



# **IMDRF** Foundational Regulatory Pathways

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#### **OVERVIEW**

- History of the GHTF/IMDRF Global Regulatory Framework
- Overview of the model, past and current
- Where are we going from here?





- Builds on the foundation laid under the GHTF banner
- GHTF was founded in 1992 with the five founding members
- Model evolved over time to a structure of 5 Study
  Groups and a Steering Committee (with Ad Hoc
  Working Groups occasionally convened as needed
  for specific work items outside the scope of the SGs)





- Study groups were organized as follows:
  - SG1 Pre-Market Evaluation
  - SG2 Post-Market Surveillance/Vigilance
  - SG3 Quality Systems
  - SG4 Regulatory Auditing
  - SG5 Clinical Safety/Performance

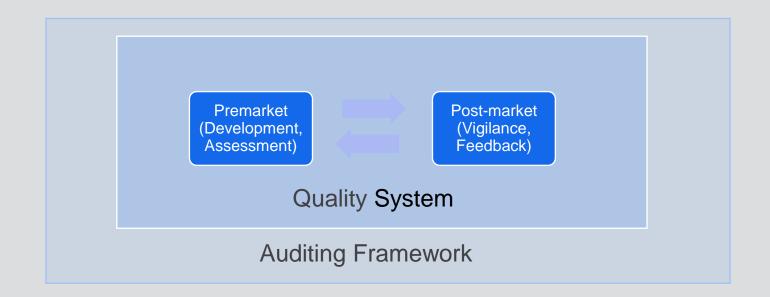




The work of each of these SGs combined to cover various aspects of the life cycle of a medical device, and collectively defined what became knowns as the GHTF Regulatory Model:



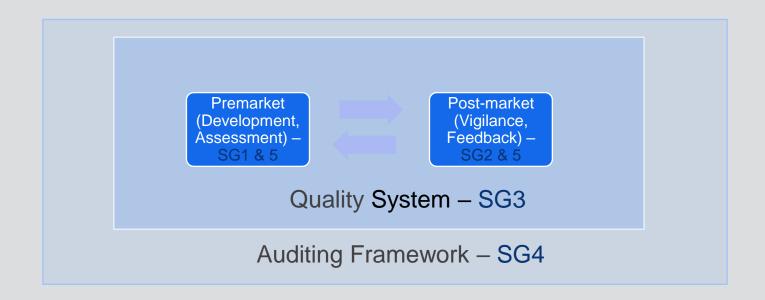




Schematic of the GHTF Regulatory Model



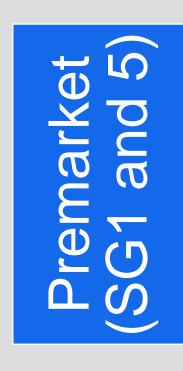




Schematic of the GHTF Regulatory Model







**Definition of Device** (GHTF SG1/N29) Definition of Manufacturer (GHTF SG1/N55) Classification Rules (GHTF SG1/N15&N45) Use of Standards (GHTF SG1/N44) Essential Principles (GHTF SG1/N41) Conformity Assessment Process (GHTF SG1/N40&N46) Labeling (GHTF SG1/N43) **Device Registration** (SG1/N65) **Submission Format** (STED) (GHTF SG1/N11) Clinical Investigations and Evidence (GHTF SG5 N2/N3)





Post-market (SG2 and 5) Adverse Event Reporting (GHTF SG2/N54)

Field Safety Notices (GHTF SG2/N57)

Information Exchange (GHTF SG2/N8&others)

Post-Market Surveillance (GHTF SG2/N79)

Post-Market Clinical Follow-Up (SG5/N4)







Risk Management (SG3/N15)

CAPA (SG3/N18)

Supplier Controls (SG3/N17)

Process Validation (SG3/N99)







General Audit Requirements (GHTF SG4/N28)

Audit Strategy (GHTF SG4/N30)

Audit Reports (GHTF SG4/N33)

Multi-Site Audits (GHTF SG4/N83)

Supplier Audits (GHTF SG4/N84)





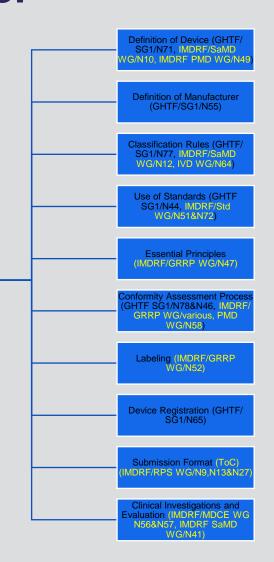
- Then, in October 2011, the IMDRF was established and the transition away from the GHTF approach began
- Instead of standing Study Groups, the IMDRF uses more taskoriented Working Groups (somewhat analogous to the AHWGs that were used occasionally in GHTF)
- Continues to build on the GHTF Regulatory Model, updating some of the previous work, and adding new pieces to the puzzle:





Premarket

Legend: Black = GHTF documents still active, Yellow = new IMDRF documents







Postmarket

Legend: Black = GHTF
documents still active, Yellow =
new IMDRF documents

Adverse Event Reporting (GHTF SG2/N54, IMDRF AE WG/various Field Safety Notices (GHTF SG2/N57) Information Exchange (IMDRF/NCAR WG/N14) Post-Market Surveillance (GHTF SG2/N79) Post-Market Clinical Follow-Up (IMDRF MDCE WG/N65) **UDI (IMDRF UDI** WG/N7&N48) Use of Registries (IMDRF Registries WG/N33,N42&N46)





Quality Systems Risk Management (SG3/N15)

CAPA (SG3/N18)

Supplier Controls (SG3/N17)

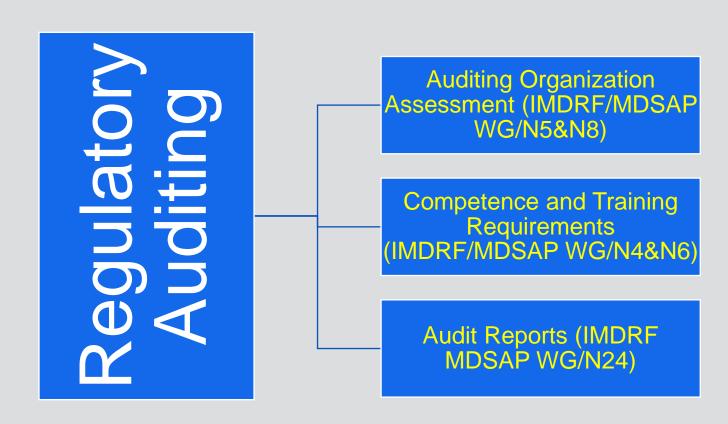
Process Validation (SG3/N99)

Applicability to SaMD (IMDRF SaMD WG/N23)

Legend: Black = GHTF documents still active, Yellow = new IMDRF documents







Legend: Black = GHTF documents still active, Yellow = new IMDRF documents





## **Current IMDRF Global Regulatory Framework**

- So, we can see that the basic building blocks continue to be updated and expanded upon
- Work is ongoing current WGs include:
  - AE Terminology (Post-Market)
  - AI/ML Medical Devices (Pre-Market)
  - GRRP (Pre-Market)
  - Personalized Medical Devices (Pre-Market)
  - Quality Management Systems
  - RPS (Pre-Market)
  - SaMD (mainly Pre-Market)





## **Current IMDRF Global Regulatory Framework**

#### Up next:

- How are these documents and this framework used by regulatory authorities as part of their models?
- Looking beyond the basics specialized regulatory pathways building upon this framework





### Foundational vs. specialised documents

Foundational	Specialised
Definition of terms medical device and IVD GHTF/SG1/N071:2012	Definitions for personalised medical devices IMDRF/PMD WG/N49
Principles of medical device classification GHTF/SG1/N77:2012	Principles of IVD Medical Device Classification IMDRF/IVD WG/N54
Principles of conformity assessment for medical devices GHTF/SG1/N78:2012	Assembly and technical guide for IMDRF Table of Contents Submissions IMDRF/RPS WG/N27
Medical Device post-market surveillance GHTF/SG2/N79R11:2009	PMS: NCAR Exchange Criteria and Report Form IMDRF/NCAR WG/N14
Principles of labelling for medical devices and IVDs IMDRF GRRP WG/N52	Unique Device Identification (UDI) Application Guide IMDRF UDI WG/N48
Clinical Evaluation IMDRF MDCE WG/N56	Software as a Medical Device (SaMD): Clinical evaluation IMDRF/SAMD WG/N41
Post-market clinical follow up studies IMDRF/MDCE WG/N65	Methodological principles in the use of international medical device registry data IMDRF/Registry WG/N42



#### Regulatory authority/regional use of IMDRF documents

- Can be used to inform regulatory models and best practices across member authorities
- Promotes regulatory harmonisation & convergence of regulatory principles, methodologies & requirements
- Improves clarity, enhances information and hopefully increases awareness and understanding of regulatory requirements
- Level of implementation/adoption by regulatory authorities/regions will be dependent on applicable legislative framework and associated policies
- Nature of document will also have a bearing on extent of implementation



## Use case – adverse event reporting

GHTF/SG2/N54R8:2006



#### FINAL DOCUMENT

Global Harmonization Task Force

Title: Medical Devices Post Market Surveillance: Global Guidance for Adverse Event Reporting for Medical Devices

30 November 2006

Authoring Group: Study Group 2

Date

Zrázu

Georgette Lalis, GHTF Chair

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GHTF/SG2/N57R8:2006



#### FINAL DOCUMENT

Medical Devices Post Market Surveillance: Content of Field Safety Notices

ing Group: Study Group 2

ed by: The Global Harmonization Task Force

7 June 2006

Zrázu

Georgette Lalis, GHTF Chair

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Aim to ensure consistent, accurate and timely adverse incidents globally

 Describe good practice without inhibiting potential for regional variance

 Used in EU to develop MEDDEV guidance under Directives – informed legal text in MDR and IVDR

Variances in definitions, reporting timelines etc.



## Use case – adverse event nomenclature

IMDRF/AE WG/N43FINAL:2020 (Edition 4)



#### FINAL DOCUMENT

Title: IMDRF terminologies for categorized Adverse Event Reporting (AER): terms, terminology structure and codes

Authoring Group: IMDRF Adverse Event Terminology Working Group

Date: 18 March 2020

Dr Choong May Ling, Mimi, IMDRF Chai

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- Improve accuracy and consistency of AE reporting and facilitate analysis for trends and signals
- Common language for AE reporting and could be used by regulators, manufacturers and potentially health care providers
- EU adopted in EUDAMED and EU manufacturer incident report (MIR) form

Adopted by multiple NCA at EU level and multiple regulators at international level



# **Use case – Drafting IVD Regulation in EU**





#### FINAL DOCUMENT

Global Harmonization Task Force

Title: Principles of In Vitro Diagnostic (IVD) Medical Devices Classification

Authoring Group: Study Group 1 of the Global Harmonization Task Force

Date: 19 February 2008



Larry Kessler, GHTF Chair

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GHTF/SG5/N6:2012



#### FINAL DOCUMENT

Global Harmonization Task Force

Clinical Evidence for IVD medical devices – Key Definitions and pts

ring Group: Study Group 5 of the Global Harmonization Task Force

lovember 2<sup>nd</sup>, 2012

Dr. Kazunari Asanuma, GHTF Chair

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Classification system for IVDs based on 2008
 GHTF document

- Principles on risk levels used for device classification
- Differences in wording of rules which could result in regional variances

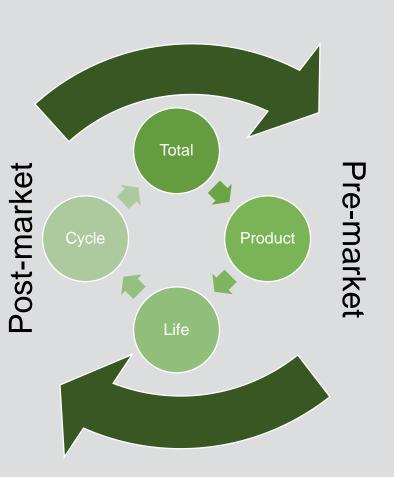
Clinical evidence for IVD medical devices

Used as a starting point for performance evaluation requirements





## **Device lifecycle**



- Foundational and specialised documents may cover some or all phases of lifecycle
- Trend towards increasing specialisation of documents from IMDRF
- Devices for discrete populations and specific technology types underline importance of lifecycle regulation
- Regulatory paradigm determines roles of regulatory authority at each phase



## Regulatory paradigm



#### Two main paradigms

- authorisation and market surveillance by regulatory authority (RA)
- certification by conformity assessment body (CAB), regulatory authority role in market surveillance and CAB oversight

RA assessment	CAB assessment
Centralised	Decentralised
Expertise concentration	Expertise distributed
Government	Government oversight







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