**Implementation tool for**

 **the NCEPOD report**

**Highs and Lows**

Fishbone diagrams

Fishbone (or Ishikawa) diagrams are used to consider cause and effect. The starting point is a problem or incident and the diagram can help you to think about what contributed to it. All possible causes should be considered, not just the obvious or major ones.

We have provided some fishbone diagrams with issues that were identified during the study. Use any of these that are relevant to your organisation to start identifying possible causes. Major factors should go in the larger boxes at the end of the branches – more specific causes within those factors should go on the branches and you may even want to add contributing sub-branches. The diagrams we have provided are a starting point and should be adapted and expanded to fit your need. The final diagram is blank and can be copied or printed out blank for any additional issues you have identified.

This should be done as a multidisciplinary/team exercise to get different perspectives and as many potential causes as possible. Other quality improvement techniques, such as five whys and process mapping, could be used to help. We have included blank action plans for you to plan changes to practice and/or more quality improvement work.

Example:

Patient population

**Patients not concordant with medication**

Communication

Medication

Side-effects

Not sure when to take

Not felt to be working

Not sure how to take

Written information not always given

Unable to collect prescription

Not keen to have meds

For more information on quality improvement please see the following sources or contact your local Quality Improvement department:

Health Foundation: <https://www.health.org.uk/collection/improvement-projects-tools-and-resources>

King’s Fund: <https://www.kingsfund.org.uk/topics/quality-improvement>

NHS Improvement: <https://improvement.nhs.uk/resources/cause-and-effect-fishbone-diagram/>

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**Patients are not being closely monitored**

Suggested questions to ask:

Who is responsible for monitoring patients with diabetes undergoing surgery?

Do local care pathways include glucose monitoring at sign-in and sign-out stages of the surgical safety checklist, in anaesthetic charts, in theatre recovery and in early warning scoring systems?

Are system markers and alerts used to raise awareness of glucose levels?

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| **Problem identified** | **Action required** | **By when?** | **Lead** |
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**Elective surgery in patients with diabetes was cancelled**

Suggested questions to ask:

Why was surgery cancelled? Was it due to poor diabetes management?

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**Patients with diabetes are fasting for prolonged periods prior to surgery**

Suggested questions to ask:

Does local policy specify that a patient with diabetes should not miss more than one meal?

If a patient misses more than one meal is their care escalated to the responsible medical team?

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**Referral letters do not contain information about the management of patients’ diabetes in the community**

Suggested questions to ask:

Does the local template include diabetes management?

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**Diabetes teams are not being consulted pre-operatively**

Suggested questions to ask:

Are staff aware of how and when to involve the diabetes team?

Is diabetes management included in surgical pathways?

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**Nutritional assessments were inadequate**

Suggested questions to ask:

When, and by who, should assessments be carried out?

Is MUST used routinely?

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**No clear plan for the management of patients’ diabetes on the day of surgery**

Suggested questions to ask:

Where in the notes should a management plan be found?

Who is responsible for ensuring that a management plan is available?

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**Discharge arrangements for patients’ diabetes are inadequate**

Suggested questions to ask:

 Which disciplines are involved in arranging discharge?

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Suggested questions to ask:

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