

Blood sampling volume - Policy

Blood Matters audit: 2019

Iatrogenic anaemia is a term applied to the anaemia that results from blood loss due to repeated blood sampling to obtain specimens for laboratory testing. Strategies to reduce iatrogenic blood loss include altering of test ordering behaviour (limiting the number of tests ordered), micro-sampling, reinfusion of blood drawn from indwelling devices and point of care microanalysis (NBA 2014). The use of micro-sampling has been shown to significantly reduce the volume of blood loss and has been associated with a significant reduction in blood transfusion (Tinmouth 2008). Implementing strategies to reduce iatrogenic blood loss in an organisation requires strategic planning, communication and implementation with relevant stakeholders such as medical staff, laboratory scientist and nursing staff.

References Tinmouth, A, McIntyre, L, Fowler, R. Blood conservation strategies to reduce the need for red cell transfusion in critically ill patients, CMAJ 2008;178:49-57. National Blood Authority Patient Blood Management Guidelines Companions No 17 Reduce iatrogenic blood loss (2014) <https://www.blood.gov.au/patient-blood-management-guidelines-companions> 'True Blood' The Critical Care Story: An audit of blood sampling practice across three adult, paediatric and neonatal intensive care settings, Australian Critical Care 29 (2016) 90-95.

Name of health service: *

Email address of person completing the survey: *

Policy

Does your health service have a policy to minimise the volume and frequency of blood sample collection to prevent iatrogenic anaemia? *

- Yes
- No
- Unsure

If you have a policy:

What was the date of last review for your policy: *

Which clinical areas within your health service does the policy cover *

- ICU
- Paediatrics
- General wards
- Emergency department
- Haematology/oncology ward
- None of the above
- Other:

Sample only - submit online

Which strategies are stipulated in the policy to support minimal blood sampling: * (Please choose **all** that apply)

- small volume phlebotomy tubes (e.g., using paediatric sample tubes or sample tubes with thick walls)
- closed system sampling (where samples are taken from central lines (Hickman's) reinfusing initial blood taken or using the initial draw for blood cultures)
- frequent evaluation of routine blood sampling orders (Reducing the number of samples taken from the patient, such as not doing a daily cross match specimen)
- bundled scheduling of blood sampling
- point of care testing (e.g. hemoCue)
- non-invasive monitoring
- charting of cumulative daily phlebotomy loss
- none of the above

Strategies

Whether formal guidelines exist or not, do any of the below areas within your health service practice minimal blood sampling? *

(Please choose **all** that apply)

- ICU
- Paediatrics
- General wards
- Emergency department
- Haematology/oncology ward
- None of the above
- Other:

Whether formal guidelines exist or not, are any of the following strategies (which support minimal sampling) currently in place: *

	Yes - to minimise iatrogenic anaemia	Yes - other reasons	No
Small volume phlebotomy tubes (e.g., using paediatric sample tubes or sample tubes with thick walls)			
Closed system sampling (where samples are taken from central lines [Hickman's] reinfusing initial blood taken or using the initial draw for blood cultures)			
Frequent evaluation of routine blood sampling orders (Reducing the number of samples taken from the patient, such as not collecting a cross match specimen daily)			
Bundled scheduling of blood sampling			
Point of care testing			
Non-invasive monitoring			
Charting of cumulative daily phlebotomy loss			

If any of the above answers include “yes – for other reasons”, please comment on what the reasons may be, e.g., Point of care testing is used in some areas for convenience rather than for the purpose of minimal sampling.

Whether formal guidelines exist or not, is specific education regarding iatrogenic anaemia provided? *

- Yes
- No
- Unsure



Do any of the following practices occur within your health service that may potentially increase the number of samples taken? *

(Select **all** that apply)

- Specified test set – (i.e. where a specific patient group have specified tests taken at stipulated time points regardless)
- Routine blood sampling orders (i.e. daily FBE regardless of clinical condition of the patient)
- None of the above

If your health service has an electronic medical record (EMR), are blood tests managed as order sets? *

- Order sets prescribed – cannot be modified
- Order sets prescribed – but can remove specific tests if not needed
- No order sets prescribed
- Not applicable

If no policy is in place or where minimal sampling is not practised, please indicate why? * (Select all that apply and provide a comment, where applicable)

- Small volume tubes are not available
- Small volume tubes are not suitable for our pathology provider's analysers
- Practice is not supported by pathology/laboratory- (other than equipment restrictions)
- Practice not supported by management
- Practice of returning blood from central lines not supported
- Resources to instigate and sustain change not available
- Practice has not been considered
- No known barriers
- Not applicable, health service actively supports and implements minimal sampling
- Other:

Please indicate if the current analysers at your health service have the ability to take small volume sample tubes. (Select all that apply)

- Full blood examination
- Group and Save
- Biochemistry
- Routine coagulation testing
- No lab onsite
- None of the above

When new tenders for analysers are raised, do they include the specification to allow for small volume testing? *

- Yes
- No
- Unknown
- No lab onsite