

Understanding the requirements of PMCF

- Considerations for Manufacturers

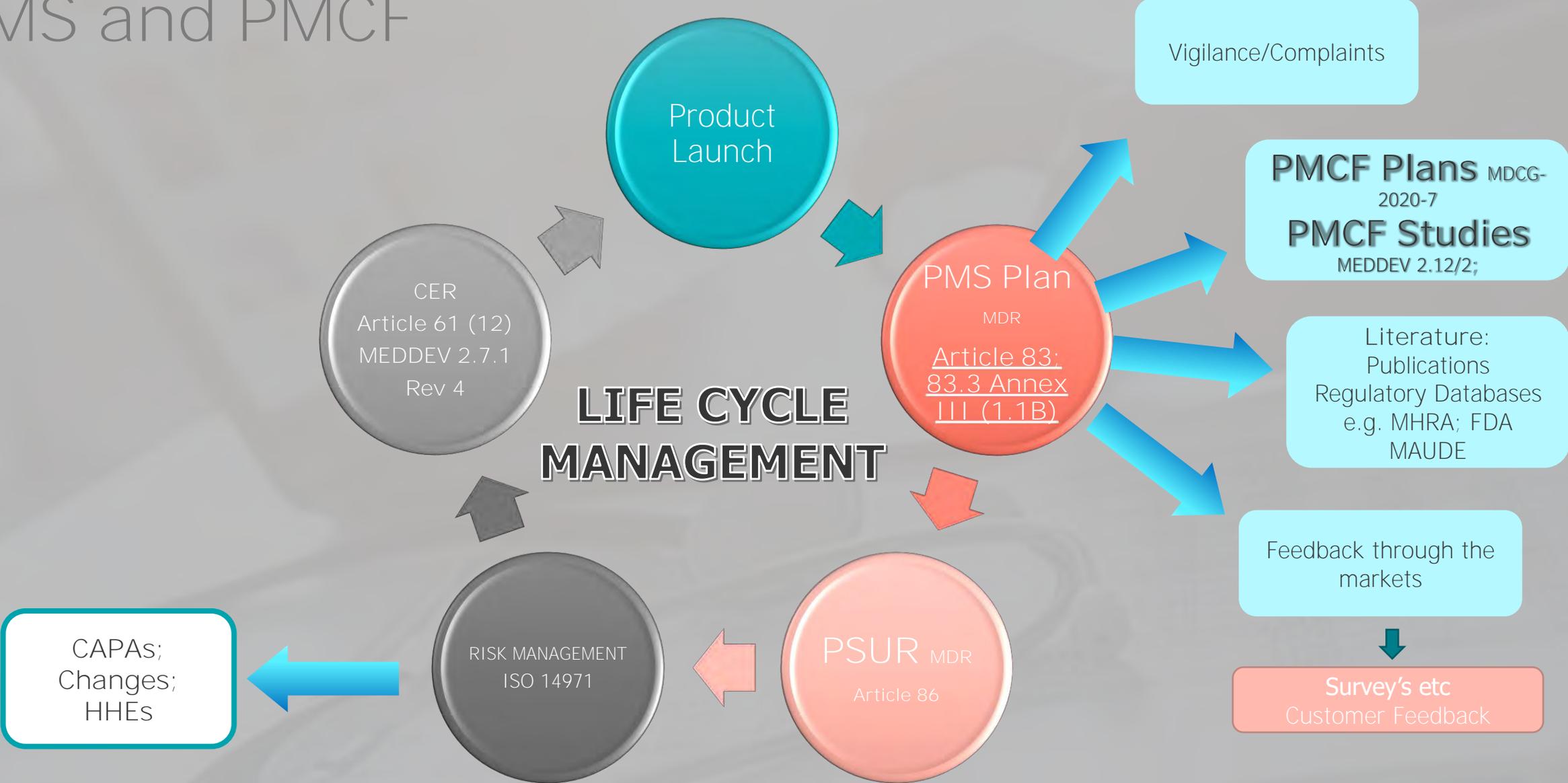


Topics Covered in this presentation;

- MDR Requirements
- MDCG Guidance
- PMCF Plans
- Types of PMCF
- PMCF Reports
- Other Considerations
- Questions



PMS and PMCF



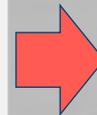
PMS and PMCF requirements: where are they defined?

Medical Devices Regulation

- Chapter II: Making Available On The Market And Putting Into Service Of Devices, Obligations Of Economic Operators, Reprocessing, Ce Marking, Free Movement
- Chapter VI: Clinical Evaluation And Clinical Investigations
- Chapter VII: Post-Market Surveillance, Vigilance and Market Surveillance
- Annex III: Technical Documentation on Post-Market Surveillance
- Annex XIV (Part B): Post Market Clinical Follow Up
- Annex XV (Article 74)
- Annex XIII [5]: Custom made devices
- ANNEX IX: Conformity Assessment Based On A Quality Management System And On Assessment Of Technical Documentation

Guidance documents

- MedDev 2.12/2 (rev 2) – Post Market Clinical Follow Up Studies: A Guide for Manufacturers and Notified Bodies
- MEDDEV 2.7.1/4 Clinical Evaluation: A Guide for Manufacturers and Notified Bodies



- MDCG 2020-7: PMCF Plan template. A guide for manufacturers and notified bodies
- MDCG 2020-8: PMCF Evaluation Report. A guide for manufacturers and notified bodies
- MDCG 2021-6 – Q&A on Clinical Investigations

MDR Definition: Article 2(48)

Clinical data: Information concerning safety or performance that is generated from the use of a device and is sourced from:

Clinical investigation of devices concerned

Clinical investigations or other studies reported in scientific literature of a device for which equivalence to the device in question is demonstrated

Reports published in peer reviewed scientific literature on other clinical experience of either the device in question or a device for which equivalence is claimed and demonstrated

Clinically relevant information coming from the post market surveillance, in particular post market clinical follow up

**Does PMCF under the
MDR mean the same as
PMCF under the
Directives?**

MDD

Clinical evaluation: methodological, ongoing procedure to collect, appraise, analyse clinical data to evaluate whether there is **sufficient clinical evidence** to confirm compliance with relevant essential requirements for safety and performance when using the device according to the manufacturer's Instructions for Use.

Annex X and Annex 7 requirements:

- "The clinical evaluation and its documentation must be actively updated with data obtained from the **post-market surveillance**. Where post-market clinical follow-up as part of the post-market surveillance plan for the device is not deemed necessary, this must be duly justified and documented."

MDR

Clinical evaluation: a systematic and planned process to continuously generate, collect, analyse and assess the clinical data pertaining to a device in order to verify the safety and performance, including clinical benefits, of the device when used as intended by the manufacturer (Article 2 (44))

MDR Chapter VII requirements:

"For each device, manufacturers shall plan, establish, document, implement, maintain and update a **post-market surveillance** system in a manner that is proportionate to the risk class and appropriate for the type of device."

Annex III 1.1b says **PMS should include: "a PMCF plan"** as referred to in Part B of Annex XIV, or a justification as to **why a PMCF is not applicable.**"

PMCF Plans

Medical Device

Medical Device Coordination Group Document

MDCG 2020-7

MDCG 2020-7

Post-market clinical follow-up (PMCF) Plan Template

A guide for manufacturers and notified bodies

April 2020

PMCF Plan

• MEDDEV 2.12/2

Documented, **proactive**, organised **methods and procedures** set up by the manufacturer to collect clinical data based on the use of a **CE-marked device**

The **objective** is to confirm **clinical performance and safety** throughout the expected **lifetime** of the medical device, the acceptability of identified risks and to detect **emerging risks** on the basis of factual evidence.

MDCG – 2020 -7

Specify the **methods and procedures** set up by the manufacturer to **proactively** collect and **evaluate** clinical data from the use in or on humans of a **CE marked medical device**. The plan should describe if a **general** or **specific** procedure / method of obtaining data is adopted and state why PMCF is required.

The **aim** of the PMCF plan* is:

- confirming the **safety and performance**, **clinical benefit** if applicable, of the device throughout its expected **lifetime**;
- identifying **previously unknown side-effects** and monitor the identified side-effects and contraindications;
- identifying and analysing **emergent risks** on the basis of factual evidence;
- ensuring the continued **acceptability of the benefit-risk ratio**,
- identifying possible **systematic misuse or off-label** use of the device, with a view to verifying that the intended purpose is correct

*Ref: MDR Annex XIV Part B

MDR: Annex XIV PART B

The PMCF plan shall include at least:

- (a) the **general methods and procedures** of the PMCF to be applied, such as gathering of clinical experience gained, feedback from users, **screening of scientific literature** and of **other sources of clinical data**;
- (b) the specific methods and procedures of PMCF to be applied, such as evaluation of suitable **registers or PMCF studies**;
- (c) a rationale for the *appropriateness of the methods* and *procedures* referred to in points (a) and (b);
- (d) a reference to the relevant parts of the clinical evaluation report and to the risk management documentation
- (e) the *specific objectives* to be addressed by the PMCF;
- (f) an evaluation of the *clinical data relating to equivalent or similar devices*;
- (g) reference to any *relevant CS, harmonised standards* when used by the manufacturer, and relevant guidance on PMCF; and
- (h) a detailed and adequately *justified time schedule* for PMCF activities (e.g. analysis of PMCF data and reporting) to be undertaken by the manufacturer



PMCF Plan

Key Message

- PMCF Plan can be part of the PMS Plan

“PMCF shall be understood to be a continuous process that updates the clinical evaluation referred to in Article 61 and Part A of this Annex and shall be addressed in the manufacturer's post-market surveillance plan”.

Ref: MDR Annex XIV PART B

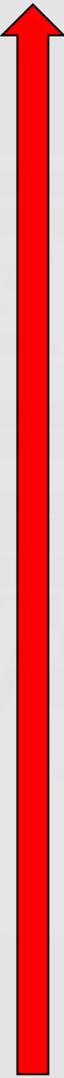
The diagram features two overlapping circles. The left circle is light pink with a red border and contains the text 'Types of PMCF'. The right circle is light blue with a teal border and contains the text 'A Risk Based Approach'. The circles overlap in the center, with a red triangular shape pointing from the pink circle towards the blue circle. The background is white with a large grey diamond shape in the center, and the corners are decorated with overlapping teal and salmon-colored squares.

Types
of PMCF

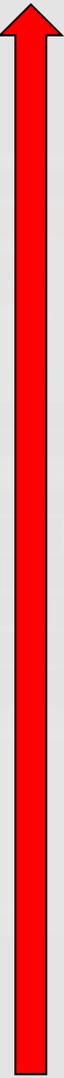
A Risk
Based
Approach

PMCF Studies & Risk

Selected methods should be justified, surveys for example may only be appropriate for lower risk devices , or established technologies



RISK, DURATION, INVASIVENESS



or UNKNOWNNS



POST MARKET CLINICAL FOLLOW UP

SPECIFIC

- Prospective trials (e.g. Expansion of pre-market study, New prospective clinical trial)
- Device registries
- Retrospective studies

GENERAL

- Patient / surgeon questionnaires?
- Field surveys?
- Feedback from users
- Literature Review
- Complaints/vigilance

What is Specific PMCF?

MDR CHAPTER II ASSESSMENT OF THE TECHNICAL DOCUMENTATION

Section 5. Specific additional procedures

5.1g talks about 'specific' PMCF studies but not in context of specific PMCF

Annex XIV Part B 6.2

The PMCF plan shall include at least:

"the specific methods and procedures of PMCF to be applied, such as evaluation of suitable registers or PMCF studies "

MDCG 2020-7

Section C Activities related to PMCF:

general and specific methods and procedures are mentioned;
SPECIFIC is not defined!

Specific Methods of PMCF

Evaluation
of registries

PMCF

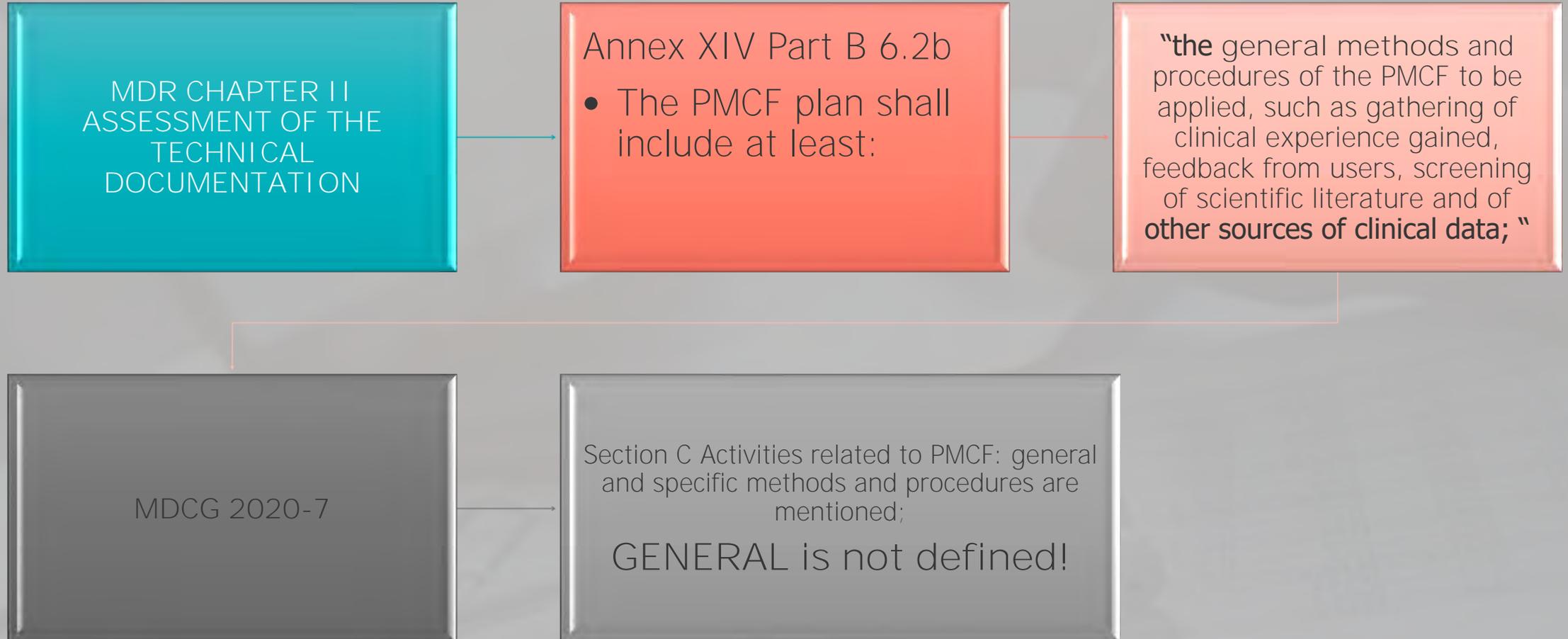
Plan

SPECIFIC

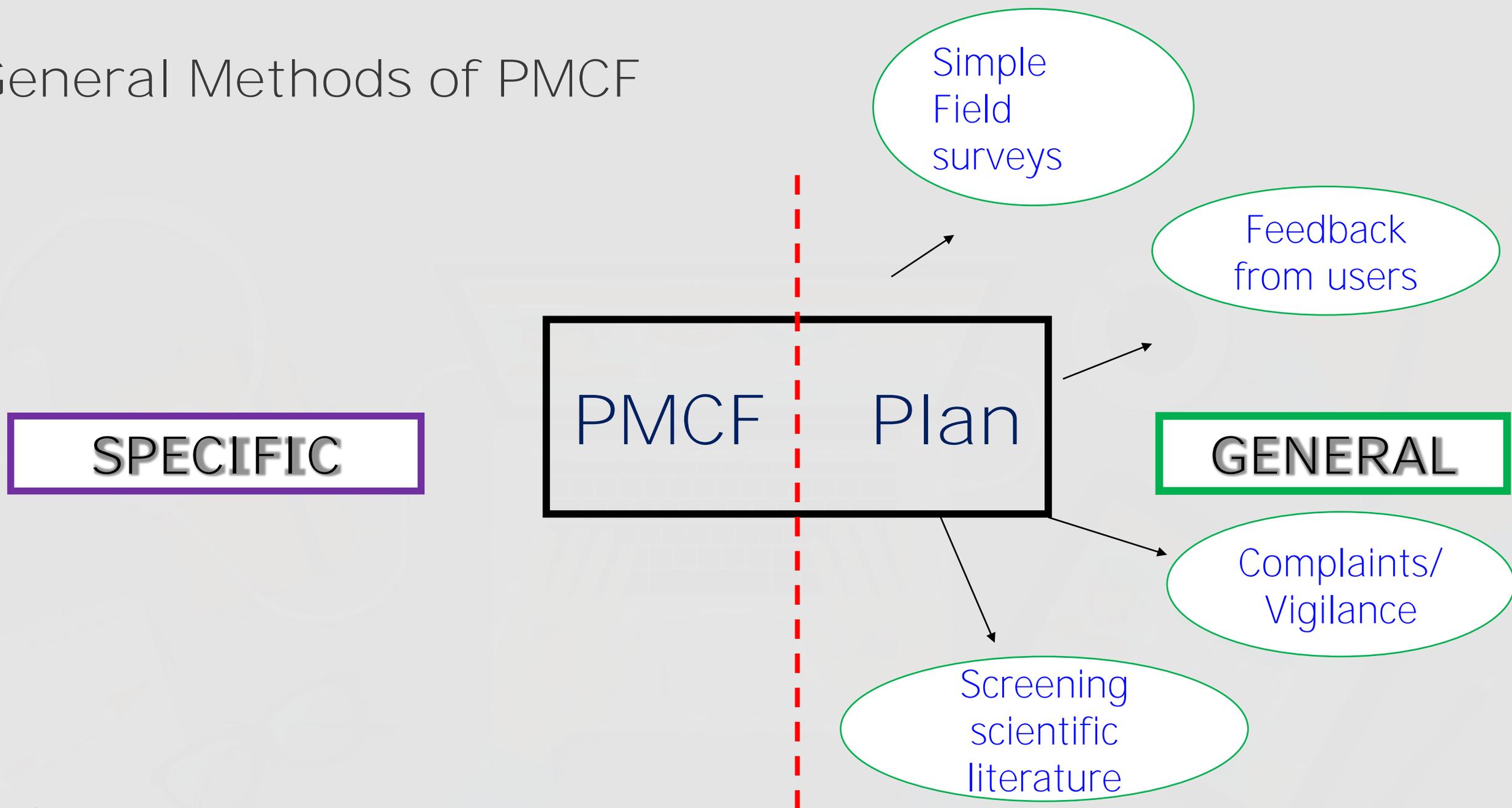
Prospective/
Retrospective
PMCF studies

Field Surveys? Focus Groups?

What is General PMCF?



General Methods of PMCF



What is Proactive PMS? What is the difference with PMCF?

(60) 'post-market surveillance' means all activities carried out by manufacturers in cooperation with other economic operators to institute and keep up to date a systematic procedure to **proactively** collect and review experience gained from devices they place on the market, make available on the market or put into service for the purpose of identifying any need to immediately apply any necessary corrective or preventive actions;

(b) The **post-market surveillance plan** shall cover at least:

- a **proactive** and systematic process to collect any information referred to in point (a). The process shall allow a correct characterisation of the performance of the devices and shall also allow a comparison to be made between the device and similar products available on the market;
- effective and appropriate methods and processes to assess the collected data;

PART B

POST-MARKET CLINICAL FOLLOW-UP

5. PMCF shall be understood to be a **continuous process** that updates the clinical evaluation referred to in Article 61 and Part A of this Annex and shall be addressed in the manufacturer's post-market surveillance plan. When conducting PMCF, the manufacturer shall **proactively** collect and evaluate clinical data from the use in or on humans of a device which bears the CE marking and is placed on the market or put into service within its intended purpose as referred to in the relevant conformity assessment procedure, with the aim of confirming the safety and performance throughout the expected lifetime of the device, of ensuring the continued acceptability of identified risks and of detecting emerging risks on the basis of factual evidence.

6.1. The PMCF plan shall specify the methods and procedures for **proactively** collecting and evaluating clinical data with the aim of:

...making excellence a habit.™

The term proactive is used in the MDR for both in the context of PMS and PMCF

Annex III

(b) The **post-market surveillance plan** shall cover at least:

- a **proactive** and systematic process to collect any information referred to in point (a). The process shall allow a correct characterisation of the performance of the devices and shall also allow a comparison to be made between the device and similar products available on the market;
- effective and appropriate methods and processes to assess the collected data:

1.1. The post-market surveillance plan drawn up in accordance with Article 84.

The manufacturer shall prove in a post-market surveillance plan that it complies with the obligation referred to in Article 83.

(a) The post-market surveillance plan shall address the collection and utilization of available information, in particular:

- information concerning serious incidents, including information from PSURs, and field safety corrective actions;
- records referring to non-serious incidents and data on any undesirable side-effects;
- information from trend reporting;
- relevant specialist or technical literature, databases and/or registers;
- information, including feedbacks and complaints, provided by users, distributors and importers; and
- publicly available information about similar medical devices.

We see Annex III Point B referring to the list in Annex A – But are all these proactive activities?

General vs Specific / Reactive Vs Proactive

General Methods

Complaints Vigilance
Screening of Literature
Passive feedback
Trend reporting

?Surveys
?User Feedback
? Information on other devices

Specific Methods

Registries
PMCF Studies

Considered Proactive PMS – but could be specific PMCF pending on the type and output of data. E.g. High quality survey

6.2. The PMCF plan shall include at least:

- (a) the general methods and procedures of the PMCF to be applied, such as gathering of clinical experience gained, feedback from users, screening of scientific literature and of other sources of clinical data;
- (b) the specific methods and procedures of PMCF to be applied, such as evaluation of suitable registers or PMCF studies;

Annex XIV Part B Section 6.2

When is a **PMCF Study**
required?

PMCF Study is mandatory

When is PMCF Study required?

MED DEV 2.12/2

CE mark based on equivalence

Novel technology

Long term safety or performance unknown

High risk population
e.g. patients with an implantable device (active or non-active)

Risks identified from other data sources

To assess performance and/or safety of the device in a more representative population of users and patients.

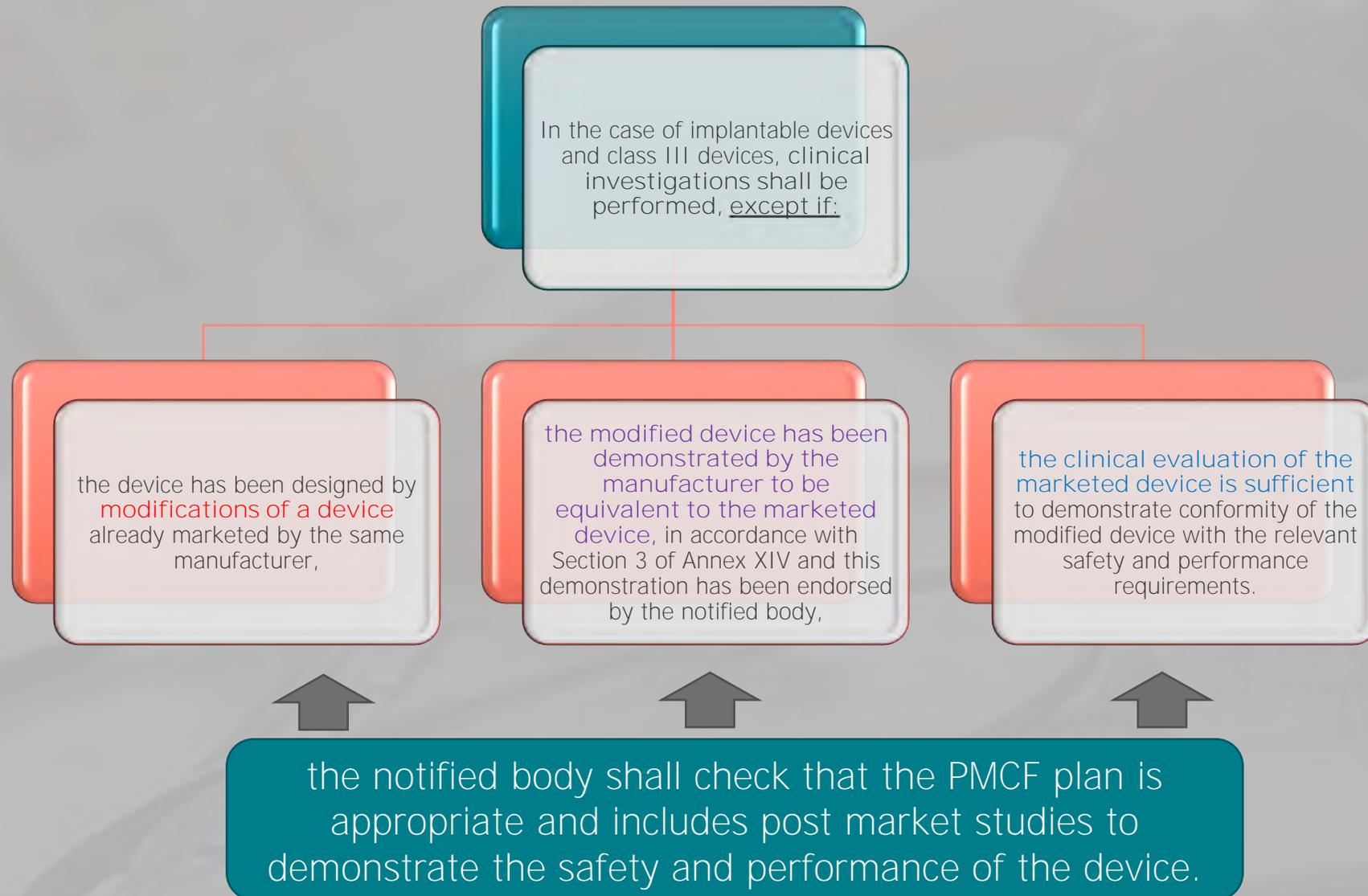
Occurrence of clinical events (e.g. delayed hypersensitivity reactions, thrombosis)

Following a proper premarket clinical evaluation, the decision to conduct PMCF studies must be based on the identification of possible residual risks and/or unclarity on long term clinical performance that may impact the benefit/risk ratio.

MEDDEV 2.12/2

- **innovation**, e.g., where the design of the device, the materials, substances, the principles of operation, the technology or the medical indications are **Novel**
- **significant changes** to the device or to its intended use leading to pre market clinical evaluation and re-certification;
- high **product related risk** e.g. based on design, materials, components, invasiveness, clinical procedures;
- high risk **anatomical locations**;
- **high risk target populations** e.g. paediatrics, elderly; severity of disease/treatment challenges;
- questions of ability to generalise clinical investigation results;
- unanswered questions of long-term safety and performance;
- results from any previous clinical investigation, including **adverse events or from post-market surveillance activities**;
- identification of previously **unstudied subpopulations** which may show different benefit/risk-ratio
- continued validation in cases of discrepancy between reasonable premarket follow-up time scales and the expected life of the product;
- risks identified from the **literature** or **other data sources** for **similar marketed devices**;
- **interaction** with other medical products or treatments;
- verification of safety and performance of device when exposed to a larger and more varied population of clinical users;
- **new information** on safety or performance;
- where CE marking was based on equivalence.

MDR Article 61 [4]: High Risk Devices



- What PMCF activities would be relevant to an implantable artificial cervical disc intended to be implanted for the lifetime of the patient?
 - A. Survey from the surgeons who implanted the device
 - B. PMCF clinical investigation
 - C. State of the art Literature search
 - D. Complaints and feedback from patients who were treated with the device

When thinking about types of PMCF – all of these should be considered in this scenario and all would have a role in answering questions around ongoing safety and performance.

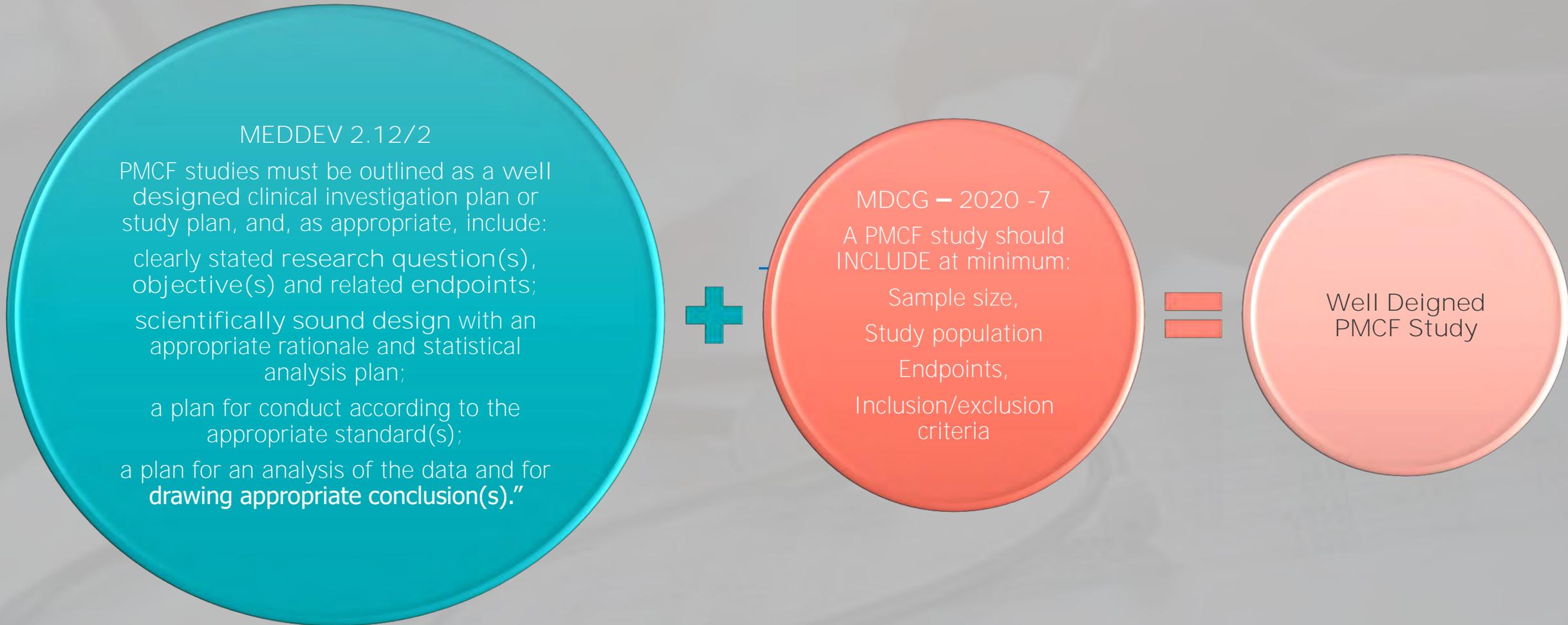




Specific PMCF

PMCF Studies

PMCF Study Requirements



Potential Study Types

RCT

Large Sample
Within Intended Purpose
Defined **Study Objective**
Statistically Calculated
Sample Size
Data on **safety & performance**
Likely to be conducted to
ISO 14155:2020

Slow
Costly
May not reflect real
world use
Select Investigators
Select patients

Prospective Controlled Study/Expansion of pre-market study

Defined **study objectives**
Sample size calculation: may be based on feasibility should be **statistically defined** with a **statistical analysis plan**
Data on **safety & performance**
Likely to be conducted to ISO 14155:2020

Slow
Potential for bias
Costly
May not reflect
real world use
Select
Investigators
Select patients

Retrospective Controlled Study

Defined **study objectives**;
Sample size and statistical analysis plan
Multiple exposures
Generalizable
May be conducted in accordance with
ISO 14155:2020

Missing Data
Illegible data
May not answer all
questions posed
Misuse
Variability in
practice
May not reliably
report safety

Potential Study Types

Observational

Large Sample
Within Intended Purpose
Defined **Study Objective**
Statistically Calculated Sample Size
Data on **safety & performance**
Real World Use
Could to be conducted to ISO 14155:2020

User Error's

Registry Study

Defined **study objectives**
Sample size calculation: may be based on feasibility should be **statistically defined** with a **statistical analysis plan**
Data on **safety & performance**

Slow
Costly

Systematic review with Meta Analysis

Large Sample
Within Intended Purpose
Defined **Study Objective**
Statistically Calculated Sample Size
Data on **safety & performance**

Registry Studies

Registry Studies (ISO 14155:2020)

A REGISTRY is an organised system that uses observational study methods to collect defined clinical data under normal conditions of use relating to one or more devices to evaluate specified outcomes for a population defined by a particular disease, condition, or exposure and that serves predetermined scientific, clinical or policy purpose(s)

Guidance:

IMDRF/REGISTRY WG/N33 FINAL. 2016 'Patient registry; Essential Principles' registry system', available at:
<http://www.imdrf.org/docs/imdrf/final/consultations/imdrf-cons-essential-principles-151124.pdf>

IMDRF/Registry WG/N42FINAL: 2017 'Methodological Principles in the Use of International Medical Device Registry Data' (covering multiple applicable registries), available at: <http://www.imdrf.org/docs/imdrf/final/technical/imdrf-tech-170316-methodological-principles.pdf>

When are Registries Applicable?

Long term implants

Limited follow up in Pre CE mark study

Side by side analysis of similar devices

Examples of registries:

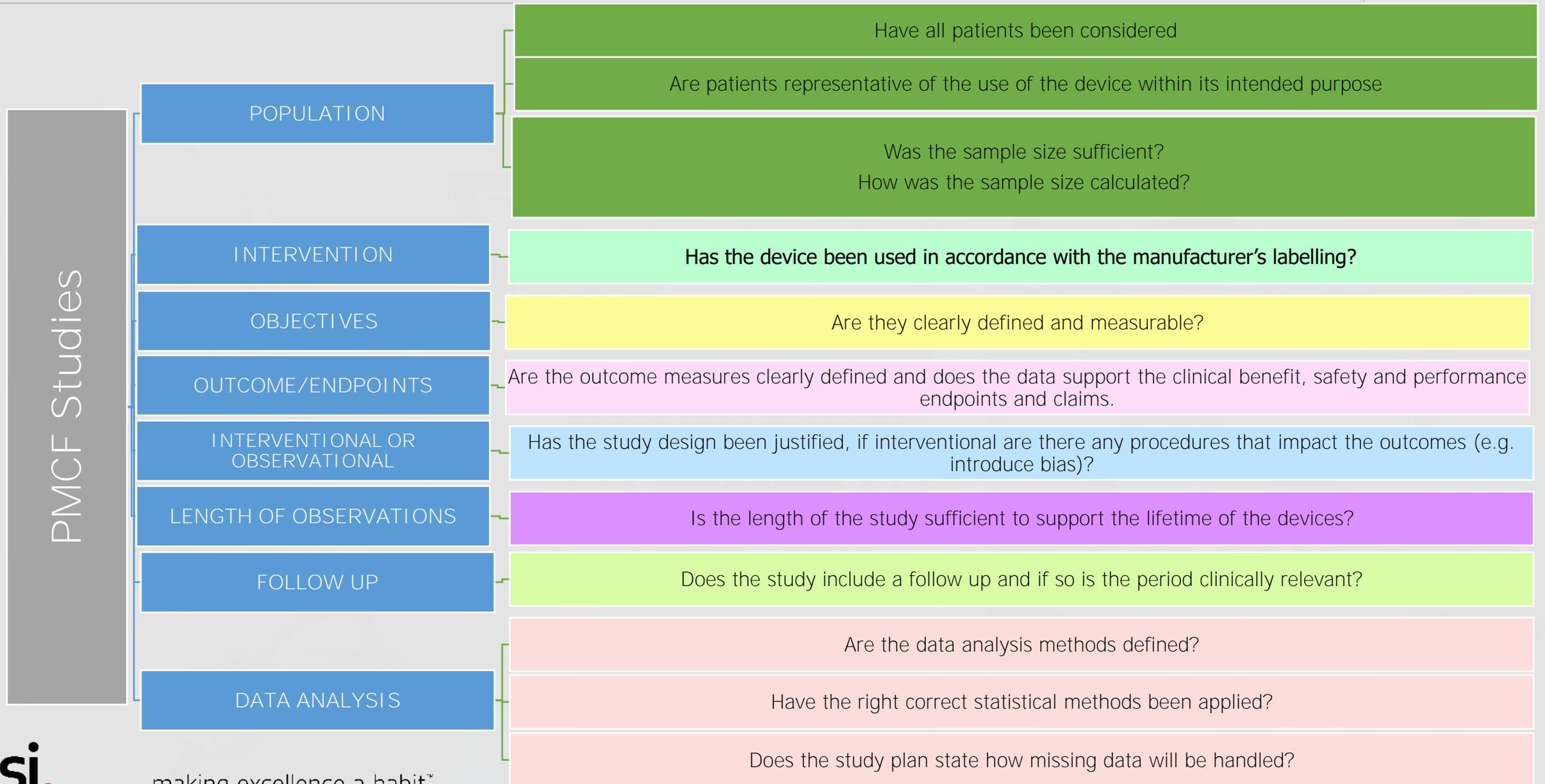
The National Joint Registry (NJR) of England, Wales and Northern Ireland

UK vascular registry e.g.

<https://www.hqip.org.uk/a-z-of-nca/national-vascular-registry/#.YVGkZLhKg2w>

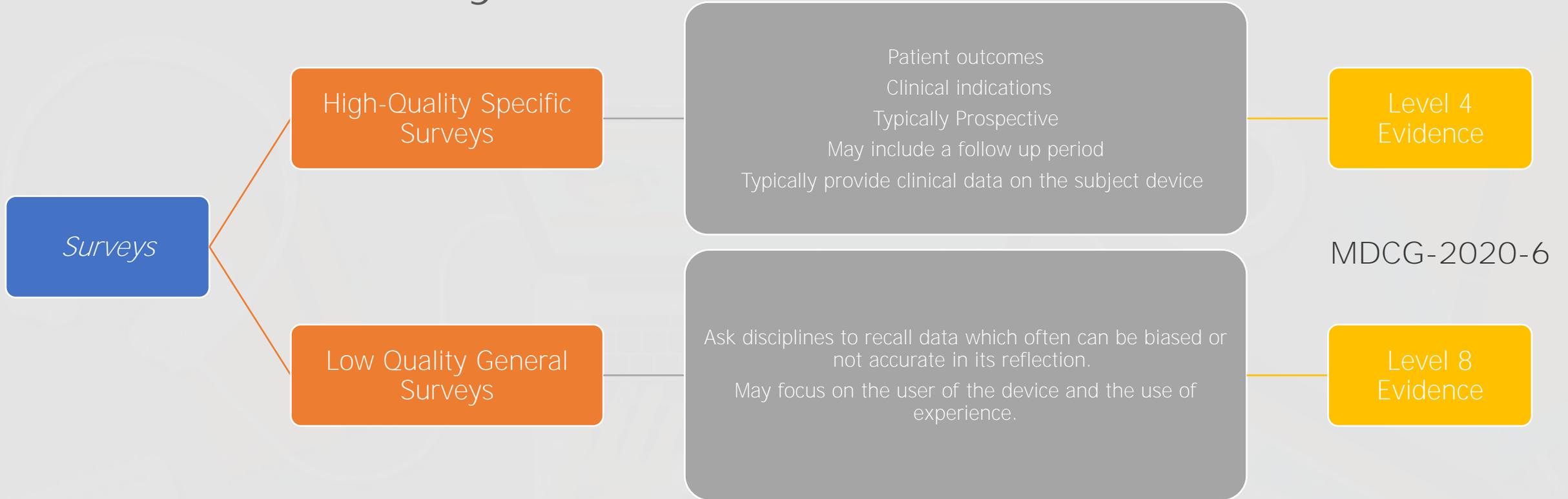
<https://digital.nhs.uk/data-and-information/clinical-audits-and-registries/breast-and-cosmetic-implant-registry>

PMCF Studies



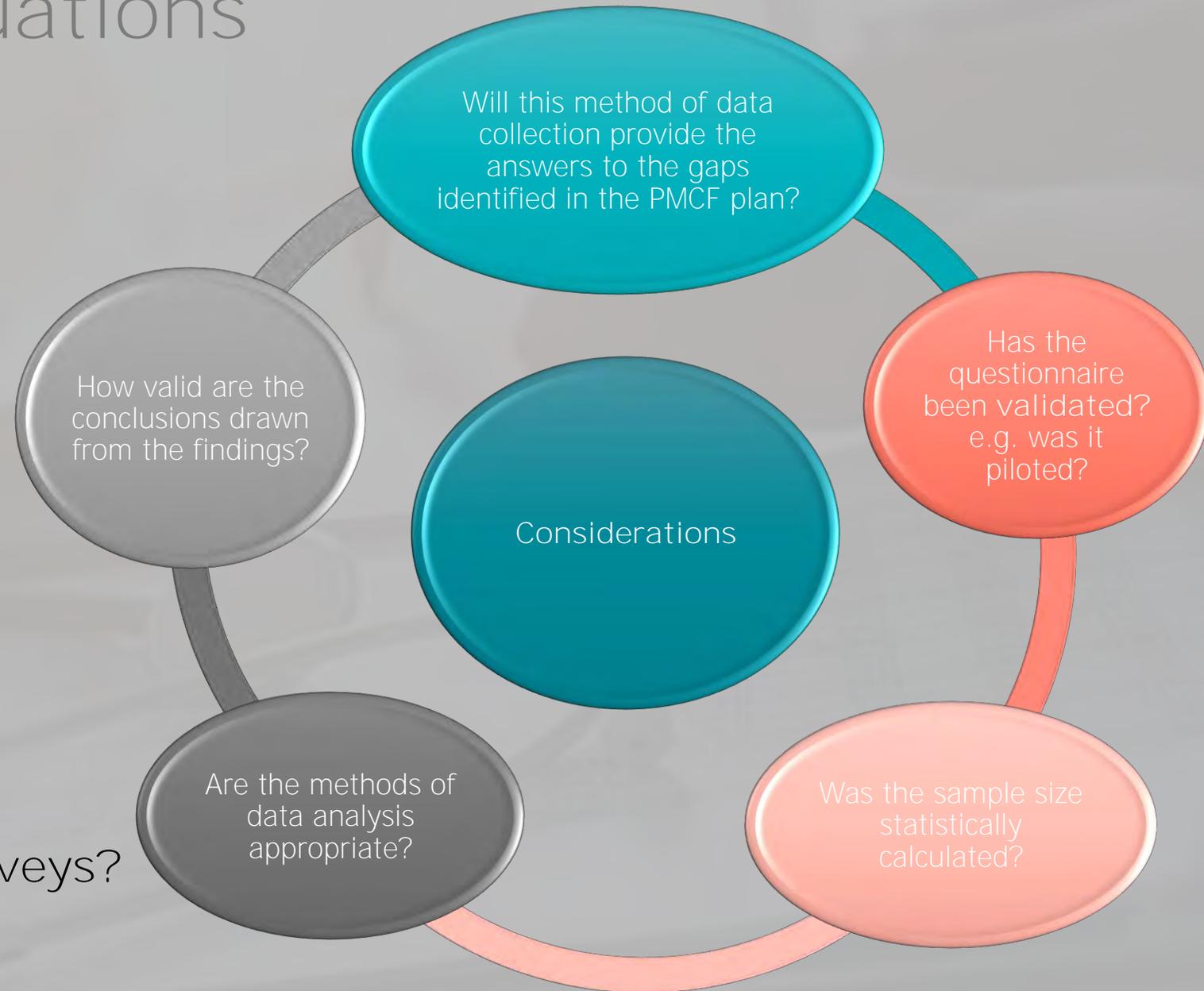
Specific PMCF Surveys

What is a High-Quality Survey Versus a General Survey?



Surveys/User Evaluations

- V** Valid
- a** Applicable
- I** Labelling
- i** Indications
- d** Data
- i** Intended Use/Users
- t** Targeted
- e** Endpoints
- ?** Is it possible to validate surveys?





General PMCF

Types of General PMCF



General PMCF

- Surveys
- Feedback from users
- Literature reviews
- Complaints/Incident reports/Trends

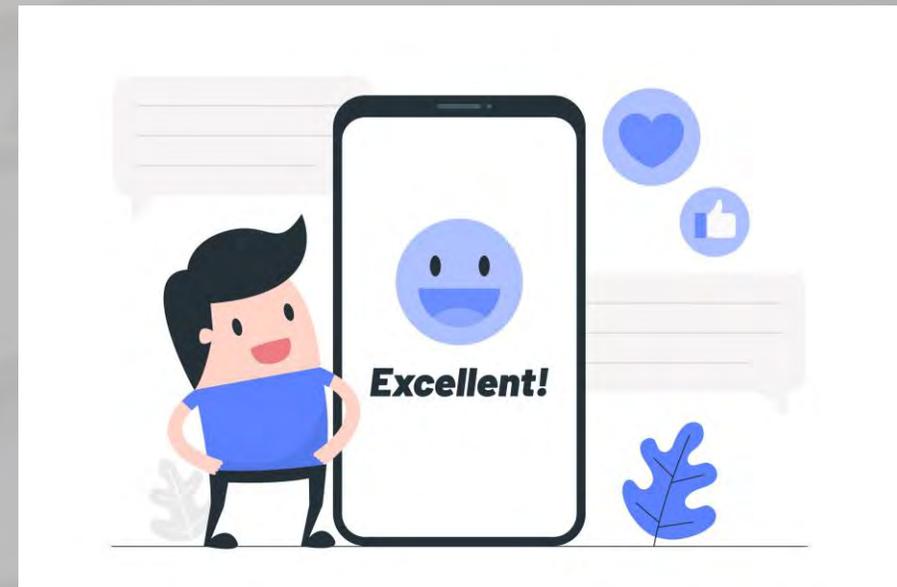
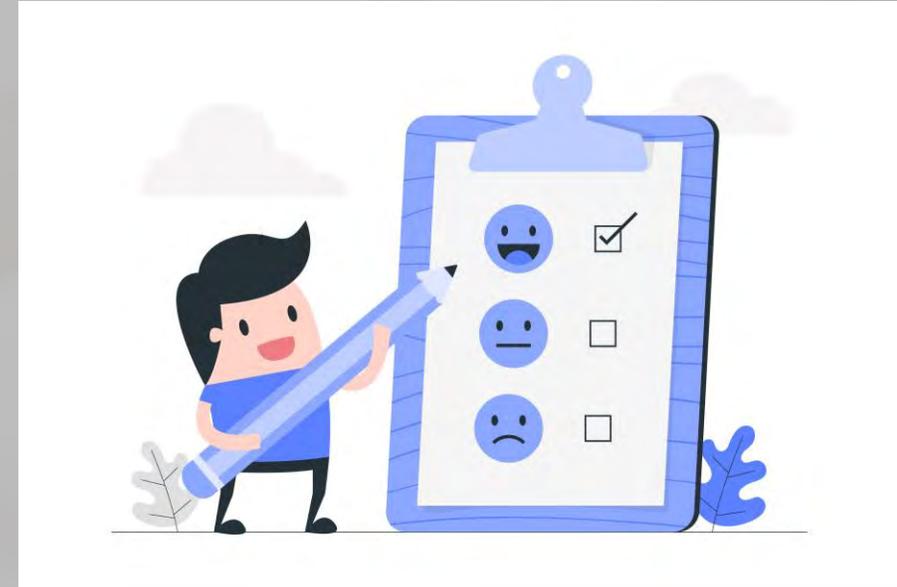
Surveys/User Evaluations

Can be online or paper based

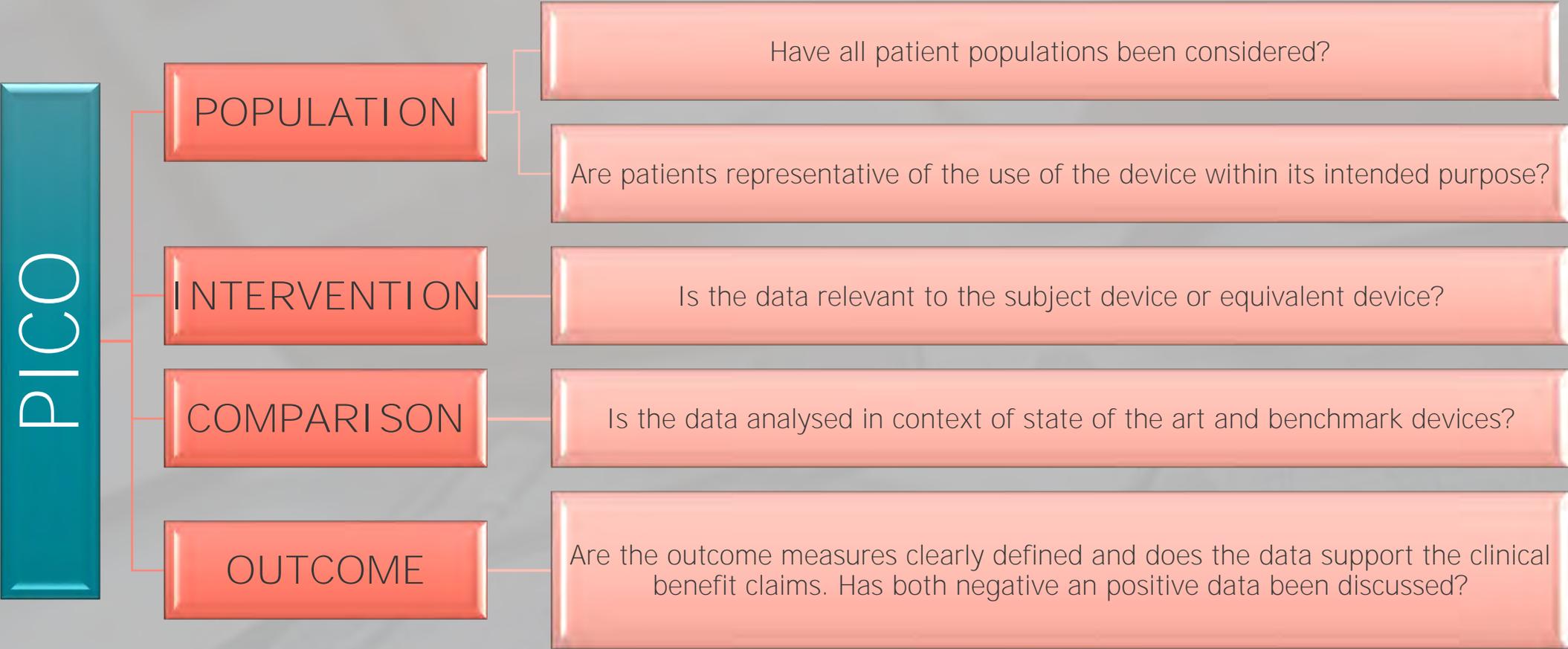
Within the intended purpose

Method must be justified

Relevant to lower risk devices, established technologies and devices with an acceptable risk/benefit ratio



Literature Reviews



Complaints: Qualitative & Quantitative Analysis

Catalog Number	Product Description	Total Sales
3333-5678	Variant A	336,739
3333-5679	Variant B	585,507
Total		922,246

Country	Hazard	Harm	Variant A	Variant B
	<p>Complaint /Sale Ratio (132°) = 298/336,739 < 0.001 Complaint /Sale Ratio (127°) = 511/585,507 < 0.001</p>			
Finland	Foreign object (unintended)	None	0	1
Germany	Excessive stress in bone	Periprosthetic fracture	1	0
	Foreign object (unintended)	None	1	1
	Packaging too difficult to open	Complications associated with extended surgery	0	1
Netherlands	Excessive stress in bone	Periprosthetic fracture	0	1
Poland	Foreign object (unintended)	None	1	0

Have GLOBAL COMPLAINTS been considered?

Are there any trends?

Have complaints been assessed in context of sales

PMCF Report

MDCG Guidance MDCG-2020-8

MDR Annex XIV Part B

PMCF Evaluation Report



Should be written as per template in MDCG 2020-8



Updated annually for Class III and implantable devices



Will feed into the PSUR, SSCP & CER



Used to update the IFU & risk management file



Forms part of the technical documentation



Follows the PMCF plan

MDR & PMCF

7. The manufacturer shall analyse the findings of the PMCF and document the results in a PMCF evaluation report that shall be part of the clinical evaluation report and the technical documentation.

8. The conclusions of the PMCF evaluation report shall be taken into account for the clinical evaluation referred to in Article 61 and Part A of this Annex and in the risk management referred to in Section 3 of Annex I. If, through the PMCF, the need for preventive and/or corrective measures has been identified, the manufacturer shall implement them.

Article XIV Part B (7,8)

Impact on labelling:
Indications?
Intended Use?
Contraindications?
Warnings?
Precautions?

Impact on
Design?
Manufacturing Controls?

PMCF and Harmonized Standards

ISO 14155:2020 Clinical Investigations in
Medical Devices: Good Clinical Practice

MDR + Standards + Guidelines: The Link

Clinical Investigations

EN ISO 14155:2020 Clinical investigation of Medical Devices for human subjects Good clinical practice; Third Edition

PMCF

MDR: Article 8 Use of harmonised standards

The first subparagraph shall also apply to system or process requirementsincluding those relating to quality management systems, risk management, post-market surveillance systems, clinical investigations, clinical evaluation or post-market clinical follow-up ('PMCF').

Study Phases: PMCF Studies

Regulatory status	Pre-market		Post-market	
Clinical development stage	Pilot stage (1.3.2)	Pivotal stage (1.3.3)	Post-market stage (1.3.4)	
Type of design	Exploratory or confirmatory (1.4.2)	Confirmatory (1.4.3)		Observational (1.4.4)
Descriptors of clinical investigations	First in human clinical investigation (1.5.2) Early feasibility clinical investigation (1.5.3) Traditional feasibility clinical investigation (1.5.4)	Pivotal clinical investigation (1.5.5)	Post-market clinical investigation (1.2.3)	Registry ^a (1.5.6) Post-market clinical investigation ^a (1.2.3)
Burden to subject	Interventional (1.6.2)			Non-interventional (1.6.3)
^a Registry data may be used for pre-market regulatory purposes (see 1.5.6), this can also apply to the post-market clinical investigation data.				

When Will The NB Assess PMCF?

Initial conformity assessment

Recertification review

Significant change review (if applicable)

During review of your PMS plan

On demand by the NB e.g. During review of your SSCP, PSUR (as per MDCG 2019-9, MDCG 2020-6)

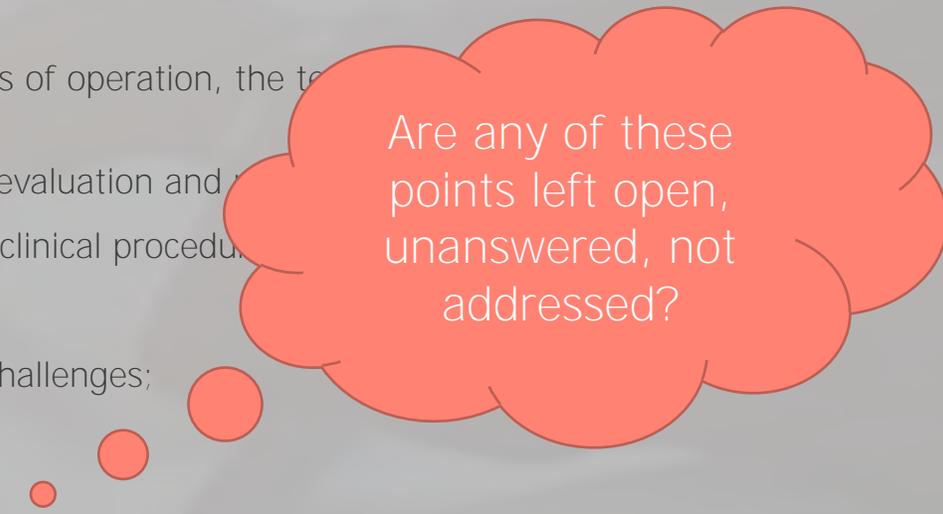
Routine review cycle - Class dependent: E.g. Class IIb (Implantable) & Class III – Annually (via EUDAMED)- MDR, Article 61(11)

Decide milestones for review of Clinical evaluation and incorporation of PMCF annex IX chapter II 4.7

Is PMCF always
mandatory under the
MDR?

MEDDEV 2.12/2

- **innovation**, e.g., where the design of the device, the materials, substances, the principles of operation, the technology or the intended indications are **Novel**
- **significant changes** to the device or to its intended use leading to pre market clinical evaluation and post-market surveillance
- high **product related risk** e.g. based on design, materials, components, invasiveness, clinical procedure
- high risk **anatomical locations**;
- **high risk target populations** e.g. paediatrics, elderly; severity of disease/treatment challenges;
- questions of ability to generalise clinical investigation results;
- unanswered questions of long-term safety and performance;
- results from any previous clinical investigation, including **adverse events or from post-market surveillance activities**;
- identification of previously **unstudied subpopulations** which may show different benefit/risk-ratio
- continued validation in cases of discrepancy between reasonable premarket follow-up time scales and the expected life of the product;
- risks identified from the **literature** or **other data sources** for **similar marketed devices**;
- **interaction** with other medical products or treatments;
- verification of safety and performance of device when exposed to a larger and more varied population of clinical users;
- **new information** on safety or performance;
- **where CE marking was based on equivalence.**



Are any of these points left open, unanswered, not addressed?

When
Specific
PMCF is
not
required

Long term safety and performance is known

CE marked under the directive for years with no trends identified and the manufacturer has demonstrated they have sufficient clinical data to support claims

Acceptable risk benefit ratio

Article 61 (10) Devices

We know the article 61 (10) devices do not require clinical data as a route to conformity, this may be an example of types of devices where perhaps a PMCF justification could be considered acceptable.

Typically these devices will rely on:

- bench testing data
- animal study data
- common specifications.

The manufacturer may choose to do some post-market clinical follow-up activity to further strengthen the evidence they hold on their device or may use PMCF to address any small gaps or confirm data that may have been identified from the pre-clinical data.

Key Points

REMEMBER
The PMCF plan is usually a part of the PMS Plan



Typically manufacturers should conduct some form of PMCF and these should be presented in a PMCF plan that mirrors MDCG 2020-7



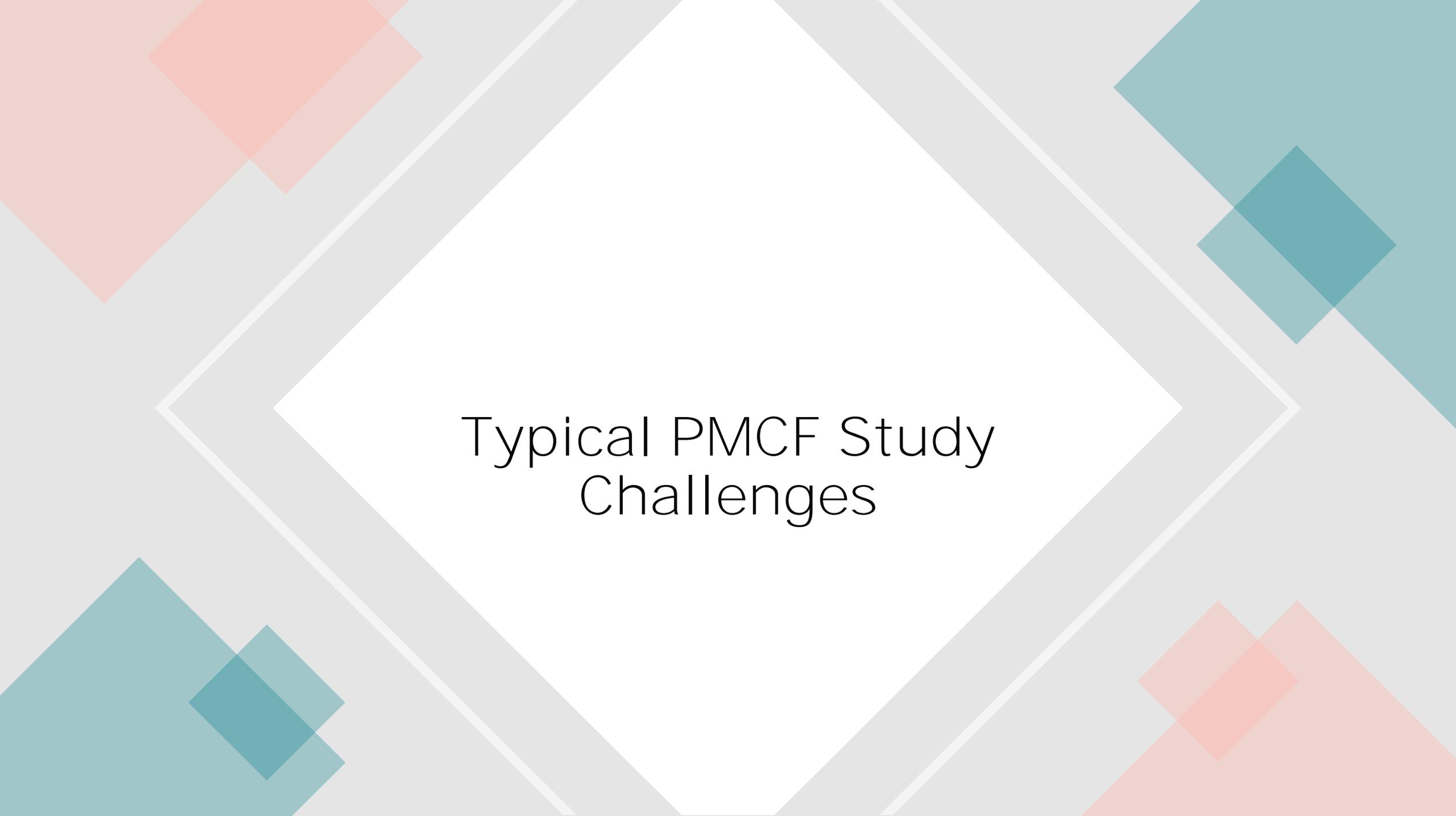
If a manufacturer chooses not to conduct a PMCF study we should always expect a justification. This justification should be in the PMCF plan.



This justification should be clear and highlight that other PMCF activities are sufficient.



It may be acceptable for article 61 (10) and some class I devices not to conduct any PMCF.



Typical PMCF Study Challenges

Common PMCF Study Failings

- Poor study design; too many variables; no control; sample size too small
- Undefined or wrong research questions; objectives; study endpoints
- Wrong study population: indications, location
- Inadequate statistical justification for sample size
- Poorly defined or no statistical analysis plan
- Poorly executed PMCF Evaluation report
- **Device not used according to CIP**



PMCF: Key Points

Where clinical evaluation in initial conformity assessment under the MDD was based exclusively from clinical data of equivalent devices (MDCG 2020-6, section 5, page 8) the certifying notified body shall verify that PMCF studies have been conducted PRIOR TO MDR CERTIFICATION

MDR Article 74 [1]

This article is specific to PMCF studies or investigations conducted

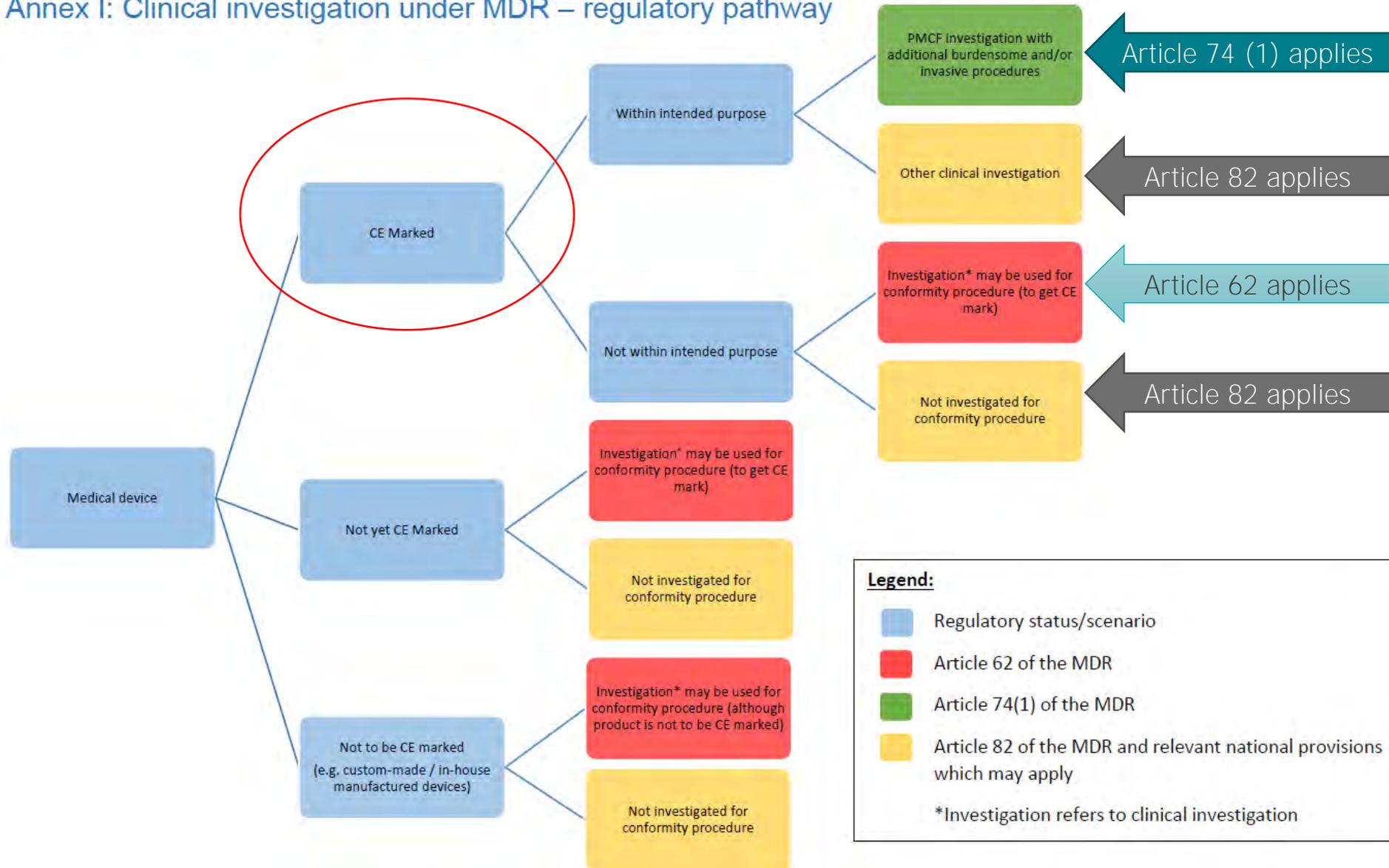
- a. to further assess an already CE marked device within the scope of its intended purpose

- a. Points (b) to (k) and (m) of Article 62(4), Article 75, Article 76, Article 77, Article 80(5) and the relevant provisions of Annex XV shall apply to PMCF investigations. and where the investigation would involve submitting **subjects to procedures additional to those performed under the normal conditions of use** of the device and those additional procedures **are invasive or burdensome**, the sponsor shall notify the Member States concerned at least 30 days prior to its commencement by means of the electronic

PMCF study would be treated in the same way as a pre market clinical investigation requiring review by the competent authority

Note competent authority timeline is reduced from 60 days to 30 days for devices bearing CE mark

Annex I: Clinical investigation under MDR – regulatory pathway



What is considered burdensome or invasive? - MDCG 2021-6

Where the investigation would involve submitting subjects to procedures additional to those performed under the normal conditions of use of the device and those additional procedures are **invasive** or **burdensome**, the sponsor shall notify the Member States concerned at least 30 days prior to its commencement, in accordance with Article 74(1) of the MDR.

Additional procedures which are burdensome can include a wide variety of different interventions, such as:

- Pain
- Discomfort
- Fear
- Potential risks or complications/side-effects,
- Disturbances of lives and personal activities, or otherwise unpleasant experiences.

It is mostly determined from the perspective of the person bearing the burden.

Additional procedures which are invasive include (but are not limited to):

- Penetration inside the body through the surface of the body, including through mucous membranes of body orifices
- Penetration of a body cavity via a body orifice.

MDR: Annex XVI Devices

Clinical evaluation of these products shall be based on relevant data concerning safety including data from post market surveillance, **PMCF** and where applicable clinical investigations

Devices without an intended medical purpose



Devices without Medical Purpose

BSI Medical Devices – Use Our Resources

<https://www.bsigroup.com/en-GB/medical-devices/resources>

Brochures, Guides and Documents



MDR guidance

- MDD Best Practice Guidelines >
- MDR Best Practice Guidelines >
- MDR Mapping Guide >
- MedDev 2.7.1 Rev 4 changes >
- MDR Conformity Routes >
- MDR Readiness Review >

Webinars

MDR Conformity Assessment Routes webinar



MDR - What we know



Download the presentation >

White Papers and Articles

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Person responsible for regulatory compliance (PRRC) - MDR/IVDR Article 15

With the MDR and IVDR, European regulators aim to ensure companies have a regulatory expert – a Person Responsible for Regulatory Compliance (PRRC) – at their disposal, to ensure that the company is meeting certain specific EU requirements.
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Software as a medical device - A comparison of the EU's approach with the US's approach

The International Medical Device Regulators Forum (IMDRF) aims to accelerate international medical device regulatory convergence. Through the IMDRF, regulators reached consensus on what software is considered a medical device. Regulators call it 'software as a medical device' (SaMD). This paper provides a comparison of how SaMD is regulated in the US and in the EU.
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Machine learning AI in medical devices

How is AI different from traditional medical devices and medical software and what are the implications of those differences? What controls are necessary to ensure AI in healthcare is safe and effective?
- 

Medical device clinical investigations – What's new under the MDR?

The conduct of a clinical investigation is one of the most time consuming and resource intensive activities that a medical device manufacturer can face. This paper discusses important new requirements for pre-market and post-market clinical investigations under the European MDR.

Training Resources



Medical devices regulation (MDR)	
Transition from MDD to MDR	1 day
Technical Documentation for CE - Marking	1 day
Requirements of MDR for CE - Marking	1 day
Implementing of MDR for CE- Marking	3 days
Further courses for medical devices manufacturers	
Medical Device Single Audit Program (MDSAP)	2 days
ISO 14971 Risk Management	1 day
Creating and Maintaining Technical Files	1 day
Post-market Surveillance and Vigilance	1 day
Clinical Evaluation for Medical Devices	1 day
Process Validation for the Medical Device Industry	1 day
Introduction to Medical Device Software	1 day



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To view all the on demand webinars in this series to date, please use the link below:

<https://www.bsigroup.com/en-GB/medical-devices/resources/webinars/2022/mdr/clinical-masterclass/>

All registrants will be sent a link to the recorded webinar and presentation slides after the event. Look out for the Clinical toolkit with lots of useful information, whitepapers and resources, which will be sent to you automatically by the end of March.

- Questions