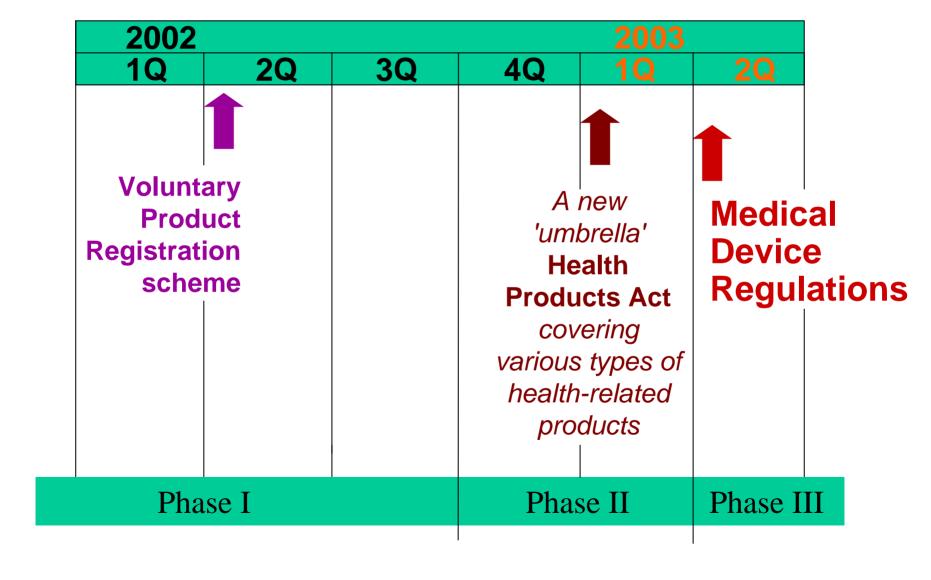
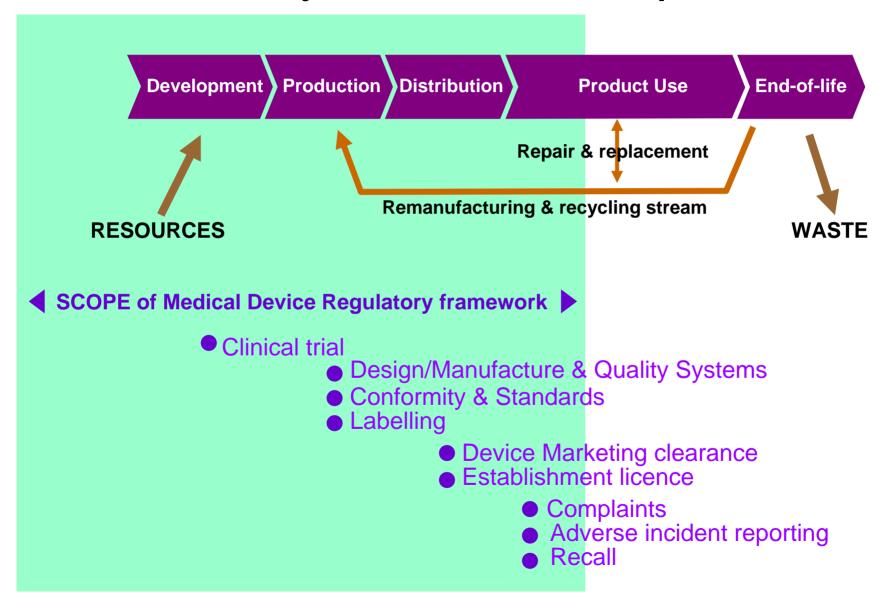


Nealda Leila Yusof Centre for Medical Device Regulation **Health Sciences Authority**

Implementation Timeline for Regulatory framework



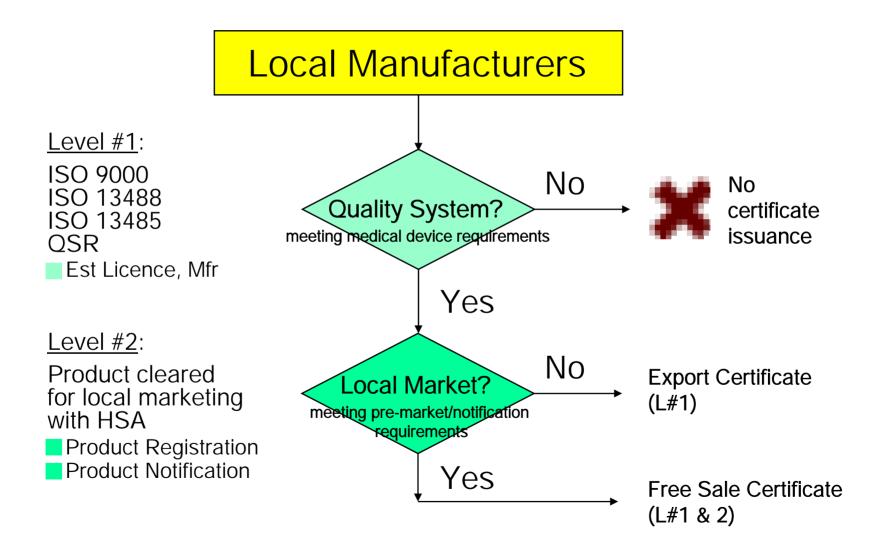
The life cycle of a manufactured product



Harmonizing for the global market



HSA Certificates for Local Manufacturers



Establishment Licences:

"Manufacturer" means (a) a person with responsibility for the design, manufacture, packaging and labelling of a device before it is placed on the market under his own name, regardless of whether the operations are carried out by that person himself or on his behalf by a third party; or (b) any other person who assembles, packages, processes, fully refurbishes or labels one or more ready-made products or assigns to them their intended purpose as a device with a view to their being placed on the market under his own name (apart from a person who assembles or adapts devices already on the market to their intended purpose for an individual person).

"Local Authorised Representative" means a person established within Singapore who, explicitly designated by the manufacturer, acts for the manufacturer and may be addressed by authorities and bodies in Singapore instead of the manufacturer.

Manufacturer's obligations

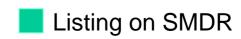
- Ensure that the medical device meets the essential principles and the conformity assessment procedures
- Keep objective evidence to establish that the medical device meets these requirements

REGULATORY ROADMAP

Establishment Product Establishment Licensing Licensing Manufacturer **MANUFACTURE** GMP/Design/Production Local Local Authorised IMPORT/SELL Representative for placement on H local market Distributor Post-market requirements (Vigilance, Distribution records) IMPORT/EXPORT Importer/Exporter Not for placement on Distribution records local market







LOW RISK

Class I Medical devices & Other general IVDDs

Notification

Inform HSA about devices marketed

MEDIUM & HIGH RISK

Class III, IIb, IIa Medical devices
 List A, List B and Self-testing IVDDs

Product Registration

Submit support documents for pre-market evaluation of safety, quality and performance



Singapore Medical Device Register

Product Listing

SINGAPORE MEDICAL DEVICE REGISTER (SMDR) is ...

A register of legally available higher-risked medical devices and their wholesale supply and distribution

Purchase from **On-line Product Product Product Listing Registration Approval** (in SMDR) portal **Manufacturer** Healthcare Institution **Local Authorised** Representative, **Public Distributor**



MEDIUM & HIGH RISK

Class III, IIb, IIa Medical devices List A, List B and Self-testing IVDDs

Devices with <u>prior</u>
regulatory
approval/clearance
from benchmark
regulatory authorities

A: Regulatory Approval

B: Post-market Requirements

C: Product Information

D: Declaration of Conformity

E: Status of Device Distribution

F: Safety and Effectiveness Data

G: Human Clinical Data

- US FDA Clearance/Approval
- EU Medical Device Directive
- Australia TGA Clearance/Approval
- Canada TPP Clearance/Approval
- Japan MHLW Clearance/Approval

A: Regulatory Approval

B: Post-market Requirements

C: Product Information

D: Declaration of Conformity

E: Status of Device Distribution

F: Safety and Effectiveness Data

G: Human Clinical Data

Established procedures for:

- Distribution records
- Complaint handling
- Adverse incident reporting
- Recall

A: Regulatory Approval

B: Post-market Requirements

C: Product Information

D: Declaration of Conformity

E: Status of Device Distribution

F: Safety and Effectiveness Data

G: Human Clinical Data

• Device Description

Functions, Concepts, Materials, Design

- Intended Use
- Instructions of Use
- Device Labelling

Instruction Manual

Pack Labelling

Promotional Material

Product Brochure

A: Regulatory Approval

B: Post-market Requirements

C: Product Information

D: Declaration of Conformity

E: Status of Device Distribution

F: Safety and Effectiveness Data

G: Human Clinical Data

- Safety and effectiveness requirements
- Product and Safety Standards
- Manufacturing process validation
- Quality systems

A: Regulatory Approval

B: Post-market Requirements

C: Product Information

D: Declaration of Conformity

E: Status of Device Distribution

F: Safety and Effectiveness Data

G: Human Clinical Data

- Date of first introduction & use
- List of countries where it device is marketed
- Regulatory status in each country
- Reported problems and recalls in each country

 ${f A}\colon$ Regulatory Approval

B: Post-market Requirements

C: Product Information

D: Declaration of Conformity

E: Status of Device Distribution

F: Safety and Effectiveness Data

G: Human Clinical Data

 All studies to determine device safety and effectiveness

Physical, Chemical and Biological Testing

- Pre-clinical

Investigational Testing on Human Subjects

- Clinical

Process validation studies

Software validation studies

Literature studies

Risk assessment – analysis, evaluation and reduction

A: Regulatory Approval

B: Post-market Requirements

C: Product Information

D: Declaration of Conformity

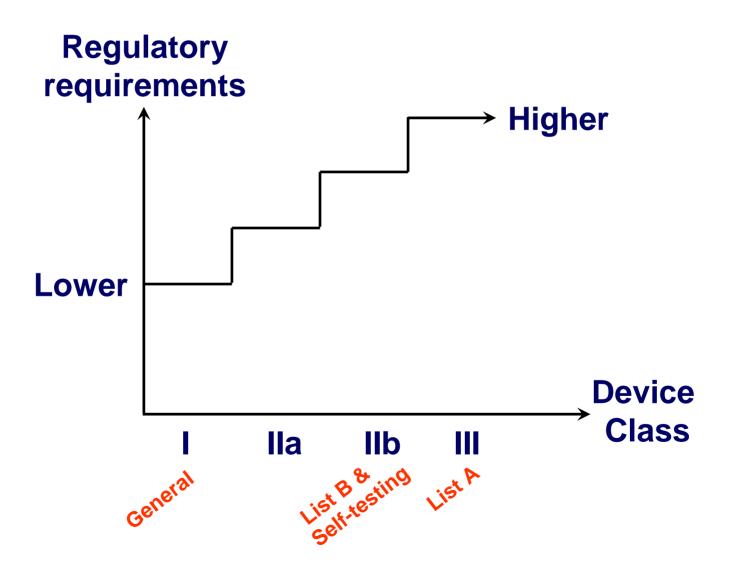
E: Status of Device Distribution

F: Safety and Effectiveness Data

G: Human Clinical Data

- Specifically designed clinical investigations e.g. controlled clinical trials
- Peer-reviewed scientific literature

Risk-based Regulatory Control



Risk-based Evaluation

Medical Devices:		lla	llb	III
A: Regulatory Approval				
B: Post-market Requirements				
C: Product Information	Claims			
D: Declaration of Conformity		Manufacture	Design & Manufacture	
E: Status of Device Distribution				
F: Safety and Effectiveness Data				
G: Human Clinical Data				

IVDDs: General

List B / Self-testing

List A



A transitional phase to a regulated environment

- A confidence building period
- A learning experience for stakeholders
- An opportunity to address issues that are obstacles to the path to market

The Change

- Minimum safety, quality & performance requirements for <u>all</u> devices
- Devices appropriately assessed according to the level of risk
- Globally aligned system eliminates unique local requirements

Thank You.

http://www.HSA.gov.sg

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