The MDR Challenge
Test your Adverse Event Reporting Expertise

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The views expressed are the presenter’s and do not necessarily represent the views of Medtronic.
AGENDA
FOR THE NEXT 90 MINUTES

• Opening Remarks – Mike Crader
• Background of reporting requirements – Sharon Kapsch and Vickie Schmid
• Mini Workshop – Mike, Sharon and Vickie
  • Three Examples of simulated events to test your Adverse Event Reporting skills
  • What some industry experts think about the examples.
  • FDAs input on the examples
• Conclusion – Mike Crader
  • How to learn more
WHY IS THIS PRESENTATION IMPORTANT?

• Understand the stated requirements for reporting adverse events as required by 21CFR803.
• Examine these requirements in application through the use of simulated case studies.
• Provide an overview of enforcement actions
• Learn where to learn more
Transition to FDA presentation
Important Note:

• This presentation will focus on manufacturer’s responsibilities only. There are also responsibilities for device user facilities, importers, and distributors.

• The full reporting responsibilities are outlined in 21CFR803. These responsibilities have been abbreviated for the purpose and time limitations of this interactive presentation. Some responsibilities are not included in this presentation.
THE MDR CHALLENGE
TEST YOUR ADVERSE EVENT REPORTING SKILLS

Interactive Session

Three “Experiential Examples”
Fabricated for learning purposes.
Any similarity to any actual product issue is purely coincidental.

Example 1:
The Bad Seal
Suture with an open pouch

Example 2:
The Fireworks Finale
A cut in the power cord

Example 3:
The Breathe Easy
Respirator Malfunction

NOTE:
The following examples are for education purposes only. Actual MDR filings should be based on all facts surrounding potential or actual adverse events.
INDUSTRY EXPERTS THAT PARTICIPATED IN THE DEVELOPMENT OF THIS PRESENTATION

- Jeff Shapiro – Attorney – Hyman, Phelps, and McNamara, P.C.
- Jodi Scott – Partner – Hogan, Lovells US LLP
- Jeff Shaul – Director Regulatory Affairs and Regulatory Compliance – Church and Dwight, Inc.
- Melissa Walker – President – Graematter, Inc.
- Jack Garvey – Principal – Compliance Architects, LLC
- Confidential – Private Practice Attorney
The Bad Seal

• One complaint received from one hospital in Ireland:
  • 2 pouches had open seals. Both from Lot number Y78X.
  • Four sutures per pouch.
  • Open pouches were noticed by O.R. Nurse prior to use and were discarded. Additional sutures were available. No consequence to patient. Procedure delayed 15 seconds.
  • Device is manufactured in Florida and sold globally.
• Inventory checked at the company owned distribution center in Finland:
  • 4 of 36 found with open seals from Lot Number Y78X
  • 14 other lot numbers checked with no defects found. Total of 158,000 pouches checked.
• Product sold sterile, single use
• Questions:
  • Is this reportable under 21CFR803?
    • If yes:
      • Why?
      • How many MDRs should be filed?
      • How would you file: Malfunction, Serious Injury, Other?
  • If no, why not?
The Bad Seal

- Answers from the Experts
  - MDR reportable?
    - Yes = 4
    - No = 2
  - If Yes, Why?
    - Product failed to meet its performance specifications due to failure to maintain sterility up to the point of final use.
    - The devices failed to meet specification in that they could not be guaranteed to be sterile. Sterility failure could result in death or serious physical injury from infection.
    - It is the assumption that packs are in interstate commerce. A malfunction is reportable if it is likely to cause or contribute to a serious injury if the event were to recur. A break in sterility is generally deemed likely to result in contamination leading to infection. Since the sterile barrier break was presented in a hospital environment, it would be difficult to make the case against serious injury. It would also be difficult to argue detectability at point of use, as not all breaches of sterility will be immediately obvious.
The Bad Seal

- If Yes, How would you file? 4 stated Malfunction
- Why?
  - Failed spec for sterility & package integrity.
  - Product cannot be used as claimed without sterility assurance.
  - If the malfunction were to recur is likely to result in serious injury.
  - There is no guarantee that others would detect defect and therefore pose no future risk . . . of infection
- If Yes, how many MDRs would you file?
  - One per pouch = two
  - Six. FDA would consider this to be 6 separate malfunction events, and would need to be filed separately. I say this in spite of the fact that 4 were found within the control of the company, because this lot had already been released for commercial distribution, and had in fact been distributed for use.
  - One MDR but I would explain in h10 on the form that there were 2 pouches found at the time of surgery with open seals (this would constitute the event) and explain that further review and investigation identified others (this would be additional relevant information)
  - One report for one hospital
• If No, Why?
  • Insufficient nexus to “serious injury” within the meaning of the regulation even if the non sterile product used. Not a life supporting / life sustaining product. Product has not malfunctioned—there is a potential it could because its labeled “sterile” and the break in the seal put that in question but that has not been shown. Further investigation necessary.
  • **Product didn’t malfunction since it was never used** – it did not fail to perform as intended. Of course, it was defective out of the box.
• Continuous Positive Airway Pressure (CPAP) machine
• Three complaints received from the same hospital:
  • Power cord damaged – Shoots Sparks
  • No other complaints received
• Customer Misuse – Obvious signs of the cord being damaged. Appears hospital bed or other large equipment has rolled over the cords.
• Ample labeling on the device and in the IFU to avoid such practice.
• No patient injury.
• Questions:
  • Is this reportable under 21CFR803?
    • If yes:
      • Why?
      • How many MDRs should be filed?
      • How would you file: Malfunction, SI, Other?
    • If no:
      • Why?
Answers From The Experts

- MDR reportable?
  - Yes = 3
  - No = 3

- If Yes, Why?
  - User error or even user abuse does not exempt an event from reportability, if the event meets the criteria.
  - Life supporting / life sustaining device, visible electrical spark in a CPAP environment is likely to cause or contribute to death or serious injury.
  - Potential for injury or death if it recurs. Even though it is a result of misuse.
• If Yes, How would you file? 3 = Malfunction
• Why?
  – Failure to meet performance specifications – even with no injury -- is reportable if death or serious injury could occur if the event happened again
• If Yes, how many MDRs would you file?
  – Two said Three – one for each event.
  – One report for that facility unless report timing dictated more than one.
• If No, Why?
  – There was no malfunction since product met specs and was damaged by user error. User error not reportable absent serious injury.
  – Product could be “returned to service” at full performance specifications if a replacement cord was provided as part of a service. Also, clear use that is contrary to IFUs.
  – I would not see this as a malfunction of the device, but rather a misuse scenario at the customer. It is a device in a hospital. While damage to the cord from equipment and handling could be seen as reasonably foreseeable, I believe it is also reasonable to believe that standard protocols in a hospital would require examination of equipment before placing it into use. Since the damage is reported to be obvious, it should have been detected. It is only being reported from a single customer. This is consistent with a facility misuse scenario, rather than any form of design deficiency in the cord. There is no patient injury. While misuse events need to be tracked and trended (the only reliable way to determine if inadequate warnings are given is through trends of use), the only reporting obligation for misuse under 21CFR803 are serious injuries.
Three complaints received from three hospitals for a false alarm on a ventilator:
- 1 complaint received from Japan, 1 from France and 1 from USA.

Investigation:
- All Three Service Technicians state that the unit is malfunctioning but there is no disruption in therapy only an inconvenience to the hospital staff.
- A loose wire was observed. The screw was tightened and adhesive added to prevent the screw from backing out.
- This issue could not lead to a disruption in therapy or lead to serious injury or death. This issue can only cause the alarm to sound when there is no issue.
- This issue can only result in false alarm and cannot result in a “No Alarm” situation.

Questions:
- Is this reportable under 21CFR803?
  - If yes:
    - Why?
    - How many MDRs should be filed?
    - How would you file: Malfunction, Serious Injury, Other?
  - If no, why not?
Answers From The Experts

- MDR reportable?
  - Yes = 2
  - No = 4

- If Yes, Why?
  - I believe the answer should be no, due to unlikelihood of serious injury from the false alarm. However, FDA has taken the position that a malfunction is reportable if it involves a life-supporting device, so I would advise reporting to avoid any regulatory risk.
  - Malfunctioning alarm could cause ignoring the alarms of a life supporting life sustaining device--sufficient nexus to cause or contribute and likely to reoccur.
The Breathe Easy

– Answers From The Experts
  • If Yes, How would you file? Malfunction Why? Could cause or contribute if recurrence (ignoring alarms).

  • If Yes, how many MDRs would you file?
    – 3 - Three separate incidents from three separate reporters
Answers From The Experts

- If No, Why?
  - This is clearly a malfunction. However, it is not likely to result in serious injury were the malfunction to recur. It is unlikely that therapy would be changed based on a machine alarm state alone, and since the alarm condition doesn’t interrupt therapy, there is no direct harm to the patient as a result of the condition. It is also stated that the malfunction as it occurs is limited to false alarm, and the condition cannot lead to a no alarm situation.
  - Life-sustaining/life-saving technology so FDA’s presumption of reportability is at play here. The conclusion that this malfunction could not result in death or serious injury should it recur needs to be rock solid. The company also needs to be certain it would reach the same conclusion for same or similar devices. If the rationale for the likelihood of injury is anything greater than remote, the better course is to file.
  - Product continued to meet therapeutic performance specifications (“essential function”, i.e., respiration), and failure did not impinge on claimed performance functionality.
  - Failed to meet specifications – gives false alarms, however, no risk of death or serious injury if it recurs.
The term “user error” means any error made by the person using the device. A user error may be the sole cause or merely contribute to a reportable event… device injuries attributed to user error may show that the device is misbranded within the meaning of section 502(f) of the FD&C Act [21 U.S.C. 352(f)] in that the device fails to bear adequate directions for use or adequate warnings. Reports of adverse events that result from user error may alert FDA to the need for improved labeling to prevent future injuries. (Refer to the FRpreamble, page 63583, Final Rule, December 11, 1995.)
Reporters do not need to assess the likelihood that a malfunction will recur. **The fact that the malfunction occurred once leads to the presumption that the malfunction will recur.**

A malfunction is reportable if any one of the following is true:

(1) The chance of a death or serious injury occurring as a result of a recurrence of the malfunction is not remote;

(2) the consequences of the malfunction affect the device in a catastrophic manner that may lead to a death or serious injury;

(3) the malfunction results in the failure of the device to perform its essential function and compromises the device's therapeutic, monitoring or diagnostic effectiveness which could cause or contribute to a death or serious injury, or other significant adverse device experiences required by regulation (the Essential function of a device refers, not only to the device's labeled use, but for any use widely prescribed within the practice of medicine);

(4) the malfunction involves a long-term implant or a device that is considered to be life-supporting or life-sustaining and thus is essential to maintaining human life; or

(5) the manufacturer takes or would be required to take an action under sections 518 or 519(f) of the act as a result of the malfunction of the device or other similar devices.

Malfunctions are not reportable if they are not likely to result in a death, serious injury or other significant adverse device experience, that FDA, in a future rulemaking, may require by regulation. A malfunction which is or can be corrected during routine service or device maintenance must be reported if the recurrence of the malfunction would be likely to cause or contribute to a death or serious injury, or other significant adverse device experiences required by a future regulation.
January, 2013

1. Failure to report to the FDA no later than 30 calendar days after the day that your firm received or otherwise became aware of information, from any source, that reasonably suggests that a device that your firm markets malfunctioned and that this device or a similar device that your firm markets would be likely to cause or contribute to a death or serious injury, if the malfunction were to recur, as required by 21 CFR 803.50(a)(2).

For example, complaints… refer to malfunctions of your firm’s [product]. The [product] is a life-sustaining medical device and a malfunction involving such a device is reportable. See Medical Devices; Medical User Facility and Manufacturer Reporting, Certification and Registration (preamble); Final Rule, 60 Fed. Reg. 63585, comment 12 (Dec. 11, 1995). There is no information in your firm’s complaint file that justifies why the malfunctions referenced above would not be likely to cause or contribute to a reportable death or serious injury were they to recur. An MDR should have been submitted for each of the referenced complaints.
October, 2011

1. Failure to submit a medical device report (MDR) to FDA……

Per the Medical Devices; Medical User Facility and Manufacturer Reporting, Certification and Registration (preamble); Final Rule, 60 Fed. Reg. 63585, comment 12 (Dec. 11, 1995), a malfunction that involves a device that is considered to be life-supporting or life-sustaining, and thus is essential to maintaining human life, is reportable. An MDR is required to be submitted for each of the referenced complaints, but none have been submitted.

2. Failure to adequately develop, maintain and implement a written MDR Procedure, as required by 21 CFR Part 803.17. For example:

……Limiting the reportability criteria for ventilator failures to only include those failures that have resulted in loss of therapy. This is incorrect. A malfunction that involves a device that is considered to be life-supporting or life-sustaining, and thus is essential to maintaining human life, is reportable.
(1) Timely and effective identification, communication, and evaluation of events that may be subject to MDR requirements. For example:

(a) Your procedure, as written, combines language from requirements of other regulatory or competent authorities with those from 21 CFR Part 803. This will result in incomplete, inadequate or even non-reporting of adverse events that meet the reportability requirements under 21 CFR Part 803.

(b) There are no definitions of what your firm will consider to be a reportable event under 21 CFR Part 803. To facilitate the correct interpretation of reportable events and to assure the quality of MDR submissions, the procedure should include definitions for become aware, caused or contributed, malfunction, MDR reportable event, and serious injury based on 21 CFR Part 803.3; reasonably known found in 21 CFR Part 803.50(b); and reasonably suggests found in 21 CFR Part 803.20(c)(1).

(c) Failure to consider events involving devices that are marketed outside of the U.S.A. may result in a failure to meet the reporting requirements in 21 CFR Part 803.50. Please refer to the definition of an MDR reportable event in 21 CFR Part 803.3.
April, 2011

Failure to submit all information that is reasonably known to you.
For example, MDR does not indicate that the patient was in respiratory failure and subsequently died after delayed heparin treatment.

Failure to submit a complete MDR to indicate the outcome attributed to the adverse event.
For example, Block B2 for the initial and supplemental MDR does not indicate that the patient had died.

Failure to initially submit a correct MDR and supplement MDR to indicate the type of the reportable event.
For example, Block H1 from the initial MDR indicates the type of the event as “Other: delayed treatment.” In your supplemental MDR, you indicated the type of the reportable event as “Malfunction.” There is no evidence from the MDRs submitted that indicate that the patient died.

Continued…
April, 2011 (continued)

We reviewed your responses and have concluded that they are not adequate because your conclusion that the patient did not die as a result of device failure is based on the limited information from the physician’s discharge report. The physician’s report does not reference the cause of the patient’s death. In addition, you have stated that there was a device product problem. This resulted in delayed treatment of the patient with heparin for fifty-four (54) minutes. Your HEALTH HAZARD EVALUATION states that there is a potential risk to the patient resulting from delayed treatment. 

Without additional information from you demonstrating that the device did not cause or contribute to the patient’s death, we conclude that the information included for the event reasonably suggests that your device may have caused or contributed to the death of the patient.
IMPORTANT LINKS

MDR Guidance Document
- http://www.fda.gov/MedicalDevices/DeviceRegulationandguidance/GuidanceDocuments/ucm094529.htm

MDR Preamble

Compliance Program Guidance Manual
– http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm072753.htm

CDRH Learn
– http://www.fda.gov/Training/CDRHLearn/default.htm

eMDR Draft Guidance
## FD483 observations

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Table provided by Melissa Walker, President, Graematter Inc.