Improving glycaemic control in vascular patients

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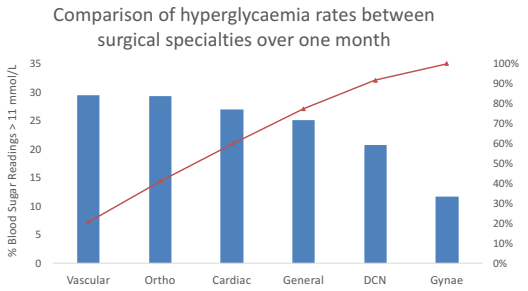
Quality issue / initial problem

Poor glycaemic control in the perioperative period is associated with increased morbidity and mortality. Hyperglycaemia is common and particularly prevalent in diabetic patients undergoing emergency vascular surgery.



Specific aim

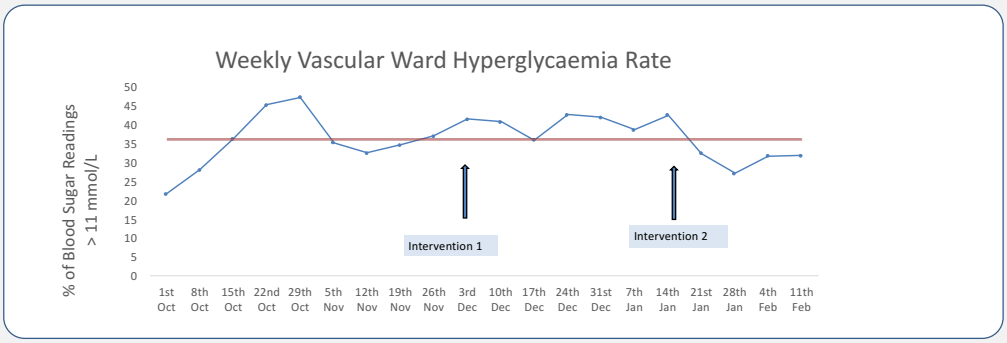
To reduce the incidence of hyperglycaemia (BM >11 mmol/L) in the first 48 hours post-operatively, in diabetic patients requiring emergency vascular surgery, by August 2019.

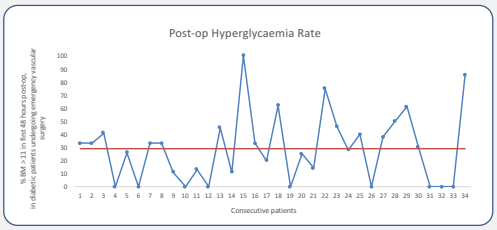
Measurement of improvement

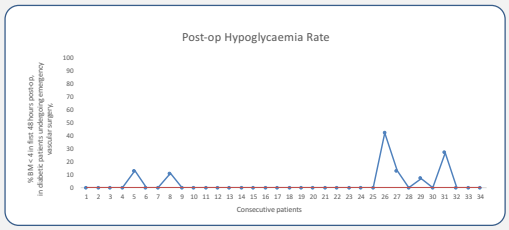
The % of blood sugar readings taken on the vascular ward which were > 11 mmol/L each week

Outcome measure:
The % of BMs > 11 mmol/L, in diabetic patients, in the first 48 hours after emergency vascular surgery.

Balancing Measure:
The % of BMs < 4 mmol/L, in diabetic patients, in the first 48 hours after emergency vascular surgery.







Tests of change

- New protocol made visible on the wall in the doctors room
- Education session with FY1s on vascular ward, emphasising the importance of treating hyperglycaemia
- Protocol put in notes of all diabetic patients on the vascular ward

Tools

Pareto Chart
Driver Diagram
Fish Bone
Process Map

Effects of change

Raising the profile of the importance of glycaemic control during the perioperative period, through educating FY1s and making the new protocol to aid management easily available. Hopefully this will reduce post-operative complications such as wound infection.

Lessons learned and message for others

To understand the problem it is important to speak to those on the 'shop floor'.
Diagnostic tools are useful to identify a wide range of potential solutions.
The first solution may not always be the best, keep working through the list as there may be a more effective one.

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