Vigilance Reporting in the European Economic Area, Switzerland and the United Kingdom

Amelia Boldrick
and Elizabeth Pugh

June 2024

EMERGO
by UL

A note to readers

Under the now-obsolete European Directives, vigilance reporting was (and still is, in the United Kingdom) informed by the seminal guidance document MEDDEV 2.12/1 rev 8; Guidelines on a Medical Devices Vigilance System.[1] Although it was supplemented in 2019, the last revision of the primary guidance document occurred in 2013, when the European Union (EU) Medical Devices Regulation 2017/745 (MDR) and In Vitro Diagnostic Medical Devices Regulation 2017/74[6] (IVDR) were developments on the regulatory horizon, the United Kingdom (U.K.) was still a member of the EU, and the mutual recognition agreements which allowed for the free movement of medical devices between Switzerland and the EU had not expired.[2,3,4] Both the U.K. and Switzerland have since emerged as third countries excluded from the common market and EUDAMED. Until the 2023 release of the Medical Device Coordination Group (MDCG) guidance MDCG 2023-3 (Questions and Answers on vigilance terms and concepts as outlined in the Regulation (EU) 2017/745 on medical devices), MEDDEV 2.12/1 rev 8, though obsolete from a regulatory perspective, continued to serve as the primary resource for manufacturers for vigilance reporting in Europe.[5]

Due to the explicit vigilance provisions in the new Regulations, MDCG 2023-3 is a far more succinct resource than its predecessor, with which it assumes a degree of familiarity. However, as will be discussed in greater detail to follow, a number of the MEDDEV Device Specific Vigilance Guidance (DSVG) documents have been updated and published by the MDCG in alignment with the MDR, and further vigilance guidance from the MDCG is expected shortly, including a revision of MDCG 2023-3 that includes IVDs and new reporting forms.

Until then, the MEDDEV vigilance guidance documents and report forms continue to serve as the primary resources for vigilance reporting in the U.K., and all vigilance report forms used in the European Economic Area (EEA) at the time of this publication were developed in the context of MEDDEV 2.12/1 rev 8. Although Switzerland has now released a number of its reporting forms, it continues to use the same incident report form as the EEA and U.K. The three systems continue to align broadly, though some key divergences will be discussed here and must be considered by manufacturers who supply devices in all of these markets .

Incident reporting in the European Economic Area

Incidents and serious incidents

The European Economic Area (EEA) consists of the 27 EU member states and three of the four European Free Trade Association countries: Iceland, Liechtenstein and Norway. Incidents involving medical devices, their accessories and products listed in Annex XVI to the MDR (hereafter 'devices') that occur in the EEA must be assessed to determine if they meet the criteria for reportability. Only serious incidents that occur in the EEA are reported there. If the manufacturer is located outside of the EU and/or the subject device requires notified body involvement, the manufacturer must also inform their notified body and authorized representative (AR) of reportable events. The MDR and IVDR introduced the following codified definitions for the incident and serious incident, the latter of which must be reported to the competent authority in the member state where the event occurred:

Incident

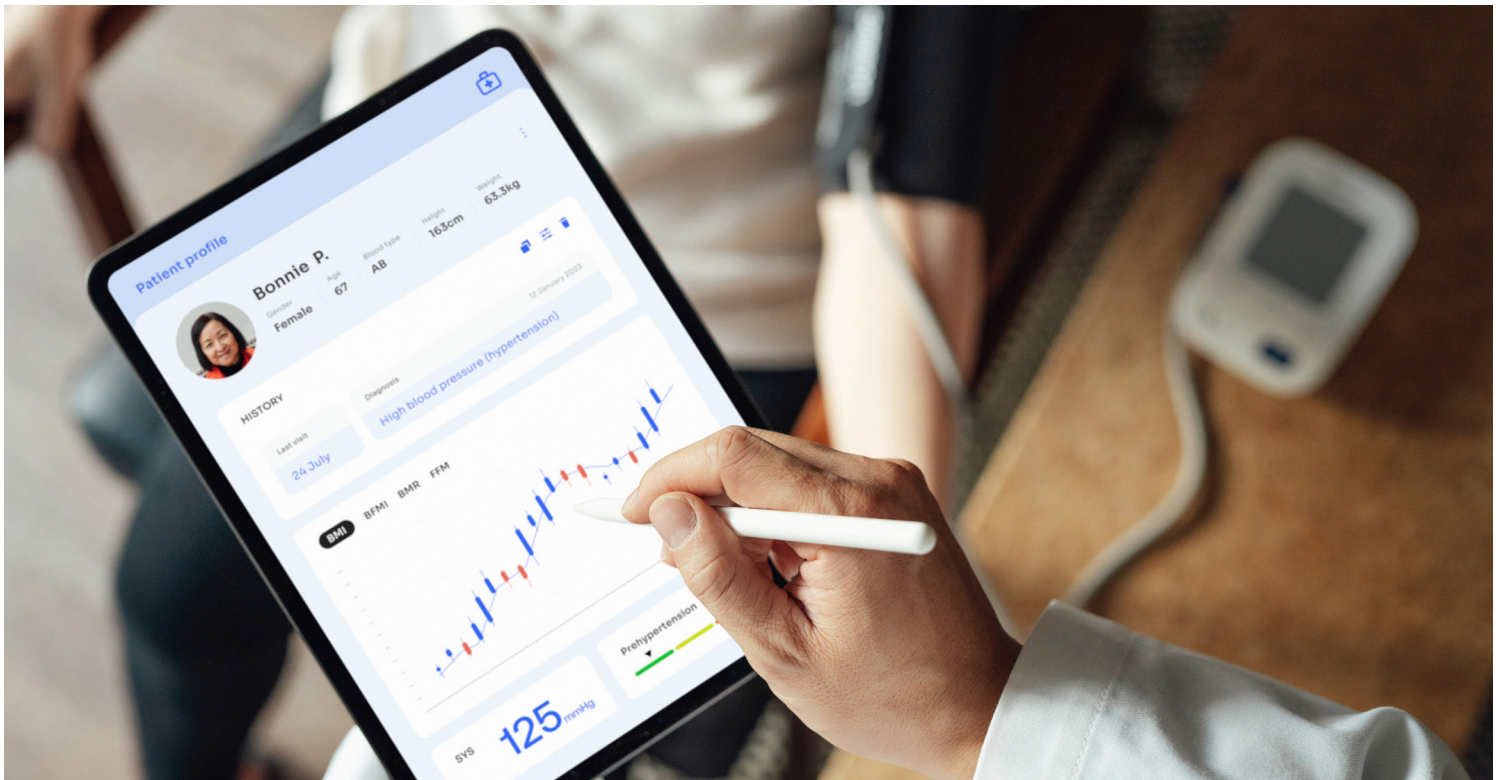
MDR Article 2(64): "[A]ny malfunction or deterioration in the characteristics or performance of a device made available on the market, including use-error due to ergonomic features, as well as any inadequacy in the information supplied by the manufacturer and any undesirable side effect;"

IVDR Article 2(67): "[A]ny malfunction or deterioration in the characteristics or performance of a device made available on the market, including use-error due to ergonomic features, as well as any inadequacy in the information supplied by the manufacturer and any harm as a consequence of a medical decision, action taken or not taken on the basis of information or result(s) provided by the device;"

Serious incident

MDR Article 2(65) / IVDR Article 2(68): "[A]ny incident that directly or indirectly led, might have led or might lead to any of the following:

- The death of a patient, user or other person,
- The temporary or permanent serious deterioration in the state of health of a patient, user,or other person,
- A serious public health threat;"



Assessing reportability

The severity of the outcome, or potential outcome is the determining factor for assessing reportability. It is a common misconception that if an incident doesn't result in direct harm to a patient, user or another person, it isn't reportable. The manufacturer must also consider if the incident were to recur or occur in less advantageous circumstances, whether it could directly or indirectly lead to a serious public health threat, death, or a serious deterioration in the state of health. A careful review of the reportability flowchart included within MDCG 2023-3 is recommended.

It is also important to note that competent authorities may interpret a serious deterioration in the state of health more broadly than manufacturers expect. Further, if a competent authority disagrees with a determination of an event as not reportable, they may require the manufacturer to report and investigate the incident as serious and can impose follow-up action. In cases of uncertainty, if the device cannot definitively be excluded as a causal or contributing factor to a serious incident at the time the manufacturer receives the complaint, it must be reported within the timeframe mandated by the category of the event.

Reporting categories and timeframes

Serious incidents fall into one of the following categories: serious public health threat, death, unanticipated serious deterioration in the state of health, or all other reportable incidents. MDCG 2023-3 provides numerous examples for each category, though the distinction may at times be highly nuanced. For example, if a serious deterioration in the state of health is accounted for by the manufacturer in the risk management documents and is therefore anticipated, it is categorized within all other reportable events.

By contrast, there are five fewer days for an initial report to be submitted within the mandated reporting timeframe of the serious deterioration if the risk has not been accounted for. The date the manufacturer becomes aware that their device may have been a causal or contributing factor in a serious incident is considered day 0, and days in the reporting window are counted as calendar days, rather than business days. The following reporting timelines are codified in Articles 87 and 82 of the MDR and IVDR, respectively:

Serious public health threat
"[I]mmediately, and not later than 2 days after the manufacturer becomes aware of that threat."

Death or unanticipated serious deterioration in the state of health
"[I]mmediately after the manufacturer has established or as soon as it suspects a causal relationship between the device and the serious incident but not later than 10 days after the date on which the manufacturer becomes aware of the serious incident."

All other reportable incidents
"[I]mmediately after they have established the causal relationship between that incident and their device or that such causal relationship is reasonably possible and not later than 15 days after they become aware of the incident."

Indirect harm

Some incidents may not result in direct harm to a patient, user or another person, but result in or could potentially result in indirect harm. Indirect harm is referenced in the MDR, though not defined. It is described in MDCG-2023-3 to refer to a medical decision or action taken (or not taken) as a result of information provided by the device involved in an incident. This harm, or risk of harm, could include an incorrect or delayed diagnosis resulting in an unintended treatment decision or a clinically significant delay in a medical procedure.
At the time of this publication, the guidance currently excludes IVDs from its scope. However, a draft update to MDCG-2023-3, including IVDs within its scope, has been circulated to stakeholders and is expected to be published soon. Until that time, manufacturers should be aware that some incidents involving IVDs may be categorized as serious incidents due to potential or actual indirect harm.

Expected undesirable side effects and non-reportable incidents

Expected undesirable side effects may be categorized as non-reportable when they meet both of the following two defining criteria:

- They are documented in the information supplied with the device AND
- Quantified in the product technical documentation

However, if the undesirable side effect is not documented in the product information or its anticipated rate of occurrence isn't specified in the product technical documentation, it cannot be considered expected and must be reported.

Any incident that is not reported must still be documented in the quality management system (QMS) of the manufacturer and tracked for any statistically significant increase in frequency or severity following the trend reporting requirements outlined in Articles 88 and 83 of the MDR and IVDR, respectively. Regardless of device type, manufacturers should ensure that any decision to classify an incident as not reportable is documented in their QMS and thoroughly supported by careful analysis. Failure to appropriately assess and report serious incidents is a common but entirely avoidable audit finding.

Conducting an investigation

It is a common misconception that if a device is not returned to the manufacturer, then no investigation can be performed or that the incident is not reportable. Analysis of the subject device is just one of numerous methods of investigation, though not all will be equally informative. Competent authorities, however, expect manufacturers to demonstrate an attempt to investigate and assign, at minimum, a most likely root cause to each serious incident.

In the absence of the actual device involved in the incident, manufacturers can review the device history/production record complaint history or test a surrogate device from the same or different lot. Interviewing healthcare providers or users involved in the incident can also be helpful. Whether the manufacturer contacts the source of the complaint/ initial reporter or engages the distributor for this activity, communication can open other investigative avenues to pursue.

The Manufacturer Incident Report form

At the time of this publication, the EEA, Switzerland, and the U.K. all continue to use the European Commission (EC) Manufacturer Incident Report (MIR) form6. This form contains dynamic text fields, which result in a PDF file format, which internet browsers do not support. The desktop versions of Adobe Reader or Acrobat DC are necessary for viewing and completing the form, which should be saved and opened from a local folder on a computer (i.e., the desktop). The EC website also has a help tex t spreadsheet that guides completing the form fields and specifying which are mandatory according to the type of report.[7]

Report types

Initial

Used for the first report submitted and indicates that further information will follow in a subsequent report. The manufacturer must indicate a date by which the next report will follow, which competent authorities generally expect between 1 – 3 months from the initial report submission date. Either a follow-up or final report must be submitted by this date. Manufacturers should allow sufficient time for their investigation to produce additional information, whether or not a conclusion has been reached by the date of the next report.

Follow-up

Typically used when an investigation is not complete by the date identified in the initial report, though manufacturers can select either initial or follow-up as the type of report if it corresponds to a user report initially received from a competent authority.

Combined initial and final

Used when an investigation for a serious incident is completed within the mandated reporting timeframe.

Final (reportable incident)

Used when the investigation is complete, and the manufacturer can identify the root cause — or most likely root cause — if the actual cause cannot be established definitively. This report will also include the number of similar events that have occurred in the country of the incident, the EEA (including Turkey), and worldwide.

Final (non-reportable incident)

Used when a manufacturer determines after their investigation that the criteria for a serious incident were not met. This type of report is submitted either after an initial report or after receiving a user report from a competent authority.

IMDRF coding

The use of the International Medical Device Regulators Forum (IMDRF) Adverse Event Terminology is mandatory and coding is required.8 Manufacturers using in-house codes or complaint keyword searches will need to map their selections to the most appropriate IMDRF codes. Similar events are usually based on either Annex A (Medical Device Problem) or Annex C (Investigation Findings). In some cases, another annex may be more appropriate and can be used instead (i.e., Annex E: Clinical Signs and Symptoms or Conditions). These annexes represent the key variables in a serious incident that inform the detection of trends. However, Annex A and C are the norm, and manufacturers should provide a justification for the alternative selection in the form.

Once complete, the report is ready for submission. Although the competent authorities of some EEA countries, such as the Czech Republic and Sweden accommodate online reporting, reports for most countries are sent to the competent authority via email.9,10

Key incident reporting differences in Switzerland and the United Kingdom

Switzerland

The Swiss Medical Devices Ordinance (MedDO) and Ordinance on In Vitro Diagnostic Medical Devices (IvDO) mirror the MDR and IVDR, respectively, and incident reporting is almost identical in this market.11,12 However, because Switzerland still uses the EC MIR form, Swissmedic requires the Swiss AR to be identified on the report form in a very specific manner. It is finally important to note that Swissmedic provides its vigilance guidance documents and forms, the latter of which include both the EC MIR form for serious incidents as well as market-specific report forms for other vigilance activities discussed further in this white paper.13

The United Kingdom

Due to Brexit, the Medicines and Healthcare products Regulatory Agency (MHRA) follows The Medical Devices Regulations 2002, which still aligns with vigilance reporting under the EU Directives and MEDDEV 2.12/1 rev. 8.14 Accordingly, the timeframe for reporting incidents categorized as all other reportable incidents in this market is still 30 calendar days. The MHRA provides additional vigilance guidance for manufacturers and submission information on their website.15 Importantly, the U.K. no longer accepts vigilance report submissions via email. The u se of their e-reporting portal, the Manufacturer's Online Reporting Environment (MORE), is mandatory.16 Unlike the competent authority online reporting systems in the EEA, MORE is linked to the MHRA registration database on the system backend and is only accessible to registered account holders and users assigned to those accounts. Although the MHRA website notes that registration is mandatory for the use of the MORE portal, U.K. Responsible Persons (UKRPs) have access to all manufacturer accounts for the U.K. registrations they hold by default. Foreign manufacturers that have at least one active device registration through their UKRP can simply request an invitation to set up a user profile under their manufacturer account in MORE from the UKRP. Comprehensive guidance on the functions in MORE is available on the MHRA website.

Device Specific Vigilance Guidance and other types of incident reporting

Device Specific Vigilance Guidance

Certain complaints involving specific types of (typically) high-risk devices do not always need to be reported individually. However, as the manufacturers of these devices know, it can be difficult to determine when an alternative report type, such as a periodic summary report or trend report, is appropriate. The original Device Specific Vigilance Guidance (DSVG) documents were drafted for this reason. These are now obsolete in the EEA but still used in the U.K., where several other DSVGs unique to the market have been published on the MHRA vigilance guidance page linked to earlier. In January of 2024, the MDCG released several updated DSVGs in alignment with the MDR (see footnote 5):

- MDCG 2024-1: Device Specific Vigilance Guidance (DSVG) Template
- MDCG 2024-1-1: DSVG 01 on Cardiac ablation
- MDCG 2024-1-2: DSVG 02 on Coronary stents
- MDCG 2024-1-3: DSVG 03 on Cardiac implantable electronic devices (CIEDs)
- MDCG 2024-1-4: DSVG 04 on Breast implants

Trend reporting

As noted earlier, under Articles 88 and 83 of the IVDR and MDR respectively, expected undesirable side effects and incidents not categorized as serious must be tracked and monitored for trends. They are reportable when there is a statistically significant increase in the frequency or severity of an incident that could significantly impact the benefit-risk analysis and the incident led or may lead to health or safety risks. Manufacturers of IVDs should note that the IVDR includes an additional criterion for trend reporting: a significant increase in expected erroneous results established in comparison to the stated device performance. The identification of a reportable trend is informed by the threshold, acceptance criteria, and methodology for statistical analysis outlined in the risk management file for the device and the post-market surveillance plan drawn up by the manufacturer per Articles 84 and 79 of the MDR and IVDR, respectively.

As a part of the risk management process, manufacturers estimate the baseline frequency and severity levels for each hazard identified in their risk analysis.17 Risks are evaluated according to the acceptance criteria documented in the risk management plan and control measures implemented until the overall residual risk of the device is judged acceptable and outweighed by its benefit. This process is documented in the risk management file and post-market surveillance plan and continues throughout the device life cycle. The manufacturer remains responsible for the identification of new risks, the re-evaluation of existing risks, and actioning those that impact safety for the entire lifetime of the device.

Periodic summary reporting

Some serious incidents occurring with certain devices or certain types of device are common and well-documented. A manufacturer may be able to come to an agreement with the competent authorities to report similar serious incidents meeting the aforementioned criteria together in a regular, consolidated, periodic summary report if all of the following criteria are met:

- The manufacturer has previously reported these serious incidents for competent authority assessment individually AND
- The root cause has been identified or a Field Safety Corrective Action initiated AND
- The serious incident or its root cause is clinically well-known and has an established qualitative or quantitative probability

The Trend Report and Periodic Summary Report forms used in the EEA and the U.K. at the time of this publication are available from the EC website.18,19 The Trend Report and Periodic Summary Report forms for use in Switzerland are available from the Swissmedic website (see footnote 13).

Field Safety Corrective Action reporting

Some serious incidents or product and labeling issues may pose a risk to patients, users or others and require remediation in the form of a Field Safety Corrective Action (FSCA). The term FSCA is defined in the MDR and IVDR, respectively, as a corrective action taken by the manufacturer for technical or medical reasons to prevent or reduce the risk of a serious incident for a device on the European market. This distinguishes them from corrective actions, which under Article 83 (4) of the MDR and Article 78 (4) of the IVDR, are notified to the competent authorities in the manufacturer's post market surveillance report or periodic safety update report as applicable per device class rather than reported as vigilance. The FSCA report form used in the EEA and U.K. is available on the EC website.20 Switzerland, however, uses a separate FSCA report form (see footnote 13).

Risk analysis/health hazard evaluation

When a serious incident occurs, or a problem associated with a device or labeling is identified, the manufacturer is responsible for identifying potential risks according to their quality system. An analysis of these risks, also called a health hazard evaluation, must be performed by the manufacturer according to the risk management system. The manufacturer identifies the problem and how it was discovered, and the predicted level of severity and frequency of occurrence. The plan for correction is outlined in the risk assessment, and if a root cause is identified early on, this is also included. However, many issues will require further investigation to determine the root cause, and this should not delay reporting of the FSCA. Some competent authorities will request the risk analysis for review upon receipt of the FSCA report submission.

Distribution and traceability

As soon as the manufacturer determines that an FSCA is necessary, they will need to take stock of the distributors and customers to whom devices have been supplied. Device traceability is not only a regulatory requirement, but critical for an efficient and successful completed FSCA. Under Article 25 of the MDR and Article 22 of the IVDR, distributors, and importers are required to cooperate with manufacturers or their ARs towards device traceability, meaning that all economic operators must be able to identify where and to whom they have supplied devices upon request from a competent authority. Importantly, the ultimate regulatory and legal responsibility for transmission of the field safety notice, tracking responses and bringing all products into conformity lies with the manufacturer, rather than the distributor.

Field Safety Notices

FSCAs are communicated to distributors and end users by way of Field Safety Notices (FSNs), for which the manufacturer retains ultimate responsibility. The term FSN corresponds exclusively to FSCAs, and customer letters communicating corrective actions taken for other reasons should not use this terminology in communication with distributors and end users. If a manufacturer is considering whether their letter should include this language, they should also consider whether the topic of the customer letter is reportable as an FSCA.

The purpose and basic content of FSNs between the EEA, Switzerland and the U.K. is generally the same, though the MHRA provides guidance on FSNs for manufacturers that includes some information specific to the U.K..21 The EC website has a Field Safety Notice Template in a tabular format, as well as a Q&A document on completing the FSN template.22,23 However, most manufacturers opt for a letter format for their FSNs. Clear, concise language is important to support the purpose of the letter and that it isn't buried in extraneous text. When the letter recipient is instructed to check areas of a device or its packaging, or model, lot, or batch information is relevant, photographs are invaluable. The structure and appearance of an FSN can vary from one manufacturer to another, though competent authorities will expect it to contain several critical pieces of information and a response form for recipients to complete in acknowledgment. The EC has response form templates for distributors and customers, though a single form for all types of recipients is also acceptable.24,25

Reporting the FSCA

Except for in cases of extreme urgency, such as an issue that poses a serious public health threat, the competent authorities must receive the FSCA report before its initiation, and must be allowed the opportunity to review and comment on the FSN before it is sent to distributors and customers. FSCAs are reported to the competent authority in any member state where affected devices have been supplied, and also to the competent authority in the member state where the European manufacturer or their AR resides whether or not affected devices were supplied there. The FSN must be translated into the official languages of the affected countries shortly after reporting to the competent authorities. Consolidated documents outlining language requirements under the MDR and IVDR, respectively, are available on the EC website and include FSNs within their scope.26 As with serious incidents, the Czech Republic and Sweden have electronic reporting portals (see footnotes 9 and 10), while the other competent authorities receive FSCA reports via email. As with incidents, FSCAs in the U.K. are reported in MORE.

Reconciling responses and completion of the FSCA

A communication strategy must be developed as early on as possible. Although 100% reconciliation can be difficult to achieve in a widespread FSCA involving a large number of devices, there are some competent authorities that will not accept closure without a relatively high percentage of responders. If distributors are enlisted to contact customers, the manufacturer may need to stay on top of those follow-ups, as some competent authorities will request regular status updates on reconciliation. When a distributor is enlisted to carry out a correction, relabeling, or removal of devices in the field, the manufacturer will similarly need to monitor progress to confirm that the FSCA is carried out expeditiously. Upon completion, a final FSCA report is submitted to the same competent authorities to whom the initial report was sent.

Final considerations on the topic of European vigilance

The National Competent Authority Reporting System

Although rare, some situations can raise concerns from a competent authority so serious that they contact other competent authorities in the EEA to alert them of an issue, or even regulators in other markets. This is orchestrated by an IMDRF program called the National Competent Authority Report Exchange System (NCAR).27 The scenarios that meet the criteria for information exchanges between competent authorities generally involve an actual or potential serious public health threat. Few incidents and FSCAs rise to this level of severity, but manufacturers should be cognizant of what constitutes a serious public health threat and understand that this mechanism exists. However, manufacturers that fulfill their post-market surveillance obligations thoroughly and report all serious incidents, trends and FSCAs appropriately to all affected countries in a timely manner have little to worry about.

Conclusion: the common objective

Stakeholders across the many varied European healthcare systems — from hospitals and physicians to each of the competent authorities and economic operators worldwide — all share a common objective: delivering high-quality, safe and effective treatments to European patients. It can be challenging for manufacturers, large or small, to navigate vigilance reporting in Europe, where subtle differences between markets can further complicate the process. However, manufacturers are required by regulation and law to fulfill these obligations.

Emergo by UL has a wealth of vigilance reporting experience and expert consultants available to support medical device manufacturers around the world.

www.EmergobyUL.com