Requirements:	**1. Change in Manufacturing Facility, Process and Quality Management System (QMS)**				
	1A*	**1B**	**1C**	**1D**	**1E**
	B-D: Notification	B: Notification C and above: Technical	B: Notification C and above: Technical	B: Notification C and above: Technical	B-D: Notification
	All changes to manufacturing and/or sterilisation facilities with no changes to the specifications of a registered medical device and/or sterilisation process	All changes in manufacturing process to Additive Manufacturing, or to refurbish a registered device	All changes to manufacturing site and/or processes that result in a change in specifications of a registered medical device	All changes to sterilization method and related processes of a registered medical device	All changes to Quality Management System (QMS) certificates for manufacturing and sterilization facilities
Quality Management System certificate(s)	✓	If applicable	If applicable	✓	✓

- Continued -	1. Change in Manufacturing Facility, Process and Quality Management System (QMS)				
	1A*	1B	1C	1D	1E
	B-D: Notification	B: Notification C and above: Technical	B: Notification C and above: Technical	B: Notification C and above: Technical	B-D: Notification
Device labelling with changes are highlighted/identified	✓	If applicable	If applicable	✓	If applicable
Declaration letter from product owner on company letterhead confirming no change to existing device specifications and/or sterilization process	✓				
Sterilization validation report (including sterlisation protocol, sterilisation standards applied. Sterility Assurance Level, Sterilsation revalidation report)	If applicable			✓	
Post sterilisation functional test report				✓	
Summary of new manufacturing process		✓	✓		
Device validation studies		✓	✓		
Risk Analysis (If applicable)		✓	✓		

** For changes in manufacturing/ sterilization site of medical devices containing medicinal products in an ancillary role, please contact the Medical Devices Branch, Health Sciences Authority for further advice.*

	2. Changes in Design or Specifications of a registered medical device (GMD and IVD)			
	2Ai	**2Aii**	**2Aiii**	**2B**
	B: Notification C and above: Technical	B-D: Notification	B-D: Notification	B: Notification C and above: Technical
Documentary Requirements:	Changes to the control mechanisms, operating principles, sterile primary packaging and/or design characteristics of a registered medical device.	Unless the change only involves a change to the software version number such as: • Software changes solely to correct an inadvertent software error which does not add new functions, does not pose any safety risk and is intended to bring the system to specification; • Software changes which augment interfacing to other nonmedical peripherals such as printers or VDUs and which has no diagnostic or therapeutic function; • Software changes which only modifies the appearance of the user interface with no risk to diagnostic or therapeutic function of the device.	Unless the change only involves a design change that does not affect performance characteristics and/or specifications of the medical device (e.g. changes that improve device ergonomics, aesthetic modification of the device)	All changes in specifications of a registered medical devices (including shelf life, stability, expiry date)
Pre-clinical studies ** Refer to Documentation Guidelines for Software Changes table below*	✓	✓	✓	✓
Risk Analysis	✓			✓
Clinical studies (If applicable)	✓			✓
Device labelling with changes	✓	✓	✓	✓

Documentation Guidelines for Software Changes

<table>
<tr><th>FSCA related software change</th><th>Non- FSCA related software change</th></tr>
<tr><td rowspan="2">Technical/ Review/ Notification change

• Evidence to demonstrate that the software issue has been resolved.

Example- Test cases verification

• Remaining software anomalies (bugs or defects) including those that affect the functionality of the device should be assessed. Company has to provide justification/explanation why the software with the remaining anomalies is still deemed acceptable for release.</td><td>Technical/ Review change

• Evidence that the Software changes have been validated. Software version number validated is the same software version to be supplied after the changes.

Example- Validation report for changes

• Remaining software anomalies (bugs or defects) including those that affect the functionality of the device should be assessed. Company has to provide justification/explanation why the software with the remaining anomalies is still deemed acceptable for release.</td></tr>
<tr><td>Notification change

• Detailed summary of software changes (can be included in the Annex 2, Summary Table of change). To include information on the incremental changes or revisions to the software from the registered software version.</td></tr>
</table>

Note- for In vitro diagnostic (IVD) devices, performance validation of the IVD analyzer & assay conducted using software is acceptable in lieu of the software validation report.

Documentary Requirements:	**3. Changes in Materials in a General Medical Device**				
	3A	**3Bi**	**3Bii**	**3C**	**3D**
	B - Notification C and above - Technical	B - Notification C and above - Technical	B-D: Notification	B - NA C and above - Technical	B - NA C and above - Technical
	All changes in type, source, processing and/or supplier of biological materials (including cells, tissues and/or derivatives of animal, human, microbial or recombinant origin) without a change in the intended purpose of the biological material.	All changes in material or material formulation (of non-biological origin) including changes to device coating or surface modification techniques that is intended to make direct/indirect contact with body tissues and fluids or is absorbed by the body, with no change in device performance specifications.	Unless the material has been reviewed in a previous device application and the new material has the same nature of body contact and contact duration.	All changes to materials that are used for shielding in medical devices emitting ionising radiation.	All changes to concentration or drug specification of medicinal substances in medical devices that incorporate medicinal substances in an ancillary role.
Preclinical Studies	✓ (e.g. biocompatibility)	✓ (e.g. biocompatibility, mechanical)	✓ (e.g. biocompatibility, mechanical testing, sterilization validation)	✓ (e.g. radiation safety validation report summary)	Contact the Medical Devices Branch for further advice.
Clinical Studies (If applicable)	✓	✓		✓	
Biological Safety Data	✓ (e.g. viral validation report)				
Information of Sources/Donors	✓				
List of material(s) making direct/ indirect contact with human body	✓	✓	✓		

- Continued -	3. Changes in Materials in a General Medical Device				
	3A	**3Bi**	**3Bii**	**3C**	**3D**
	B - Notification C and above - Technical	B - Notification C and above - Technical	B-D: Notification	B - NA C and above - Technical	B - NA C and above - Technical
Information on radiation source				✓	Contact the Medical Devices Branch for further advice.
Information on materials for shielding of radiation				✓	
Justification for choice of identified referenced device (provide device registration & model number), with consideration to the device intended use, indications of use, nature of body contact and contact duration.			✓		

Documentary Requirements:	**4. Change to Materials of In Vitro Diagnostic Medical Devices**
	4 A
	Class B: Notification Class C & D: Technical
	All changes in material (including chemical and biological substances) which results in a change to the performance specifications of the registered in vitro diagnostic (IVD) medical device
Pre-clinical performance evaluation data	✓ *Example – Shelf life studies, specificity and sensitivity studies*
Clinical performance evaluation data	✓
Information on source of material	✓ *Example – Certificate of Analysis (COA), Certificate of Compliance (COC)*

All changes to the radiation source require a new premarket submission. Example – Radioisotopes in radioimmunoassays

	5. Changes to Labelling							
	5Ai	**5Aii**	**5Bi**	**5Bii**	**5C**	**5D**	**5E**	**5F**
	B: Review C & above: Technical	B-D: Notification	B: Review C & above: Technical	B-D: Notification	B: Review C & above: Technical	B-D: Notification	B-D: Notification	B-D: Notification
Documentary Requirements:	All changes to the labelling of medical devices that involve addition and/or revision of the approved indications for use	Unless the change only involves a reduction of indications for use	All changes to labelling of the medical devices that involve removal and/or revision of warnings, precautions and/or contraindications	Unless the change involve an addition of contraindications, warnings and/or precautions	Labelling changes that modify the approved method of use OR Involves a change from 'professional use only' to 'home use'	Change involves only rephrasing of existing information in instructions for use	Labelling changes that involve: • Changes in layout, colour, font sizes and design, without change in prominence of precautions, warning and contraindications • Addition and/ or removal of languages not required by the Authority • Addition of reference agencies' approvals (e.g. CE marking) • Addition or change in barcodes without impact to device listing information • Addition of a Unique Device Identification (UDI) and standardisation of date format to conform to UDI requirements without impact to device listing information	Other labelling Changes
Regulatory approval documents from reference agencies for the change	✓							

- Continued -	5. Changes to Labelling							
	5Ai	**5Aii**	**5Bi**	**5Bii**	**5C**	**5D**	**5E**	**5F**
	B: Review C & above: Technical	B-D: Notification	B : Review C and above: Technical	B-D: Notification	B : Review C and above : Technical	B-D: Notification	B-D: Notification	B-D: Notification
Device information	✓		✓		✓			
Device labelling with changes highlighted	✓	✓	✓	✓	✓	✓	✓	✓
Declaration of conformity document	✓							
Pre-clinical studies	✓		✓		✓			
Clinical studies	✓		✓		✓			
Risk Analysis	✓		✓	✓	✓			
Software validation report (For software only)	✓		✓		✓			
Other relevant documents supporting proposed changes submitted (If applicable)								✓

	6. Changes to registered medical devices listing information						
	6Ai	**6Aii/ 6Aiii**	**6Aiv**	**6B**	**6C**	**6D**	
	B: Review C & above: Technical	B-D: Notification	B-D: Notification	B-D: Notification	B-D: Administrative	B-D: Administrative	B-D: Administrative
Documentary Requirements:	Addition of new medical devices to a device listing	**6Aii** • Unless the change involves the addition of the same design, that only involves: New models within the existing range of sizes already registered; • An increase or reduction in the number of identical devices in a pack of a registered device without breach of individual primary packaging; • An increase or reduction of volume that does not affect specifications of device (e.g. shelf life, stability, performance and sterility); • Addition of models due repackaging of existing models within the same SMDR listing in different combinations without breach of individual primary packaging. **6Aiii** Unless change involves the addition of a new device or software identifier with no change to the performance characteristics or specifications of the device	Unless the change involves the addition of Class A medical device accessories that complement the registered medical device as a closed system	All deletions of models from device listing	All changes to Product Name and/or identifier	All changes in the product owner	A change in product owner address
Annex 2 - List of Configurations with the new models highlighted	✓	✓	✓	✓	✓		

- Continued -	6. Changes to registered medical devices listing information						
	6Ai	6Aii/ 6Aiii	6Aiv	6B	6C	6D	
	B: Review C & above: Technical	B-D: Notification	B-D: Notification	B-D: Notification	B-D: Administrative	B-D: Administrative	B-D: Administrative
Device description, including justification, for deletion/ addition of device models to be grouped within the registered listing	✓	✓	✓	✓			
Device labelling	With changes highlighted/ identified beside each amended section	With changes highlighted / identified beside each amended section	✓		With changes highlighted/ identified beside each amended section	With changes highlighted/ identified beside each amended section	With changes highlighted/ identified beside each amended section
Declaration of conformity document	✓	✓			✓	✓	
Letter of Authorisation (GN-15)	✓	✓	✓ For sterile Class A		✓	✓	✓
Pre-clinical studies	✓	If applicable	If applicable				
Clinical studies (If applicable)	✓						
Risk analysis (If applicable)	✓						
Software report (If applicable) ** Refer to Documentation Guidelines for Software Changes table above*	✓	✓	✓				

- Continued -	6. Changes to registered medical devices listing information						
	6Ai	6Aii/ 6Aiii	6Aiv	6B	6C	6D	
	B: Review C & above: Technical	B-D: Notification	B-D: Notification	B-D: Notification	B-D: Administrative	B-D: Administrative	B-D: Administrative
Manufacturing information	✓	✓	✓				
Declaration Letter			On Registrant's letterhead to state (1) The added models are class A non-sterile (2) The added device name and identifier of the class A non-sterile device (3) The name of product owner (4) Name and address for the manufacturing site(s) of the class A non-sterile device		From product owner on company letterhead to state that there is no change to device in all aspects, including intended use, technical specifications.	From product owner on company letterhead, to state that they will undertake responsibility to provide post market support and assistance related to the medical devices <state device name> already supplied under the former product owner's name (if applicable)	
Quality management system certificate	✓	✓	✓				
Regulatory approval documents from reference agencies.	✓	✓					

Documentation guidelines for Class A device changes

Where relevant, the following documents are to be submitted in support of proposed changes.

Document Requirements	Class A (sterile)	IVD Class A (sterile)	Class A (non-sterile)
Letter of Authorisation	✓	✓	
R4.1► Change to Product Name and/or Identifier: Declaration from product owner, on company letterhead, to state that there is no change to device in all aspects, including intended use, technical specifications	✓	✓	
R4.1► Change to product owner: Declaration from product owner on company letterhead, to state that they will undertake responsibility to provide post market support and assistance related to the medical devices <state device name> already supplied under the former product owner's name (if applicable)	✓	✓	
On Registrant's letterhead to state (1) The models are class A non-sterile (2) The device name and identifier of the class A non-sterile device (3) The name of product owner (4) Name and address for the manufacturing site(s) of the class A non-sterile device			✓
R4.2►Evidence that proposed additional models qualify to be grouped within the registered listing. e.g. IFU, patient information leaflet and promotional material (including brochures and catalogues)	✓	✓	✓

Document Requirements - Continued -	Class A (sterile)	IVD Class A (sterile)	Class A (non-sterile)
A list of all materials of animal, human, microbial and/or recombinant origin used and manufacturing process	if applicable	✓	
Sources of all materials of animal, human, microbial and/or recombinant origin used and manufacturing process	if applicable	✓	
Information on sterilisation method(s) and validation standard(s) used	✓	✓	
Software validation report			If applicable
Proof of Quality Management System (QMS) – E.g. ISO 13485 certificate, conformity to US FDA Quality System Regulations, Japan MHLW Ordinance 169 or attestation stating adequate QMS	✓	✓	✓

ANNEX 2 to GN-21: Summary Table of Change Notification

Guidelines on completing the Summary Table of Change Notification

This summary table is to be completed and submitted for all Change Notification applications (Technical Changes, Review Changes, Administrative Changes, and Notifications).

List the proposed changes, according to the "Category of change" categories in GN-21, to the registered medical device(s) in the summary table below. All applicable types of changes are to be included; any change not specified in this table will not be included for the change notification application.

Information to be included in the table is explained below:

(i) **Type of changes:** Please state clearly the **type of change**, **category of change** and **SMDR device listing number.**

- With reference to the 'type of changes' categories in GN-21, highlight the type of change proposed.
- Specify the SMDR device listing number for the registered medical device(s) included in this change (if the proposed change is identical and applicable to identical devices across multiple device listings on the SMDR; list the applicable device listings). Confirm these device(s) subjected to the change.

NOTE *All applicable types of changes are to be included. If the types of change proposed affects/results in another type of change, all types of changes shall be included. For example, change in material of device and change (update) of labelling often occur together.*

(ii) **Present:** Please state clearly the current scope and aspects of the device to be changed.

(iii) **Proposed:** Please state clearly the proposed scope and aspects of change.

(iv) **Reason for change:** Please state clearly the rationale for the proposed scope and aspects of change.

(v) **Status of proposed change in reference agencies:** Please state the reference agency status (approved/authorised for marketing) for these proposed changes.

(vi) Indicate in the check box if the medical device(s) in this Change Notification application is a subject of an on-going field safety corrective action.

Please select the correct box.

The change(s) in this Change Notification application is/are related to field safety corrective action and/or reportable adverse events.

☐ Yes ☐ No ◄ R3.2

Type of Changes	Present	Proposed	Reason for change#	Status of proposed change in reference agencies*	Justification for not submitting documents as specified in Annex 1 to GN-21: Change Notification Checklist ◄ R4
Type of change: *e.g. Change in material: Delivery tube material changed from polyvinyl chloride (PVC) to silicone* **Category:** Notification **SMDR Device listing no(s):** (same tubing is in all the SMDR Device listing below) (i) DE 001111, (ii) DE 002222, (iii) DE 003333, *(iv)* DE 004444.	*Delivery tube material: polyvinyl chloride (PVC)*	*Delivery tube material silicone*	*Improve patient safety by changing to DEHP-free tubing material*	*Australia TGA – pending* *EU Notified Body – approved/authorised for marketing* *Health Canada – not supplied* *US FDA – not supplied* *Japan MHLW – not supplied*	

Type of Changes	Present	Proposed	Reason for change#	Status of proposed change in reference agencies*	Justification for not submitting documents as specified in Annex 1 to GN-21: Change Notification Checklist ◄ R4
Type of change: *e.g. Change in Manufacturing Facility* **Category:** **SMDR Device listing no(s):** DE 005555	*Name and address of current manufacturing facility A*	*Name and address of new manufacturing facility B*	*Reason for product owner's decision to move manufacturing activities from facility A to facility B*	*Australia TGA – pending* *EU Notified Body – approved/authorised for marketing* *Health Canada – not supplied* *US FDA – not supplied* *Japan MHLW – not supplied*	

** Applicable for changes to add new models, and revision to indications of use only*

 # Indicate the HSA FSCA Reference no. (e.g. HSA 600:41/01-000/15/01) for changes related to reportable FSCA/ local AE, if applicable.

ANNEX 3 to GN21: Medical Device Safety and Performance Declaration

Template

Safety and Performance Declaration Template

[To be printed on Company Letterhead of Registrant]

Medical Devices Branch
Pre-Marketing Division
Health Products Regulation Group
Health Sciences Authority

[Date]

Dear Sir/Madam,

[Name of Company], the Registrant of the medical device(s) stated below, hereby declare that the medical device(s) in this Change Notification application,

☐ The change(s) to the medical device in this Change Notification application is/are not due to field safety corrective action(s) and/or local reportable adverse events ◄ R4

☐ Medical device(s) in this Change Notification application conform(s) to the Essential Requirements for Safety and Performance as laid out in the Health Products (Medical Devices) Regulations

☐ The added model(s) is/are not a subject of an open reportable adverse event and/or an on-going field safety corrective action, and does not contain corrections that are the subject of an ongoing field safety corrective action and/or local adverse event. (If applicable) ◄ R4

This declaration shall apply to the following medical device(s):

[List containing product names of medical devices]

I, the Registrant, am aware that a false declaration is an offence under the Health Products Act (Cap. 122D) and may result in the cancellation of registration of the above medical devices under Section 37(1) of the Act.

Yours Sincerely,

[Signature]

[Full Name and Title of Senior Company Official]
[Company stamp]

ANNEX 4 to GN-21: Change Types Submission Reference List ◄ R4

This annex lists the change types available for submission of Change Notification applications.

Refer to flowcharts under section 4 of this Guidance, for guiding principles in identifying the type and category of Change Notification applicable for each proposed type of change to the registered medical device.

1. Change in Manufacturing Facility, Process and Quality Management System
1A Addition, deletion, or shift of manufacturing and/or sterilisation facilities with no change to specifications of a registered medical device and/or sterilisation process
1B Changes in the manufacturing process to Additive Manufacturing (3D-printing), or to refurbish a registered device
1C Changes to manufacturing site and/or processes that result in a change in specifications of a registered medical device
1D Changes to sterilisation method and related processes
1E Changes to Quality Management System (QMS) certificates for manufacturing and sterilisation facilities - an update of QMS certificate validity date - a change of QMS certificate scope for one of the multiple existing manufacturing facilities (that is not due to safety, quality and/or efficacy of the device) - change only involves a change in certification body with no change in scope of the certification

2. Changes in Design or Specifications of a registered medical device
2Ai All changes to the control mechanisms, operating principles, sterile primary packaging and/or design characteristics of a registered medical device
2Aii - Unless the change only involves minor software changes, such as: • Software changes solely to correct an inadvertent software error which does not add new functions, does not pose any safety risk and is intended to bring the system to specification • Software changes which augment interfacing to other non-medical peripherals such as printers or VDUs and which has no diagnostic or therapeutic function • Software changes which only modifies the appearance of the user interface with no risk to diagnostic or therapeutic function of the device
2Aiii - Unless the change only involves a design change that does not affect performance characteristics and/or specifications of the medical device (e.g. changes that improve device ergonomics, aesthetic modification of the device, etc.)
2B All changes in specifications of a registered medical device
2C Changes to the IVD analyser that does not impact the performance specifications of the test kits

3. Changes to materials in a General Medical Device
3A All changes in type, source, processing and/or supplier of biological materials (including cells, tissues and/or derivatives of animal, human, microbial or recombinant origin) without a change in the intended purpose of the biological material
3Bi All changes to materials or material formulation (of non-biological origin), including changes to device coating or surface modification techniques, that involve materials that make direct/indirect contact with body tissues and fluids, or are absorbed by the body, with no change in device performance specifications
3Bii - Unless the material has been reviewed in a previous device application and the new material has the same nature of body contact and contact duration
3C All changes to materials that are used for shielding in medical devices emitting ionising radiation
3D All changes to concentration or drug specifications of medicinal substances in medical devices that incorporate medicinal substances in an ancillary role

4. Changes to materials in an In-Vitro Diagnostic (IVD) Medical Device
4A All changes in material (including chemical and biological substances) which results in a change to the performance specifications of the registered in vitro diagnostic (IVD) medical device

5. Changes to labelling of medical device
5Ai All changes to the labelling of medical devices that involve addition and/or revision of the approved indications for use
5Aii Changes only involves a reduction of indications for use
5Bi All changes to the labelling of medical devices that involves removal and/or revision of warnings, precautions and/or contraindications
5Bii Changes only involves addition of contraindications, warnings and/or precautions
5C Labelling changes that modify the approved method of use OR involves a change from 'professional use only' to 'home use'
5D Labelling changes that involves rephrasing of existing information in instructions for use
5E Labelling changes that involve: • Changes in layout, colour, font sizes and design without change in prominence of precautions, warnings and contraindications • Addition and/or removal of languages not required by the Authority • Addition of reference agencies' approvals (e.g. CE marking) • Addition or change in barcodes without impact to device listing information • Addition of a Unique Device Identification (UDI) and standardisation of date format to conform to UDI requirements without impact to device listing information
5F Other labelling changes

6. Changes to registered medical devices listing information
6Ai Addition of new medical devices to a device listing
6Aii - Unless change only involves the addition of new devices of the same design, that only involves: • New models within the existing range of sizes already registered • An increase or reduction in the number of identical devices in a pack of a registered device without breach of individual primary packaging • An increase or reduction of volume that does not affect specifications of device (e.g. shelf life, stability, performance and sterility). • Addition of models due to repackaging of existing models within the same SMDR listing in different combinations without breach of individual primary packaging
6Aiii - Unless change involves an addition of new device or software identifier with no change to the performance characteristics or specifications of the device
6Aiv - Unless changes only involves the addition of Class A medical device accessories that complement the registered medical device as a closed system
6B All deletion of models from device listing
6C All changes to product name AND/OR product identifier
6D All changes to product owner, including changes to product owner name and address

HEALTH SCIENCES AUTHORITY

Health Products Regulation Group
Blood Services Group
Applied Sciences Group

www.hsa.gov.sg

Contact Officers:

Medical Devices Branch
Pre-marketing Cluster
Health Products Regulation Group
Health Sciences Authority

11 Biopolis Way, #11-03 Helios
Singapore 138667
www.hsa.gov.sg
Email: hsa_md_info@hsa.gov.sg

HSA
Health Sciences Authority