



BACKGROUND

- The use of fresh frozen plasma (FFP) and extended life plasma (ELP) is largely guided by consensus recommendations due to lack of quality data¹.
- Studies showed widespread misuse of FFP products, which is concerning given the potential serious side effects associated with inappropriate use of FFP and ELP³.

AIMS & OBJECTIVES

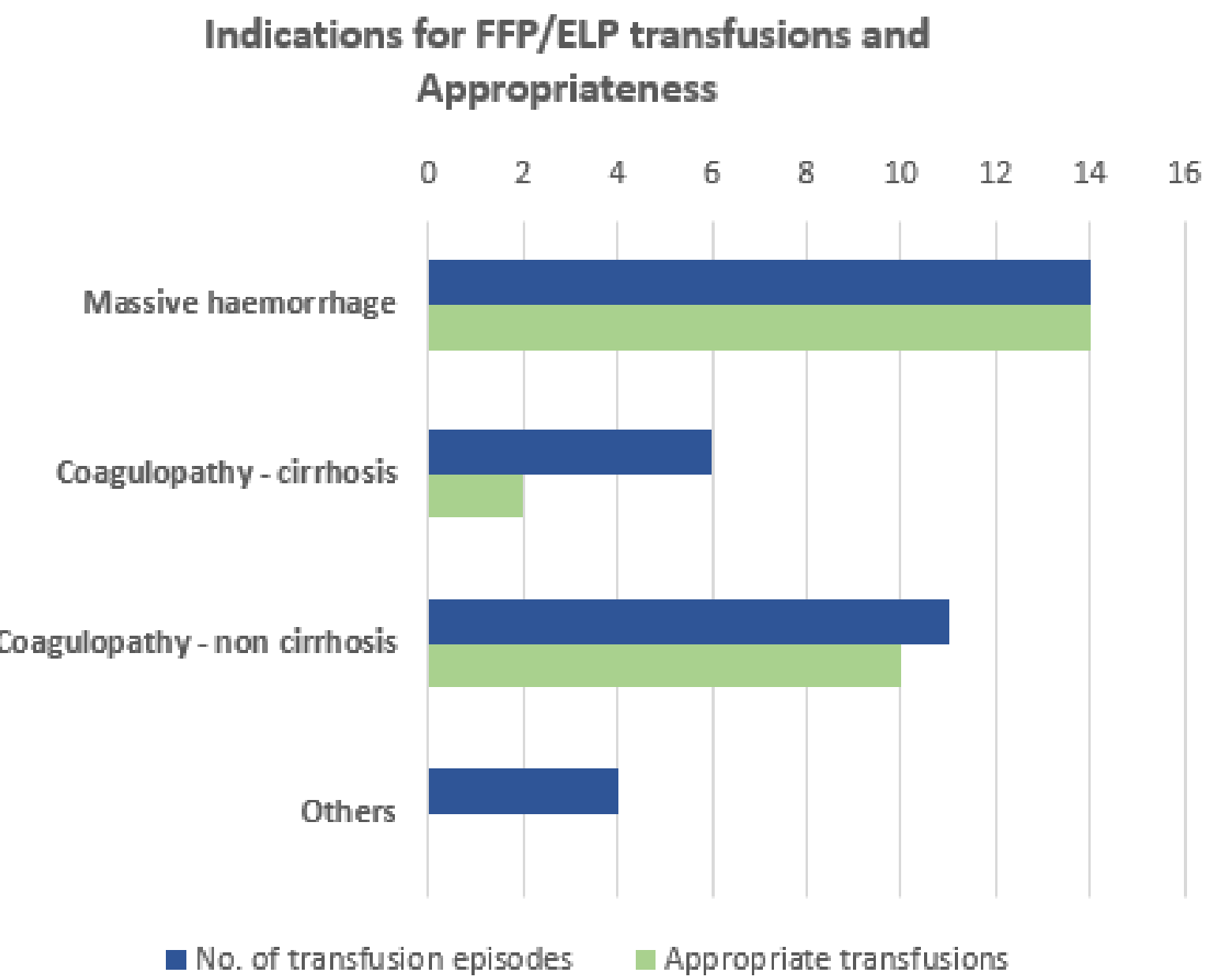
- To assess the appropriateness of FFP and ELP transfusions at Northern Health, Victoria against available transfusion guidelines.
- To compare our audit with a recent Australian FFP audit¹.

RESULTS & DISCUSSIONS

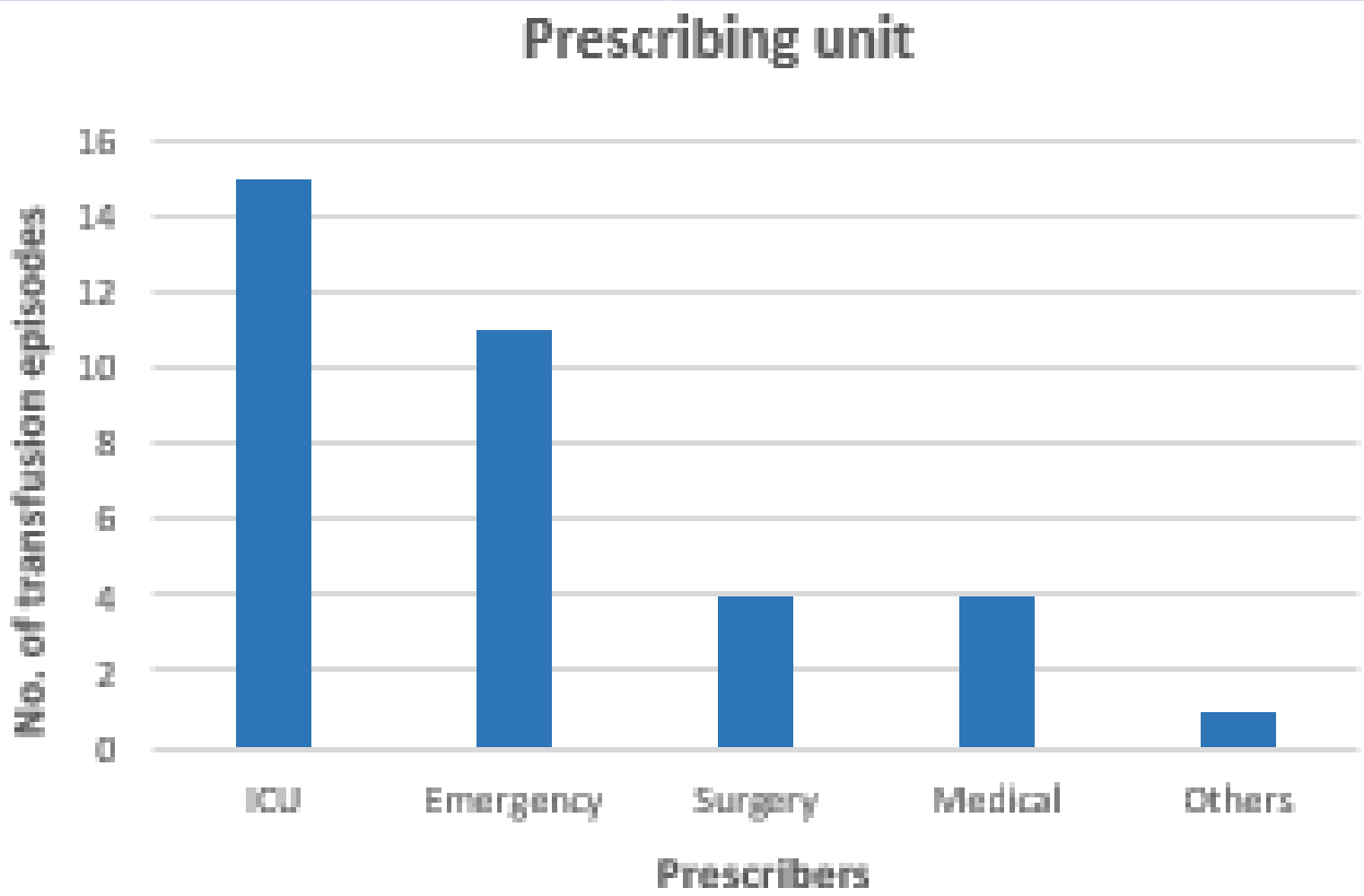
- Total of 28 patients received 75 units of FFP and 3 units of ELP in 35 transfusion episodes.
- Mean age 57yo (SD 16.9).
- 74.3% (n=26) transfusion episodes were appropriate, higher than the Australian audit (61%)¹.
 - Excluding massive haemorrhage, 46.2% transfusions were appropriate (n=12) cf. 37% in the Australian audit¹.
- One reported transfusion-related anaphylactic reaction.
- In conclusions, our local audit showed a higher rate of FFP/ELP appropriateness compared to the 2024 Australian Audit¹. There remains scope for improvement particularly for transfusions beyond massive haemorrhage.

METHODS

- All FFP and ELP issues at Northern Health from 1 October 2024 to 31 March 2025 were retrospectively reviewed.
- Appropriateness of transfusion was defined according to current recommendations in the recent Australian FFP audit¹ and cross-reviewed by two independent reviewers.
- Definition of appropriate FFP/ELP transfusions included:
 - Total plasma exchange for thrombotic thrombocytopenia purpura,
 - major haemorrhage protocol,
 - warfarin reversal where PCC not available AND emergency reversal required,
 - INR >1.5-1.8 when bleeding or pre-procedure/surgery, and
 - chronic liver disease prior to high risk procedure AND INR >2.5.
- Descriptive and comparative analysis were performed.



Indications	No. of FFP/ELP transfusion episodes
Coagulopathy – cirrhosis	6/35
Bleeding/pre-procedure	5
Severe anaemia without bleeding	1
Coagulopathy – cirrhosis	11/35
Bleeding/pre-procedure	8
Disseminated intravascular coagulopathy	2
Acute liver failure	1



REFERENCES

1. Clarke L, Maxwell E, Roberts T, Bielby L. Australian fresh frozen plasma audit: A National Blood Transfusion Committee and Blood Matters collaboration. Transfusion 2024.

2. Australian Red Cross Lifeblood. Summary of the Australian patient blood management guidelines. 2019.

3. Yang L, Stanworth S, Hopewell S, Doree C, Murphy M. Is fresh-frozen plasma clinically effective? An update of a systematic review of randomized controlled trials. Transfusion. 2012; 52(8):1673-86