

Use of Quality Improvement (QI) Suggestions Board to develop QI projects

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Introduction and aims

The initiative behind the use of a Quality Improvement (QI) suggestion board is to engage all members of the multi-disciplinary team (MDT) to consider and suggest any QI projects. We have a QI board located within our Paediatric Intensive Care Unit and report an example of how a suggestion on the QI board led to a QI project.

Storage of human albumin solution (HAS) 4.5/5% as stock had been a well-established practice on PICU. Yet HAS is used rarely and there is no robust evidence to suggest that it is superior to crystalloids as a fluid bolus (Roberts et al, 2011).

The means by which the nursing staff were required to check the stock levels each shift and record the use of HAS when administered was not robust, leading to potential inaccuracies in the recording of the administration of a blood product.

The aim of this project was to improve the storage and recording of HAS.

Methods

The need for HAS storage review was raised using the QI suggestions board. The suggestions are discussed twice weekly via MDT board huddle and the feasibility of projects classified. This project was deemed feasible, with the submitter allocated as project lead. The first step was to review the current storage and use of HAS:

	<u>Positives</u>	<u>Negatives</u>
40 bottles of HAS kept as stock on unit – costing £1050. Stock also required within transfusion department.	- HAS immediately available	- No evidence that HAS needed in an emergency - Cost implications of standing stock
Stock recording on paper sheets - date/time/patient details filled in for each unit used. Paper then sent to transfusion.	- Access for unit staff to monitor usage - Information collected and sent to transfusion	- Paper easy to damage/lose - Frequent mistakes made when manually inputting data
Stock checked by two nursing staff (usually senior staff) twice a day – approx. 5 minutes per day.	- Staff ensure stock levels are correct - Stock ordered if running low	- Frequent mistakes mean checking can be arduous - 61 nurse hours/year spent checking HAS stock

The stated aim of the project was to improve the storage and recording of HAS usage. Following the investigation into the current clinical practice, which was completed in conjunction with both the transfusion and laboratory departments as key stakeholders, two options were proposed:

1. HAS stock is labelled as emergency red cell units as a more robust system.
2. HAS stock is removed entirely and ordered only as required in line with other blood products.

Following consultation with the intensivist team, option 2 was chosen. HAS was therefore removed from PICU as stock, with the change communicated widely to all relevant staff groups.



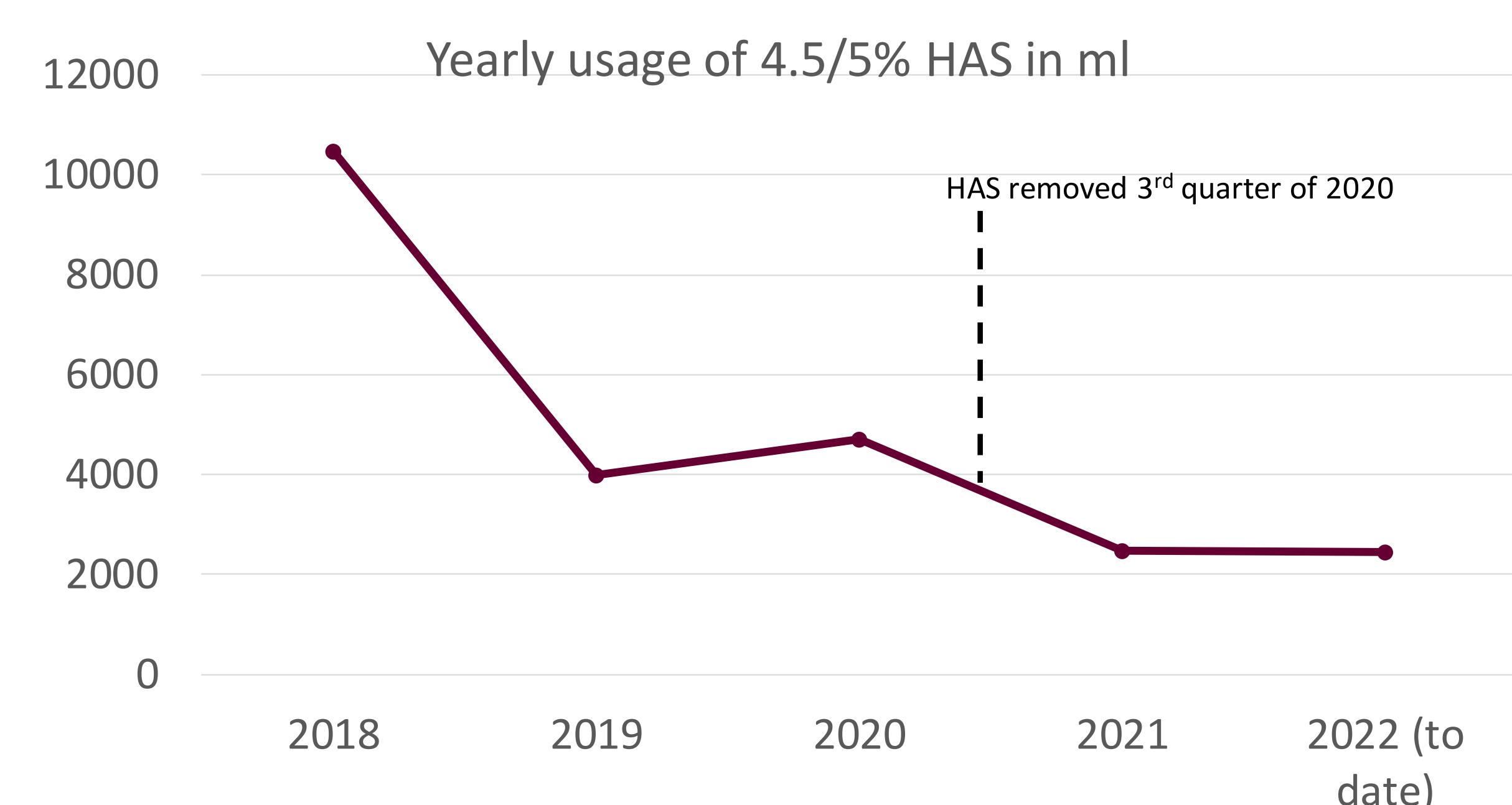
Results

The removal of HAS had two immediate outcomes for PICU:

1. Saving of £1050 as per the standing stock cost
2. Saving of 61 nurse hours/year as stock no longer needed to be checked – this equates to 1.6 weeks of full time nursing work.

A reduction in HAS usage (see graph 1) was also noted, from 4706 ml/year in 2020 to 2064mls to date for 2022.

It is possible that this highlights a gap in practice vs evidence, in that HAS was being used due to availability rather than best practice.



Discussion and conclusion

As has been reported by the Care Quality Commission (CQC), NHS trusts with a culture of quality improvement are delivering the highest quality care (CQC 2018). The running of the QI board is one such way that QI may be embedded into an organisation and engage the entire workforce.

By effecting an immediate cost saving, a saving in senior nurse time and by ensuring that a robust and safe mechanism for accessing and recording the use of a blood product is in place, this project has shown that any member of the MDT, when empowered, may make a positive change.

The QI board has been a successful tool in this establishment as a means for the MDT to both initiate and lead change. Its regular use has yielded wide ranging projects, such as this, that have the capacity to improve patient safety and staff experience.

References

Care Quality Commission. Quality improvement in hospital trusts: sharing learning from trusts on a journey of QI 2018.

Roberts I., Blackhall K., Alderson P., Bunn F. and Schierout G. Human albumin solution for resuscitation and volume expansion in critically ill patients. Cochrane Database Systematic Review. 2011; CD001208.