# Management and Evaluation for Medical Devices Safety

## *Sponsor's Perspective: How to organize and implement a cycle of assessment measures and safety event reporting*

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April 2024

INVESTIGAÇÃO CLÍNICA E ESTUDOS DE DESEMPENHO DE DISPOSITIVOS
DA TEORIA À PRÁTICA
SESSÕES DE FORMAÇÃO
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# Agenda

1. **Medtronic: our mission & who we are**

2. **Clinical Safety Responsibilities Overview**
   - Clinical Study Lifecycle Safety Milestones

3. **Evaluation and Management of Safety Information**
   - Clinical Safety Reporting Requirements
     - Clinical Study Regulatory Status
     - Applicable Regulations in Europe
   - Safety Data Types
   - Portugal Regulatory reporting requirements
   - Clinical Safety Data Review, Assessment and Reporting

4. **Q&A**

# Medtronic: our mission & who we are

# MEDTRONIC

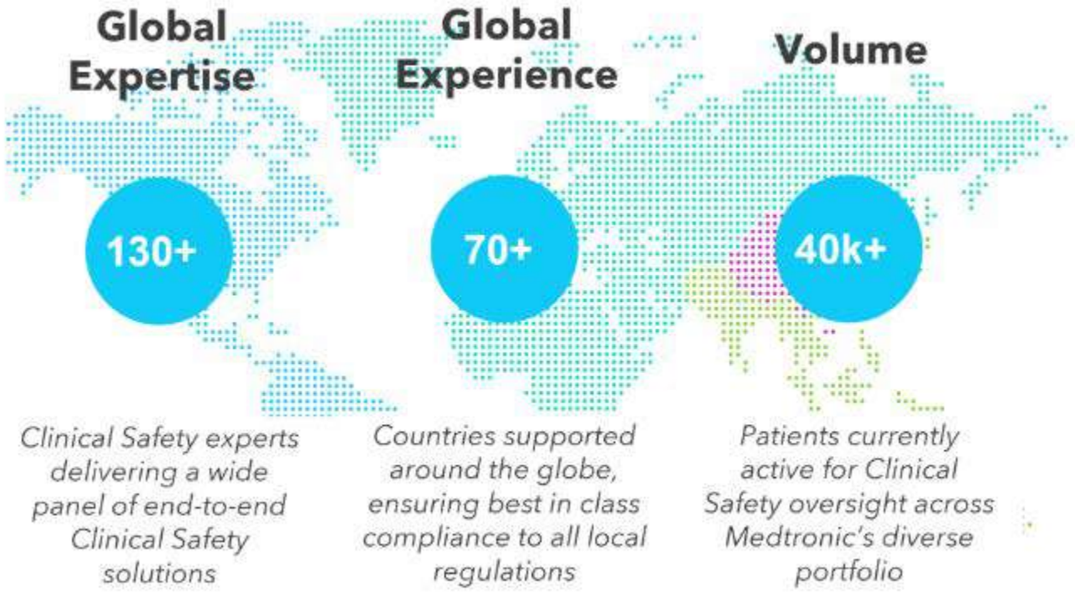
## Our Mission: Inspiring the Extraordinary

The Medtronic Mission has motivated us to do the extraordinary for 75 years — and counting!

*To contribute to human welfare by application of biomedical engineering in the research, design, manufacture, and sale of instruments or appliances that* ***alleviate pain, restore health, and extend life.***

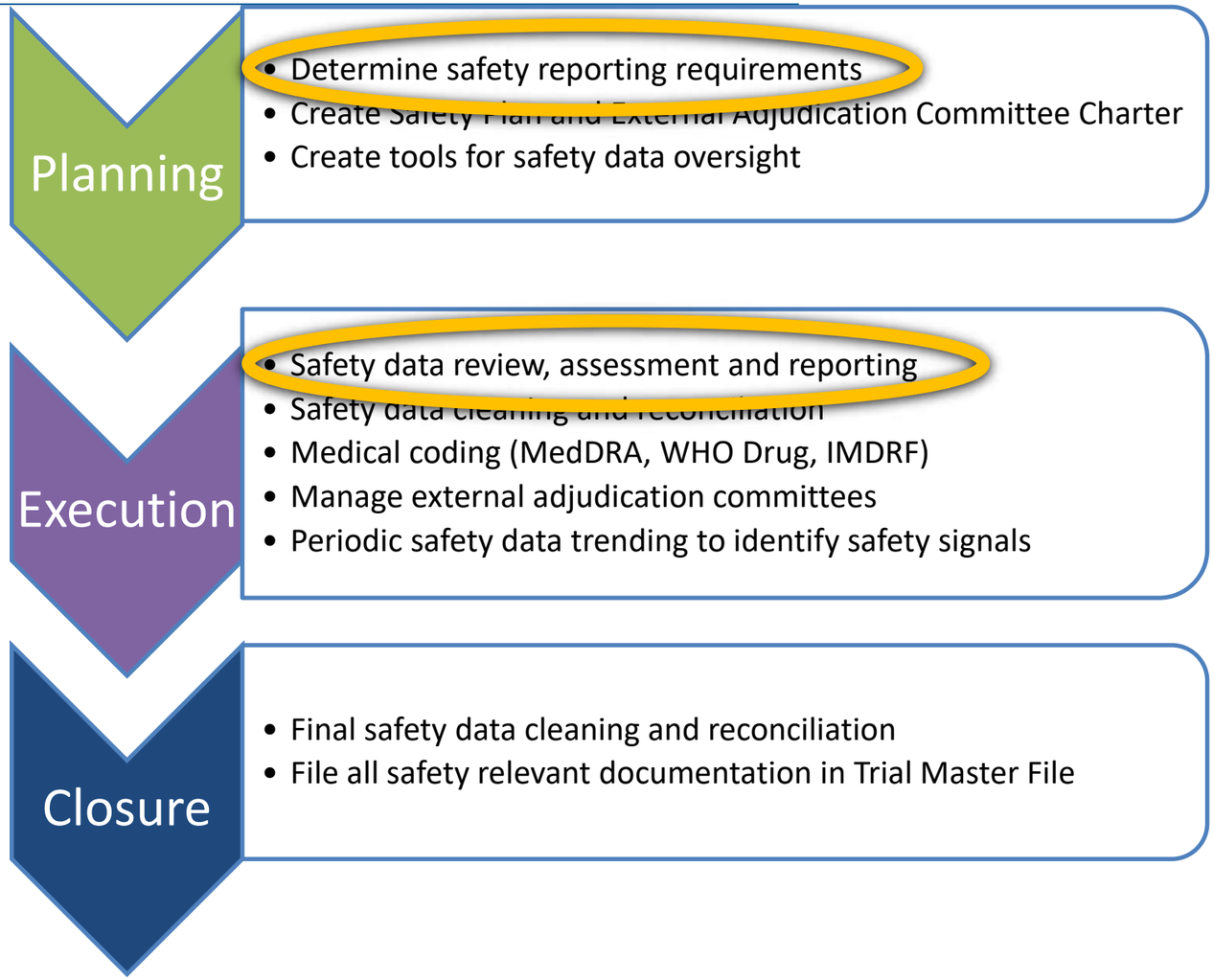
## Who We are

Medtronic Clinical Safety team deploys functional expertise and leadership to ensure uncompromised patient safety in clinical trials conducted all over the world.



# Clinical Safety Responsibilities Overview

# Clinical Study Lifecycle Safety Milestones



# Evaluation and Management of Safety Information

# Clinical Safety Reporting Requirements

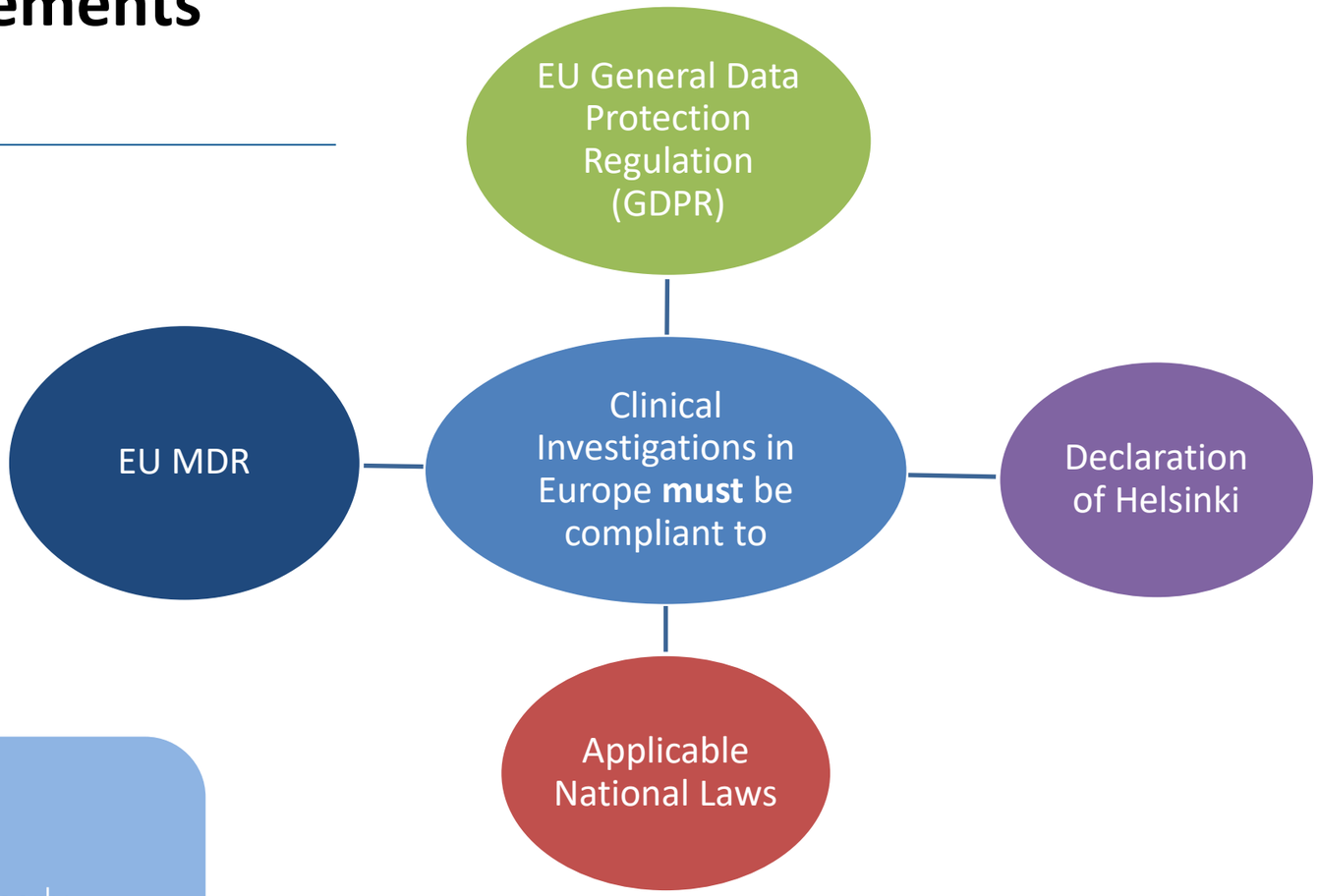
## Clinical Study Regulatory Status

The **regulations** being followed should be appropriate given the **regulatory status** of the product and the geographies the study is being conducted: geography subject matter experts are consulted to confirm local requirements.

| | PRE-MARKET | | POST-MARKET | |
|---|---|---|---|---|
| Clinical Stage | Pilot | Pivotal | Post-Market Surveillance (PMS) | |
| Type | Exploratory & Confirmatory | Confirmatory | | Observational |
| *Medtronic Study (example)* | - | *LEADR* | *SMART study* | *Cryo AF Global Registry* |
| Burden to Human Subjects | Interventional | | | Non-Interventional |

# Clinical Safety Reporting Requirements

## Applicable Regulations in Europe




Notes regarding ISO 14155 Compliance

- Compliance to ISO 14155 is not required, but recommended
- If ISO 14155 compliance is claimed, any exceptions should be clearly stated in the Protocol
- ISO 14155 Adverse Event (AE) & Device Deficiency (DD) definitions should be utilized, even if the study does not claim compliance to ISO 14155

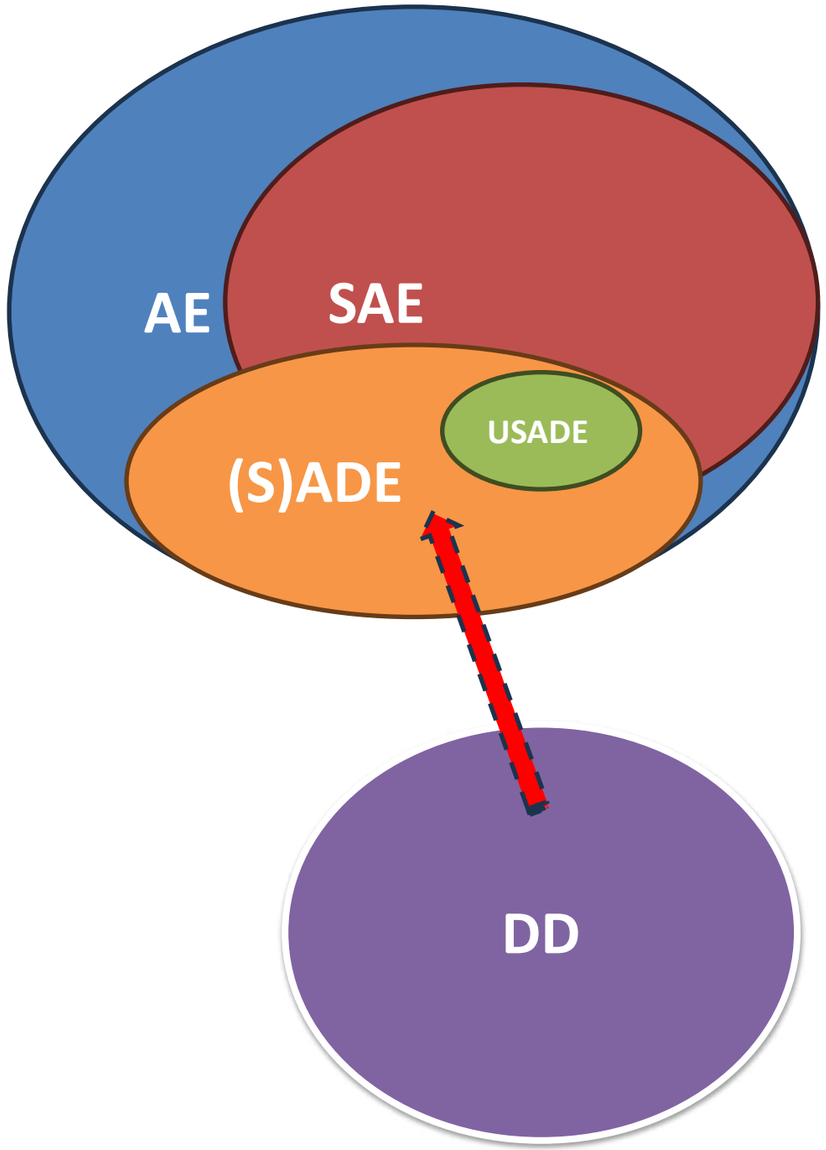
# Safety Data Types

- Adverse Event (AE)
  - Serious AE (SAE)
  - AE
  - Serious Adverse Device Effect (SADE)
  - Adverse Device Effect (ADE)
  - Unanticipated SADE (USADE)
  - Anticipated SADE

**Adverse Event**

Any untoward medical occurrence, unintended disease or injury, or untoward clinical signs (including abnormal laboratory findings) in subjects, users or other persons, whether or not related to the investigational medical device

Example: Heart Failure noted by lab value is AE, but if treated with IV med becomes SAE; bruising around implant site is ADE; stent graft fracture leading to aneurysm rupture is SADE




- Device Deficiency (DD)
  - DD with SADE potential
  - DD without SADE potential

**Device Deficiency**

Inadequacy of a medical device with respect to its identity, quality, durability, reliability, usability, safety or performance.

Example: Sacral neuromodulation device programmer breakage is DD; Lead fracture prior to implant is DD with SADE potential

# Question time

A subject participating in a clinical trial is implanted with a pacemaker. The pocket, where the pacemaker was implanted, becomes infected, and IV antibiotic administration is needed. Which type of safety event is this?

- ❑ DD with SADE potential
- ❑ AE
- ☒ SADE

# Portugal Regulatory Reporting Requirements

## Investigator Reporting Requirements

| Type of Data | PRE-MARKET |
|---|---|
| Related SAEs | To sponsor within 3 calendar days |
| DD with SADE potential | |

| Type of Data | POST-MARKET Interventional |
|---|---|
| Preceding investigational procedures related SAE | To sponsor within 3 calendar days |

| Type of Data | POST-MARKET Non-Interventional |
|---|---|
| National requirements following MDR Article 82 should be followed | |

## Sponsor Reporting Requirements

| Type of Data | PRE-MARKET |
|---|---|
| Any SAE which indicates an imminent risk of death or serious injury that requires prompt remedial action for other patients | To competent authority no later than 2 calendar days |
| Related SAEs | To competent authority no later than 7 calendar days |
| DD with SADE potential | |

| Type of Data | POST-MARKET Interventional |
|---|---|
| Procedure related SAEs | To competent authority no later than 7 calendar days |
| Preceding investigational procedure related SAEs | To competent authority no later than 7 calendar days |

| Type of Data | POST-MARKET Non-Interventional |
|---|---|
| No regulatory safety reporting requirements | |

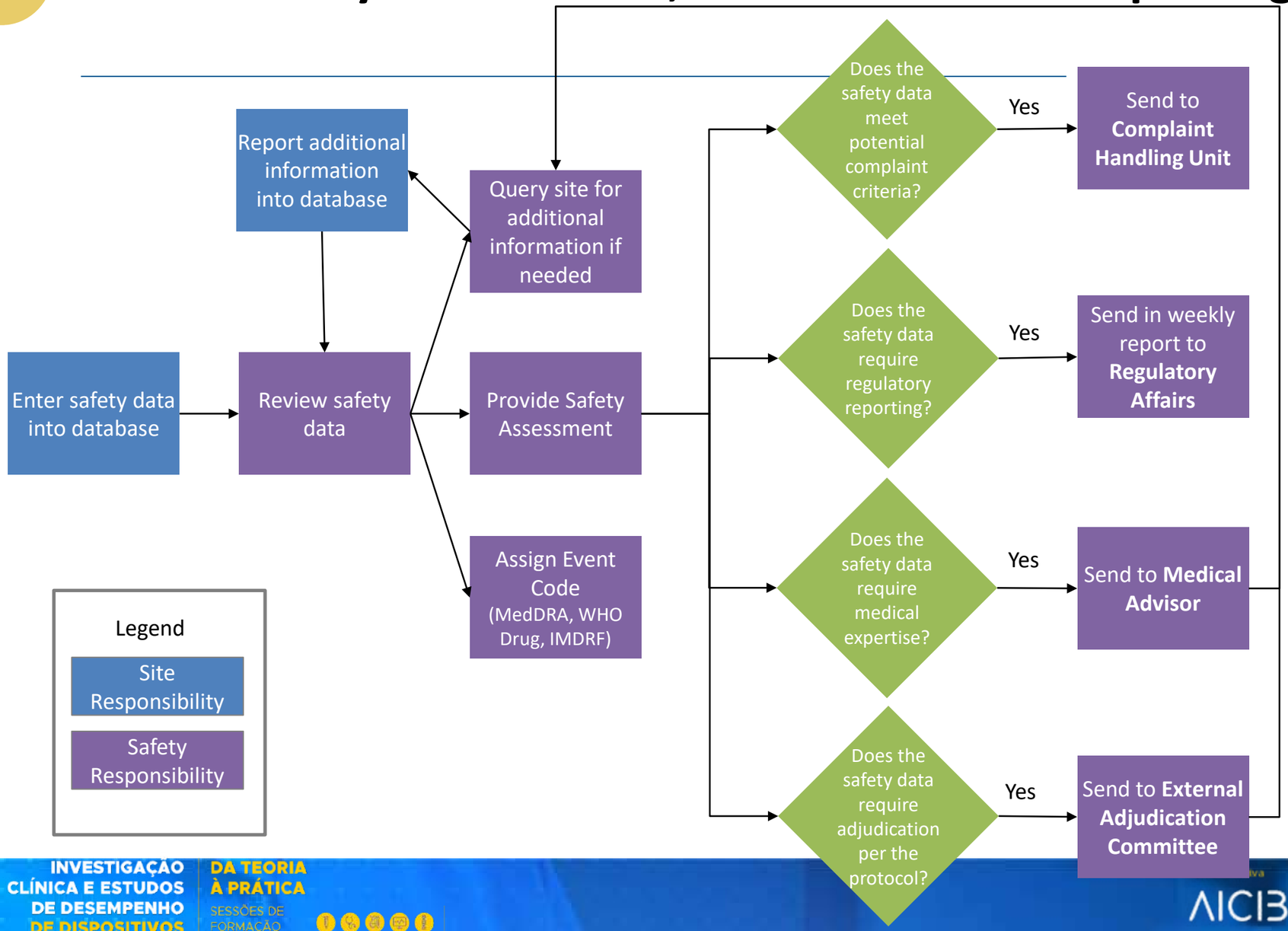
Note: Investigator and/or Sponsor may be required to report to the Ethical Committee per local country requirements

# Question time

A subject participating in a pre-market clinical study informs the site investigator that he experienced a Serious Adverse Event related to the device (e.g. requiring hospitalization). How many days has the investigator to notify the sponsor?

- ❑ 2 calendar days
- ☒ 3 calendar days
- ❑ 7 calendar days

# Clinical Safety Data Review, Assessment and Reporting




In addition to these assessments on event level – a periodic Aggregate Safety Data Trending meeting is conducted to identify safety signals

The **Complaint Handling Unit** is responsible for providing input as requested in the clinical trial with respect to ensuring any potential complaints generated as part of the clinical trial are considered for reporting to their organization for final regulatory submission.

**Regulatory Affairs** is responsible for submission for internal regulatory assessment, review of Clinical Investigational Plan, and review and approval of Investigator Brochure/ Report of Priors, at a business/operating unit level. They are the primary contacts for the different Competent Authorities.

The **Medical Advisor** possesses adequate medical background and may advise objectively on medical questions or issues throughout the lifecycle of a clinical study.

An **External Adjudication Committee is** an independent committee of experts not participating in a clinical study that provides adjudication of study specific endpoints and/or events utilizing study-specific or consensus definitions available in the field.


Q&A