GDP Information Day - Quality Risk Management Case Study

Example of a Poorly Executed Risk Assessment, using an FMEA-type tool

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What is wrong with this risk Assessment?

- **Inadequate root cause analysis work**
  - In Failure Mode 1 (Damaged Packs….): The documented root cause here is too high level – it is not useful in terms of identifying preventative actions that can be taken
  - What factors might lead to someone not adequately checking returned packs?
  - In Failure Mode 2 (Recalled Packs….): Not following the recall SOP is too simplistic an assessment of the potential root causes here
  - The assessment gives the impression that if one follows the SOPs this failure mode will not occur

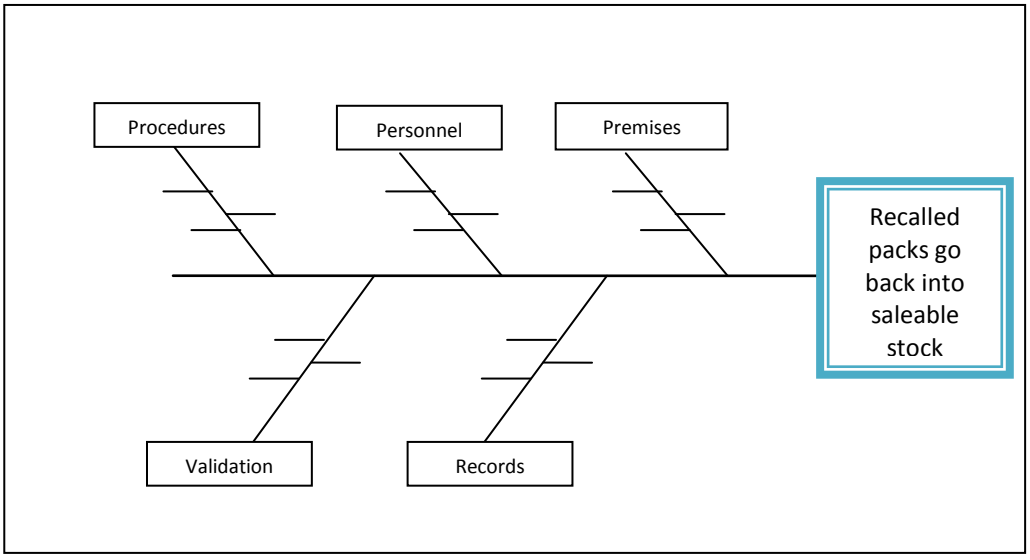
- **RPNs based on low occurrence and low detection ratings were assigned to the failure modes, but sufficient GDP controls are not documented to support these ratings**
  - What is the basis for the occurrence ratings of 1 & 2 that were assigned (scale of 1-10)
    - There are no GDP controls documented that will prevent the failure modes occurring
  - What is the basis for the detection rating of 1 and 3 assigned (scale of 1-10)
    - Does the RP always check all returned packs for signs of damage?
    - Are internal audits an effective GDP control to detect a failure to follow an SOP?
    - How often will this detection control work?
    - Why is training on the recall SOP documented as a means of detection?
    - Are the detection ratings justified?

- **The design of this tool leads to non-scientific risk-assessments, as it does not address the problems of subjectivity and uncertainty in risk assessment work**
  - Was it appropriate to decide that, because each RPN was less than 100, no risk-reducing actions were needed?
  - Is it really the case that nothing should be done to address the risk of returning recalled packs back to saleable stock (Failure Mode 2)?
    - Is this an objective or a subjective assessment of the risk?
    - In Failure Mode 2, how subjective is the Occurrence rating of 2? What if it were 4?
    - How arbitrary is the RPN cut-off value of 100 – what if it was 50?
    - Would this change the risk assessment?

How could have this Risk Assessment been done better?

- **Better Root cause Analysis Work**:
    - A thorough effort should have been performed to identify any potential weaknesses in the returns and recall processes that are relevant to these failure modes, especially FM 2.
    - This would have helped identify potential mechanisms whereby recalled goods might make their way back into saleable stock.
        - A walk-downs of the returns and recall areas should have been done
        - A review of the returns and recall procedures and processes should have been performed
        - A review of records relating to the handling of returned and recalled goods should have been performed
        - Past Inspection and Internal Audit findings in these areas should have been considered
        - Other important areas should have been looked at – e.g. goods-in
        - The evidence that returns and recall processes are effective should also have been considered – were any such assessments done?
    - Simple tools can be used to facilitate root case analyses - e.g. you can organise the analysis under several different headings using Fishbone Analysis techniques:
        - Processes/Procedures
        - People
        - Premises & Equipment
        - Records
        - Validation
    - This ensures that potential root causes <u>in different areas</u> get considered

Example of a simple fishbone to direct the Root Cause Analysis



How could have this Risk Assessment been done better?

- **Increased Focus on GDP controls:**
    - The exercise should have based each Risk Rating (Severity, Occurrence and Detection) on the relevant GDP controls that were (or were not) in place
        - e.g. what controls actually prevent recalled packs from reaching saleable stock again?
    - The effectiveness of currently in place GDP controls should have been considered when assigning those ratings
        - e.g. having segregated areas for recalled vs. returned packs going back to saleable stock is good, but are these areas actually being used as intended?
    - New GDP controls which are identified as being needed should have been documented
        - e.g. a controlled list of all current recall actions in place in the Returns area
        - e.g. a procedure for keeping this list continuously up-dated
    - Any validation or qualification requirements for the GDP controls that are identified as being important in risk control should have been assessed and documented
        - e.g. validation of certain aspects of the inventory management system may be important

- **Not relying on an RPN Threshold to decide when risk mitigation is needed:**
    - Given that only a small number of failure modes were looked at, the assessment could have considered what risk reducing actions might be considered for each of the failure modes
    - After all, each of those two failure modes is important and all efforts should have been made to reduce the risks presented by them

- **Several other important Failure Modes relevant to this Risk Assessment could have been identified:**
    - There are several other important failure modes that were not identified for the Returns area:
        - The risk of releasing partial packs back to saleable stock
        - The risk of releasing packs that contain a rogue medicinal product back to saleable stock
        - The risk of receiving a counterfeit pack in through the Returns area and releasing it to saleable stock

Items for consideration when Assessing the Potential Root Causes of Failure Mode 2

Premises & Storage Areas

1. Are the different storage areas in place clearly labelled - Returns area, Rejected Product area, Quarantined Product area, Recalled Goods area, Goods for Destruction area?

2. Is the returns area well organised, and is it clear where the boundary is between it and other areas?

3. Within the returns area, is there adequate differentiation between the storage of returned products awaiting processing, returned products awaiting return to saleable stock, and products received back in recall actions awaiting putting away?

4. Is the area in place for the storage of recalled goods adequately secure?

5. Is it clearly documented and understood how each storage area is to be used?
    a. Are recalled packs always stored in the recalls area?
    b. Are they ever stored in the quarantined area?
    c. If yes, why and how do they get moved into the recalls area?

6. Are recalled packs processed as returns in the same area where non-recalled returned goods are processed?

Personnel

1. Are personnel resources in the Returns Area sufficient to handle the volume of goods being received back via returns?

2. How robust has the training been on the procedures for the processing of recalled and returned goods?

3. What assessments have been performed on the effectiveness of that training?

Procedures

1. Is the Returns SOP clear on how to identify recalled packs in shipments of returns?
    a. How exactly is this done?
    b. Is there a list maintained of which products and batches are the subject of ongoing recalls?
    c. Is this a controlled list and how is it updated?
    d. What product details are documented on this list?
    e. Where is this list stored and how is it used?
    f. What role has the Recall SOP, if any, in identifying recalled goods in returns?

2. When a recall is announced, and if there are packs of the batch in stock at the time, when are these identified and moved into the recall area?

    a. Is this clearly proceduralised and whose responsibility is it to do this?

3. In the computerised stock management system
    a. Is it possible to assign a 'returned status' to product that is the subject of a recall?
    b. Is it possible to assign a 'saleable' status to product that is the subject of a recall?

4. In the returns area, how are controlled drugs that are the subject of a recall action handled?

Records

1. Are clear records made of the movement of goods into and out of the various storage areas - Returns area, Rejected Product area, Quarantined Product area, Recalled Goods area, Goods for Destruction area?

2. Is recall-related documentation, such as recall notifications and recall log-sheets, well organised and properly completed?
    a. Are product names, forms, strengths, batch numbers, expiry dates and MA numbers correctly documented on recall log sheets, etc?
    b. Are the sources of recalled packs always recorded?
    c. Is recall-related documentation stored in the correct folders / areas?
    d. What kind of returns documentation is supposed to accompany recalled goods from customers?
    e. Is it the same as that which is sent back with normal returned goods?
    f. What happens when the customer does not comply with your documentation requirement for recalled goods? Sometimes nothing

Validation

1. What evidence is there that the returns and recall processes are effective
    a. Has any validation work been done on them?
    b. Are there findings from Inspections, Internal Audits, Complaint Reports, etc., that these processes are not robust?

2. Has any validation work been performed on the IT Systems that support the Returns and Recall processes?
    a. Has the feature in the inventory management system that prevents recalled batches from being given a saleable status ever been challenged via validation testing?

Seven General Tips to Improve Risk Assessment exercises

- **Use Risk Assessment templates that are tailored for your business – GDP!**
    - Take an existing FMEA template and customise it so that the GDP controls applicable to each failure mode are focused on
    - e.g. Before the Severity rating, insert a column titled Back-up/Contingency Controls
    - e.g. Before the Occurrence rating, insert a column titled Preventative Controls
    - e.g. Rename the Detection Mode column to 'Detection Controls'
    - Advantage: this will ensure that scientific evident is documented to support the ratings that are assigned to each failure mode
    - Advantage: this will also let you identify those risks that have no GDP controls in place!
    - Advantage: this will help you identify when new GDP controls are needed

- **Ensure that your Risk Assessment procedure requires you to assess the <u>effectiveness</u> of the GDP controls before any Occurrence, Severity or Detection ratings are assigned**
    - If this was done above, the low detection rating that was assigned based on internal audits and training would probably not have been assigned and the risk would have been more scientifically assessed
    - Note: Just because a control may be in place, this does not mean that it will be effective at reducing the risk of concern.

- **Avoid using RPN Cut-off thresholds in Risk Assessments**
    - These do not have to be used, even with FMEA risk assessment tools
    - Instead, consider grouping the failure modes into bands in accordance with their RPNs (High Priority, Medium Priority, Lower Priority bands)
    - Advantage: this approach helps overcome some of the subjectivity in RPN estimates

- **Ensure that your Risk Assessment procedure addresses how to identify risks**
    - If brainstorming is to be used, put some guidelines in place as to how this should occur
    - Brainstorming sessions should have some structure to them and there should be a simple process in place for doing brainstorming
    - Appoint someone in your wholesale facility that who can develop an understanding of the factors that can adversely affect brainstorming sessions – very interesting area (human heuritstics)

- **Focus on 'Quality' over 'Quantity' when doing risk assessment work**
    - Risk Assessment can be very tedious and time-consuming work
    - It is better to assess well and scientifically a small number of risks rather than assessing hundreds of them only superficially
        - But the potential risks that are selected for formal assessment should be well chosen
        - Your risk assessment procedure should address how to do this

- **Design your Risk Assessment process to ensure that it adds value. For example:**
    - Properly designed Risk Assessment tools will identify those GDP controls that are important in managing risks!
    - You can then use those findings when deciding what parts of your wholesale processes need to be validated or what equipment needs to be qualified
    - In this way, a risk assessment approach can be used to determine the scope and extent of validation and qualification
    - This will both protect patients and save you time and money!!

- **Keep it Simple!**
    - Design your risk assessment process so that it is simple to use and easy to understand
    - It should reflect the current level of experience at your company in risk assessment
    - Use terminology that is clear and easy to understand –don't have to use terms like 'Failure Mode'
    - Pick risk assessment tools that are right for the task - you don't have to always use FMEA - other risk assessment tools can be very useful, e.g. HACCP, or you can design your own!!

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