

Completing the prescription chart

Carolyn Carveth-Marshall

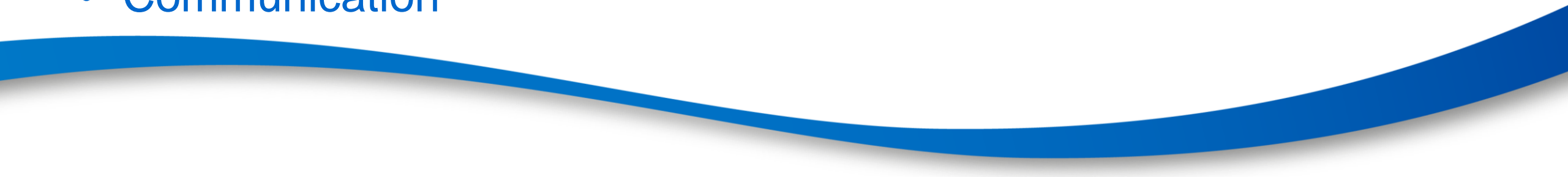
Transfusion Practitioner

James Cook University Hospital


Core principles of authorising the blood product

- Thorough clinical assessment has been undertaken and patient is fit for transfusion
- Stay within your agreed area of competency

Then ...

- Patient ID
 - Documentation
 - Communication
- 

Minimum Dataset

- Core identifiers
 - Full name
 - Date of birth
 - Unique ID number
 - Type of components
 - Red cells - FFP
 - Platelets - Cryoprecipitate
 - Date & time of transfusion
 - Special requirements if applicable
 - Signature and contact details
- 

Volume Adults

Red cells

Adult = 4ml/kg will typically give a Hb increment of 10g/L.

Platelets

1 pooled (4 donors) or apheresis unit

FFP

15ml/kg

- 50kg - 65kg 3 units
- 70kg - 85kg 4 units
- 90kg - 100kg 5 units

Cryoprecipitate

If Fibrinogen <1.5g/l (<2g/l in pregnancy)

- 2 pooled packs (10 donors)

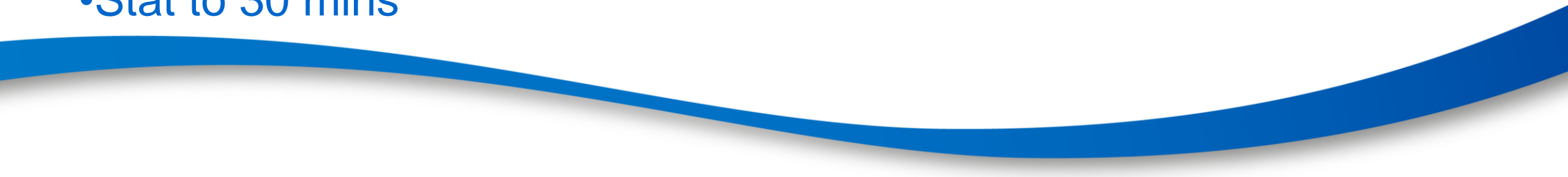
Rate

Dependent on clinical condition and co-morbidities

Red cells

- over 90 mins to 3 hours

Platelets

- over 30 minutes
 - FFP**
 - Stat to 30 mins
 - Cryoprecipitate**
 - Stat to 30 mins
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Paed/neonates

Transfusion formulas

- Top-up 10-20 mL/kg, (typically 15 mL/kg over 4 hours)

Desired Hb - Actual Hb
 x weight x Factor 3 to 5
 ÷ 10 ÷ hrs

15kg child with hb of 70g/dl; target Hb 100g/dl

Desired Hb = 100 - Actual Hb (70) = 30
 X 15kg = 450 x 3 = 1350mls ÷ 10 = 135mls
 ÷ 3 (hrs) = 45mls/hr
 Total amount transfused = 135mls

Platelets volume and rate formula

<15 kg child

10–20 ml/kg over 1 or 2 hours

>15 kg child

Single apheresis unit over 1 or 2 hours

FFP volume and rate formula

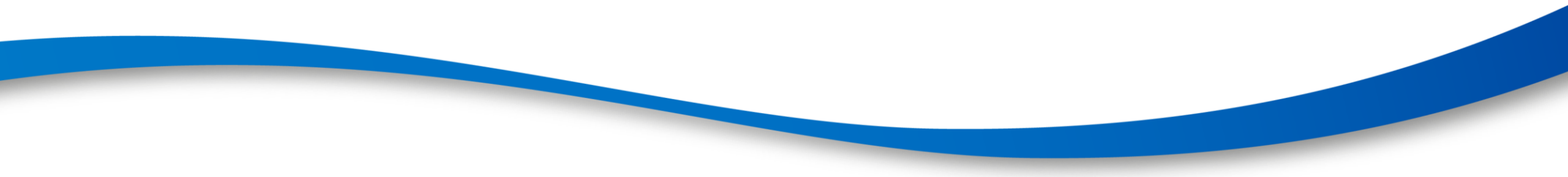
10 to 20 ml/kg over 1 or 2 hours

Cryo volume and rate formula

5ml/kg over 1 or 2 hours

Medication during/pre transfusion

E.G. Frusemide, Hydrocortisone, Piriton, Paracetamol

- Determined by local policies/assessment procedure
 - Assessment should highlight if the patient is fit for transfusion
 - Has the decision been made to administer medication
 - Do you need to challenge this prior to transfusion
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Questions ?

