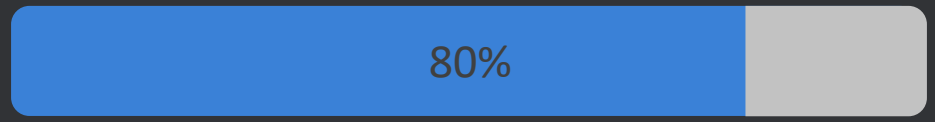
The TP role in Belgium

Jana Vanden Broeck

Health
Food Chain Safety
Environment

BeQuinT
Belgian Quality in Transfusion

TP2024 (15 May)



Health
Food Chain Safety
Environment

University
Hospital
Brussels

TP: what & why?

Goal: **to improve quality and safety of transfusion** **&** **support the implementation of PBM**

Haemovigilance

Policy & procedure development/implementation

Audit/compliance monitoring

Education

Patient information

Reducing iatrogenic anemia
Preop anaemia management
…

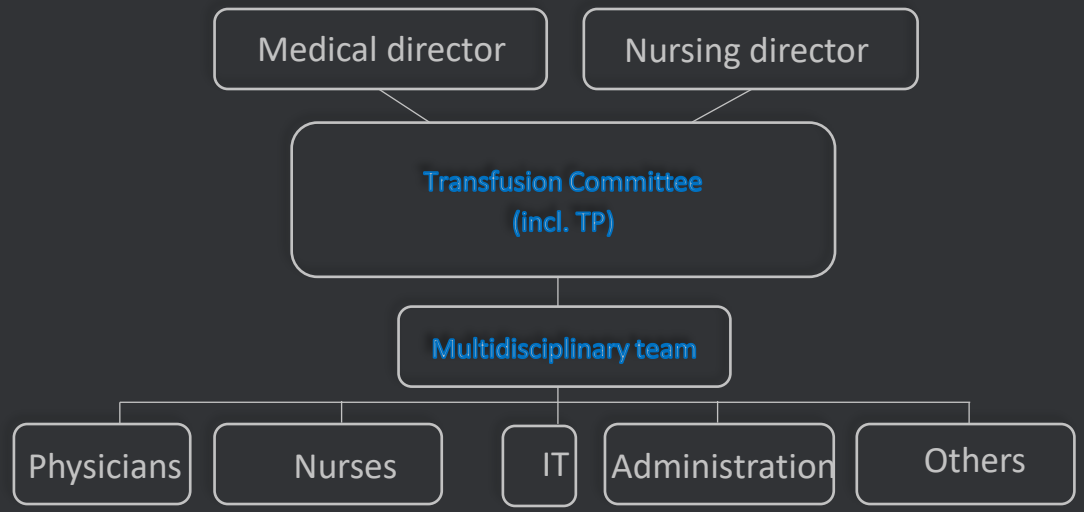
between blood bank lab & wards

< Transfusion Committee

TP – national infrastructure: Belgium

Continuous funding of hospitals to improve transfusion quality system since 2014: 4.340.000 EUR

⇨ For each hospital: lump sum 10.200 EUR + amount calculated based on blood consumption & hospital beds



Belgian “structure”

- **Federal:**

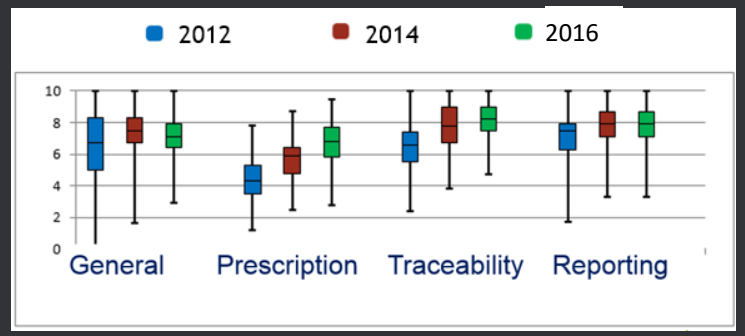
- **Communities:**

- **Professional associations:**

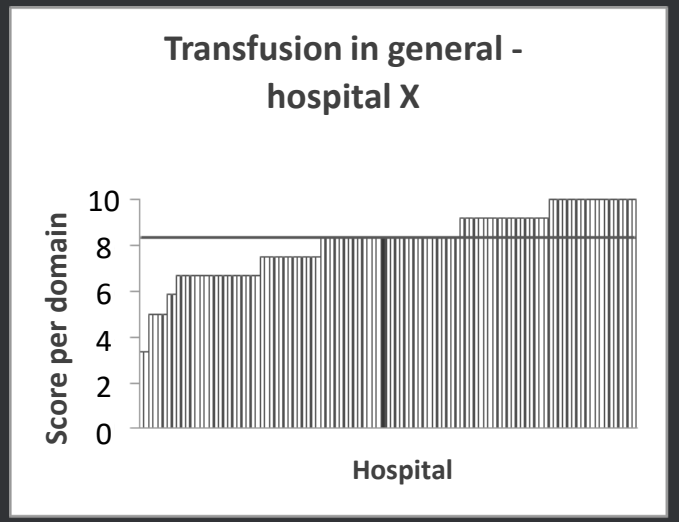
Belgian Society of Anesthesiology, Resuscitation, Perioperative medicine and Pain management

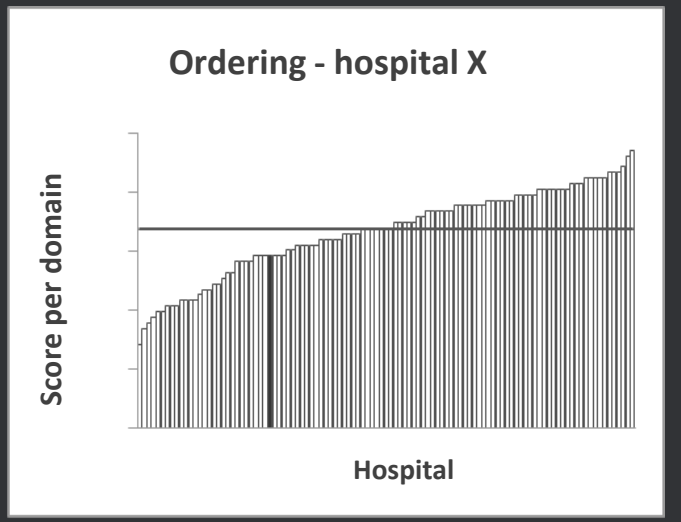
Scientific Association Transfusion Flanders

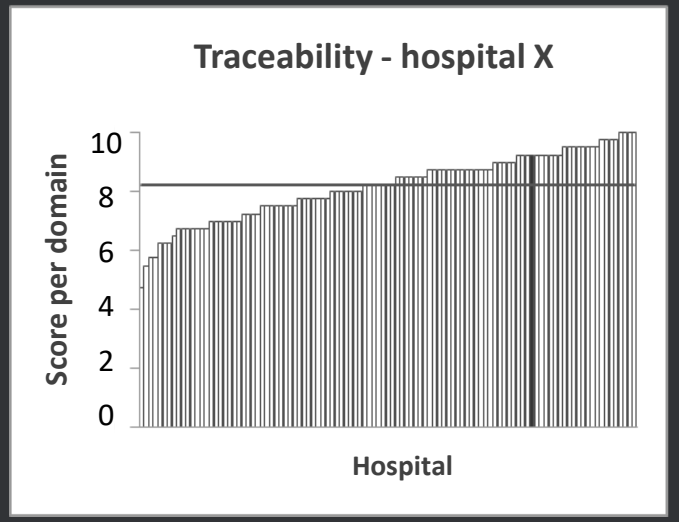
National survey 2012-16: quality of transfusion practice

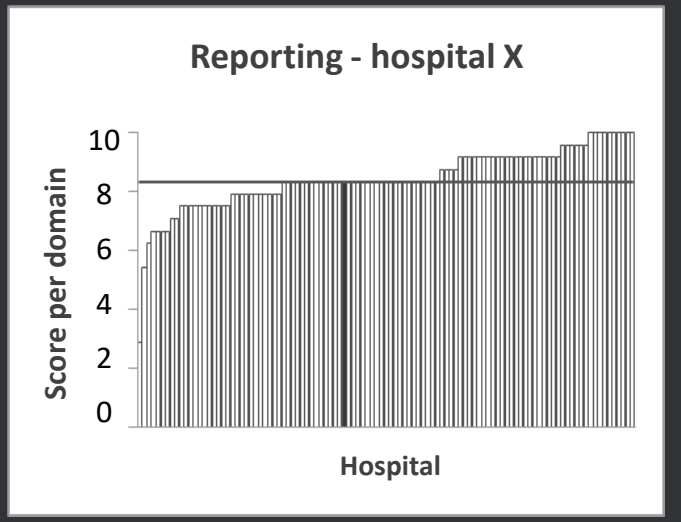


Benchmarking



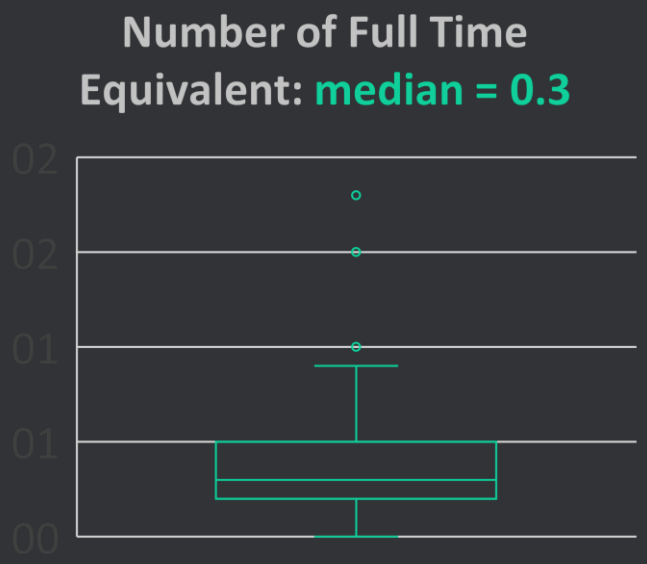






Number of TPs in Belgium

- 2020: In 88.5% of hospitals a TP is appointed (2016: 92.5%, 2014: 80%)
- Hospitals with TP (n=85):

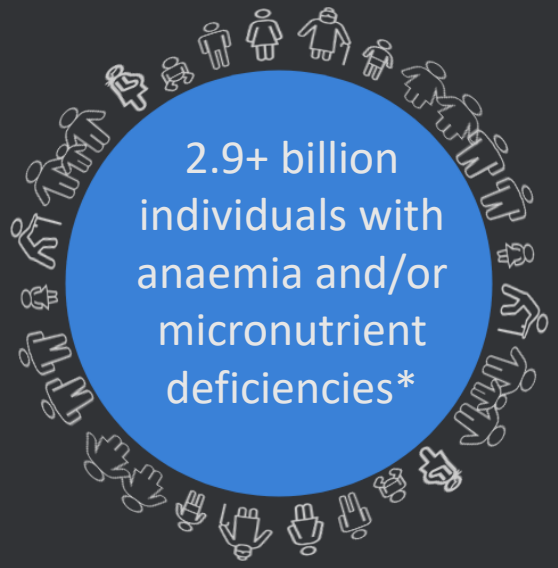


29 hospitals have a TP with allocated time to work on PBM

BeQuinT?

Why is BeQuinT important?

Blood is costly



Anaemia is a widespread problem

Guaranteeing blood supply

https://www.health.belgium.be/en/bequint

Volksgezondheid
Veiligheid van de Voedselketen
Leefmilieu

*Hofmann et al. Anesth Analg. 2022;135(3)511-523.

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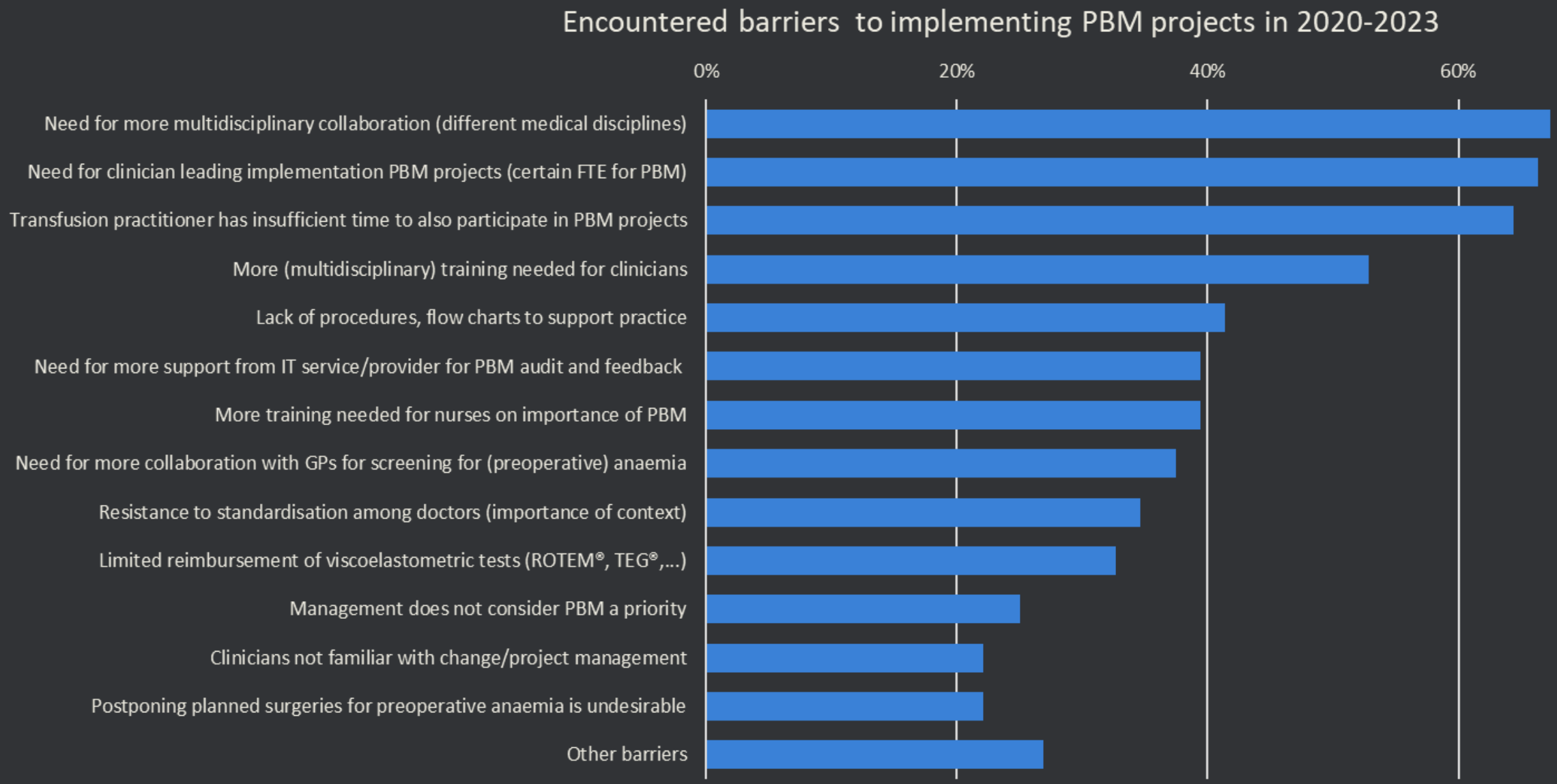
1. Improving quality of transfusion practice

2. Optimising blood use ⇨ implementing PBM



[n=104]

[Barriers stated >20% of hospitals]

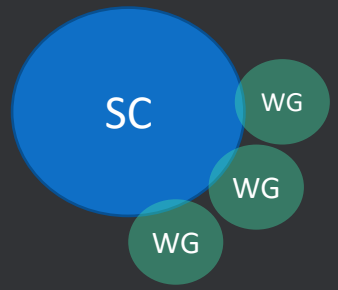
Strategies:

Structural:
legislation & financial

Data collection, analysis
& feedback

Education

Guidance



Data collection, analysis & feedback

Need for national PBM benchmarking

Haemovigilance benchmarking [FAGG?]

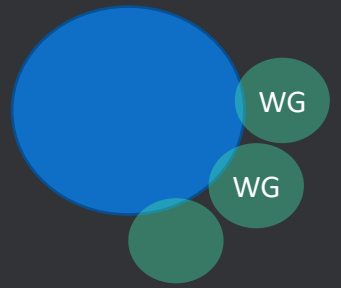
National database antibodies

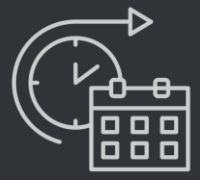
Guidance

O negative RBC [Hoge Gezondheidsraad]

PBM in obstetrcs

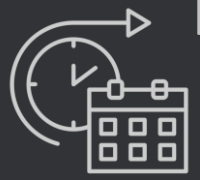
PBM for GPs





National blood shortage plan [+ stakeholders]

Education



Need for sound PBM training and certification

Education

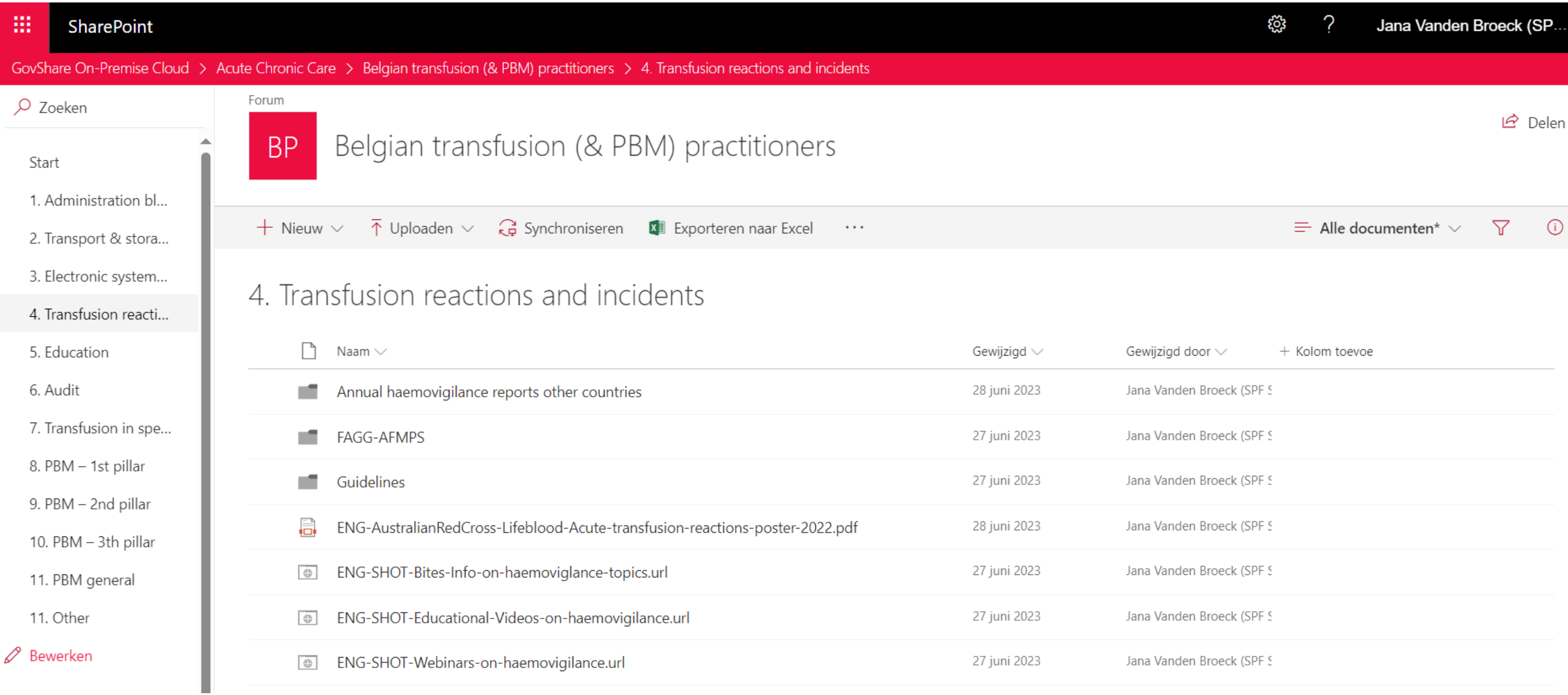
Webinars since pandemic

1. Results PBM survey BeQuinT + 2 PBM experts (UK)
2. Optimizing the perioperative management of anti-coagulants and anti-aggregants
3. Single unit transfusion policy of RBC
4. Visco-elastic testing as a PBM tool in today clinical practice
5. How to manage preoperative anaemia?
6. Blood conservation strategies
7. Reduction of iatrogenic anaemia
8. PBM in obstetrics

Interactive workshops for TPs

1. Retrospective analysis of transfusion incidents
2. (PBM) project management
3. Local transfusion audit

SharePoint for TPs



SharePoint for TPs

Zoeken op deze site

- Start
- 1. Administration bloo...
- 2. Transport & storage
- 3. Electronic systems (...
- 4. Transfusion reaction...
- 5. Education
- 6. Audit
- 7. Transfusion in specif...
- 8. PBM – 1st pillar
- 9. PBM – 2nd pillar
- 10. PBM – 3th pillar
- 11. PBM general
- 11. Other
- Bewerken

Agenda

+ Gebeurtenis toevoegen

23 JUN. – 27 JUN. ISBT Congres
zo 23 jun., Hele dag

Alles weergeven

Forum →

Belgian transfusion (& PBM) practitioners Forum KOPPELINGEN BEWERKEN

Forum

⊕ nieuwe discussie

Recent Mijn gesprekken Onbeantwoorde vragen ...

Plasma
Beste,Zijn er ziekenhuizen waarbij ontdooid plasma wordt meegeven tijdens een MTP?M...
Door Sonja Vanhaeren | 18 maart

Kalilab
Bonjour à tous,Je cherche un contact chez Dedalus pour le logiciel Kalilab.Quelqu'un utili...
Door Carine Maggetto | 16 februari

Bloedproducten en TPN via een PICC katheter
Beste,In de richtlijnen van bloedtransfusie wordt beschreven dat men via een katheter m...
Door Sonja Vanhaeren | 15 november 2023

Bloedafhaling door zorgkundigen
Goeiemorgen allemaal,bij ons in het ziekenhuis luidt het protocol voor bloedafhaling ...
Door Heidi Cardinaels | Nieuwste antwoord door Sonja Vanhaeren | 15 november 2023

New documents
In deze discussie zal ik meedelen welke documenten ik heb opgeladen op deze Sharepoi...
Door Jana Vanden Broeck (SPF Santé Publique - FOD Volksgezondheid) | Nieuwste antwoord door Jana Vanden Broeck (SPF Santé Publique - FOD Volksgezondheid) | 18 oktober 2023

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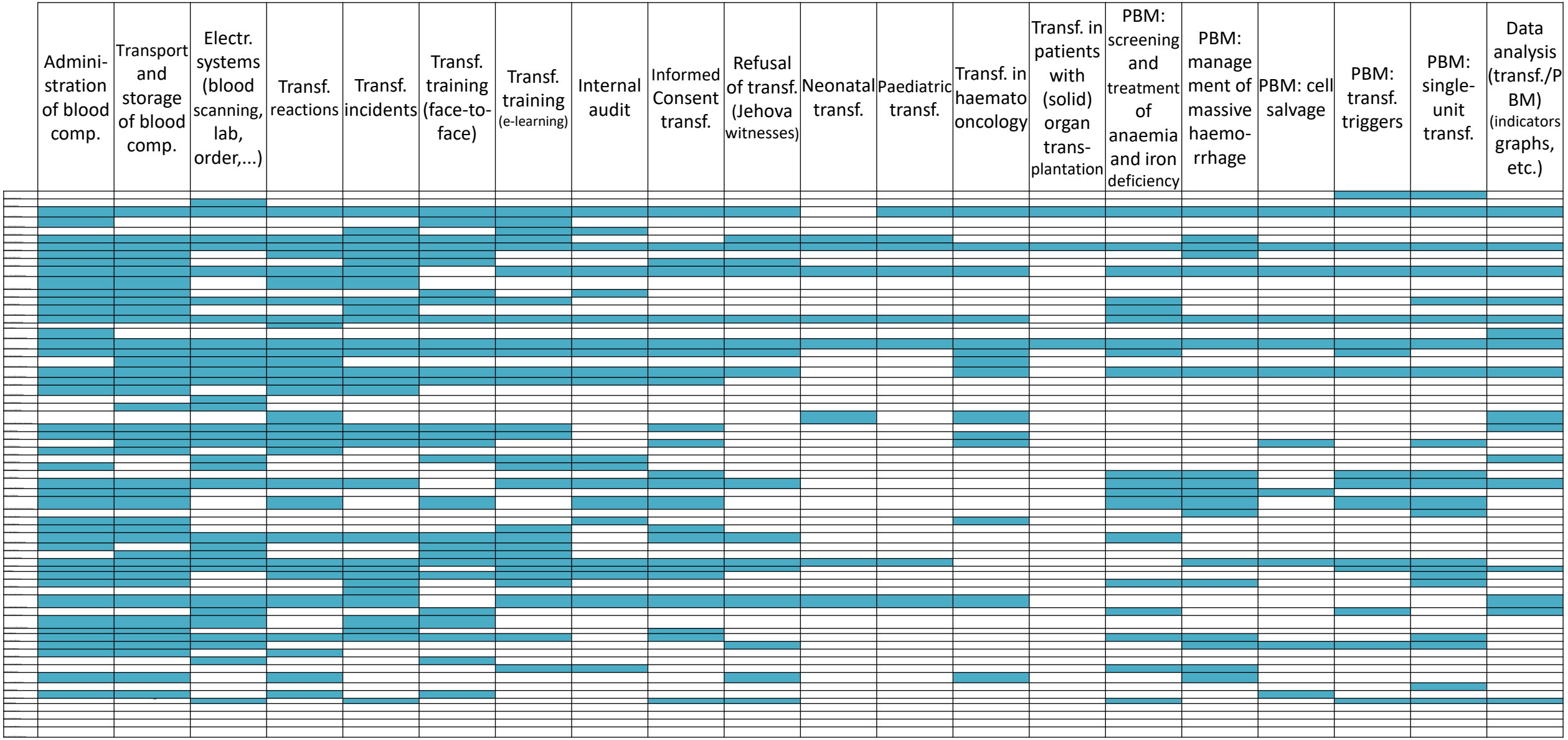
Environment

Short survey (new) TPs when signing up for SharePoint

TPs could contact each other with questions on specific topics. **On which topic(s) could fellow TPs contact you for advice?**



Short survey (new) TPs when signing up for SharePoint

I would like to contribute the following (for Sharepoint and/or subsequent meetings)

- **Protocol** about:
  - transport & storage of blood components
  - scanning of blood components (at least before start transfusion)
  - transfusion reactions
  - informed consent transfusion
- **PPT** for training:
  - transfusion basics for nurses
  - scanning of blood components, electronic order/lab system
- Contribute to document '**Frequently Asked Questions**' about:
  - blood scanning (Cybertrack, GLIMS, HiX,...)
  - Informed Consent for transfusion
  - practical aspects of implementing preoperative screening and treatment of anaemia
- Give a **presentation** on 1 of my projects to other TPs
- None of the above

Median of 0.3 FTE for TP role

Haemovigilance

Policy & procedure development/implementation

Audit/compliance monitoring

Education

Patient information

Reducing iatrogenic anemia
Preop anaemia management
…

⇨ Project & time management!

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Environment

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Training (PBM) project management

PROSOURCE
prosource.be

Project charter

1. Projects summary
2. SCOPE

2.1 Business value
2.2 Project goals
2.3 Initial project requirements
2.4 Iniatial project description
2.4.1 Project bounderies
2.4.2 Main deliverables

3. TIME – Initial milestones
4. COST – Initial budget
5. PEOPLE – Main stakeholders
6. RISKS – General project risks

Project scope document

1. Description of the product scope
2. Project deliverables & acceptation criteria
3. Project exclusions

⇨ Example: Iatrogenic anemia

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Training (PBM) project management

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Initial project requirements

1) **A baseline audit of iatrogenic blood loss is realised including at least the following parameters:**
   - daily phlebotomy loss per patient, cumulative total of blood sample volume, hemoglobin on admission, hemoglobin on discharge, nadir hemoglobin during hospitalization/audit, number of RBC units transfused per patient
2) **The feasibility of at least the following strategies is evaluated:**
   - rationalisation blood tests and collections,
   - smaller blood tubes & small volume equipment.

Other strategies can be: return of void volumes (closed system sampling), removal of sampling lines, non-invasive technics and Point-Of-Care.
This feasibility study should include the budgetary impact (costs) of each strategy.

1) **The feasibility report includes specific KPIs estimating the effect of the above strategies on the reduction of blood loss by phlebotomy:**
   - Intermediate outcomes: evolution blood loss from phlebotomy (reduction?)
   - Health outcomes: evolution of decline in haemoglobin levels, iatrogenic anaemia and need for transfusion (reduction?)
2) **The transfusion committee is regularly informed/updated about the project.**
   (According to local agreements, approval for the project is obtained)
3) **The TP plans and monitors this project in collaboration with stakeholders of the laboratory, clinicians, nurses and phlebotomists.**

Training (PBM) project management

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Initial milestones

Milestone	Description	Date
M1 - Project start	Project charter approved	1 December 2021
M2 - Presentation of baseline audit results	Presentation to the transfusion committee	15 June 2022
M3 - Presentation of the feasibility report (incl. KPIs)	Presentation to the transfusion committee	15 October 2022
M4 - Selection of strategies to reduce iatrogenic blood loss	Selection based on the feasibility report and final approval by chair of transfusion committee and head of the lab	15 October 2022
M5 - Publication of new/modified procedures/policies	Publication in the digital document management system and communication to the involved stakeholders	1 January 2022
M6 - Start education of stakeholders who have to implement the new strategies to reduce iatrogenic blood loss	First training session	1 January 2022
M7 - Modified electronic lab tests order (sets) if applicable/possible	Modifications to the Laboratory Information System to facilitate the rationalisation blood tests and collections	1 March 2023
M8 - Presentation of the post-intervention(s) audit results	Presentation to the transfusion committee and other involved stakeholders	30 September 2023

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Training (PBM) project management

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Deliverable	Acceptation criteria
Baseline audit report about iatrogenic blood loss and anaemia	• Including patient demographics (sex, age, weight, etc.) • Including at least the following parameters: daily phlebotomy loss per patient, cumulative total of blood sample volume, hemoglobin on admission, hemoglobin on discharge, nadir hemoglobin during hospitalization/audit, number of RBC units transfused per patient.
Feasibility report about the proposes strategies to reduce iatrogenic blood loss:	• Including at least the feasibility of the following strategies: ○ rationalisation blood tests and collections (which tests can be realised on which blood tubes, minimum blood volume required for each test, which tests (+ frequency) are necessary?) ○ smaller blood tubes & small volume equipment, Other strategies can be: ○ return of void volumes (= closed system sampling), ○ removal of sampling lines, ○ Point-of-Care testing. • Including the budgetary impact (costs) of each strategy. • Including specific KPIs estimating the effect of the above strategies on the reduction of blood loss by phlebotomy.
New policy/modified protocols for selected strategies	• Format according to hospitals' template • Validated by some key persons and communicated to stakeholders
Training for involved clinicians, nurses, lab technicians and phlebotomists	• Including a formal assessment with minimum score 7.5/10.
Modified electronic lab tests order (sets) if applicable/ possible	• Modifications to the Laboratory Information System to facilitate the rationalisation blood tests and collections
Implementation of selected (feasible) strategies to reduce iatrogenic blood loss	• Ensure policy & modified protocols are followed • Ensure Lab. IS systems are implemented and validated • Ensure Lab material is available for the Labs
Availability of (lab) equipment	• Ensure necessary (Lab) equipment is ordered for start-up
Post-intervention(s) audit report about iatrogenic blood loss and anaemia	• Structure similar to baseline audit report • Including comparison with baseline audit results and targeted KPIs • Including suggestions for improvement actions

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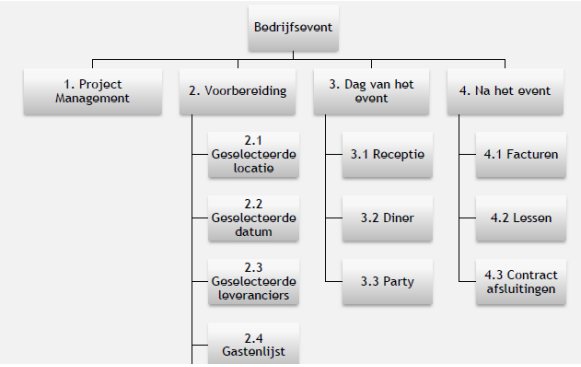
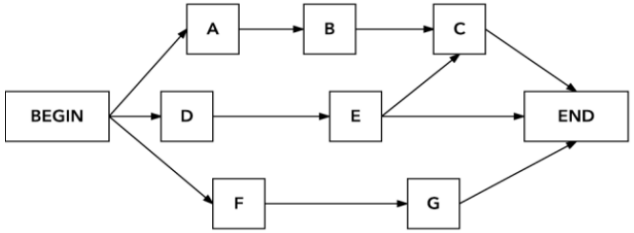
Training (PBM) project management

Exercises in groups of +-4 persons:

1) Project planning: Make a Work Breakdown Structure of the Project “ Iatrogenic anaemia” (30 minutes)



2) Project planning: order the activities:
Start to make a Precedence Diagram
for the Project “Iatrogenic anaemia” (45 minutes)

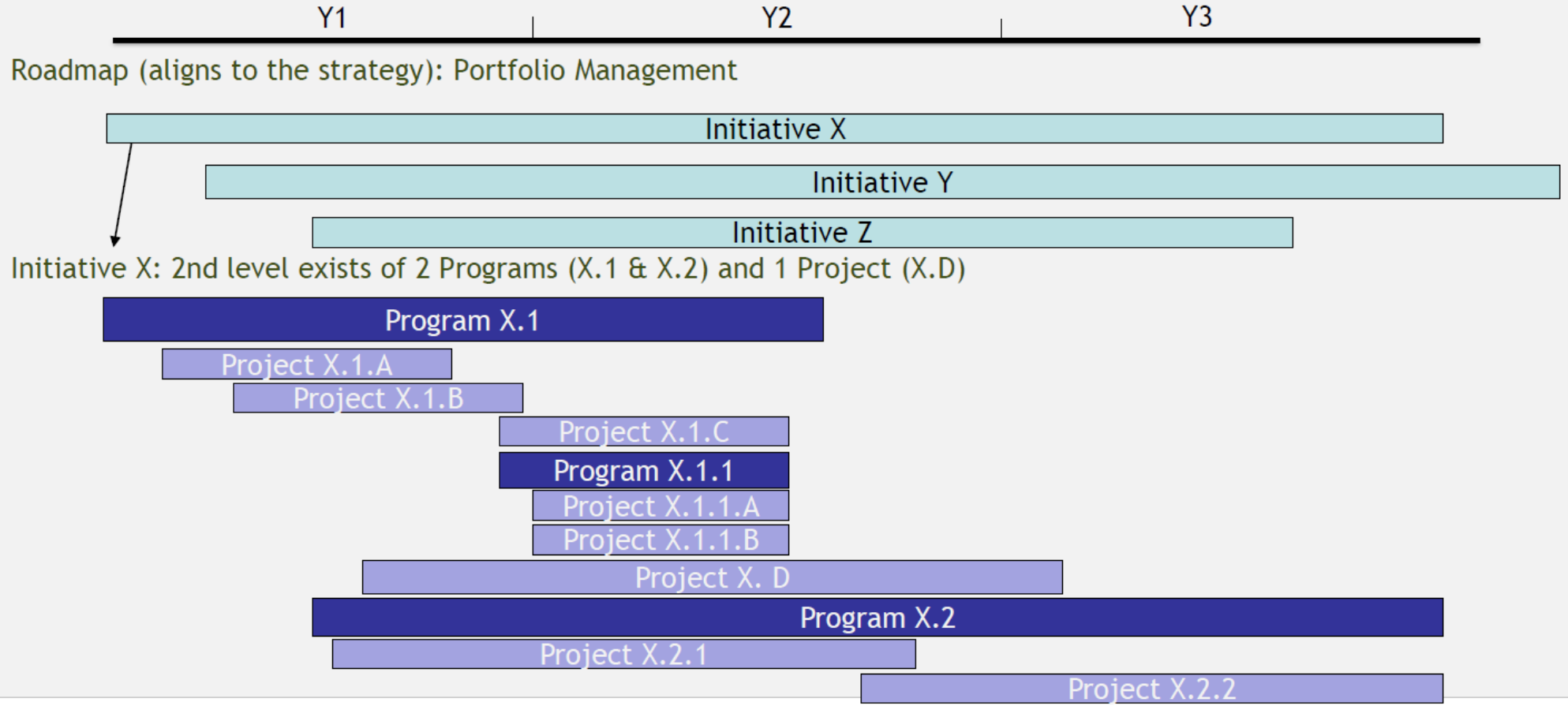


3) Make a Risk analysis for the Project “Iatrogenic anaemia” (30 minutes)
Risk, Probability, Impact, PI-index, Effect/Impact of the Risk, Cost if the Risk occurs, Risk Owner, Strategy, Concrete Mitigated action, Cost of the action,…

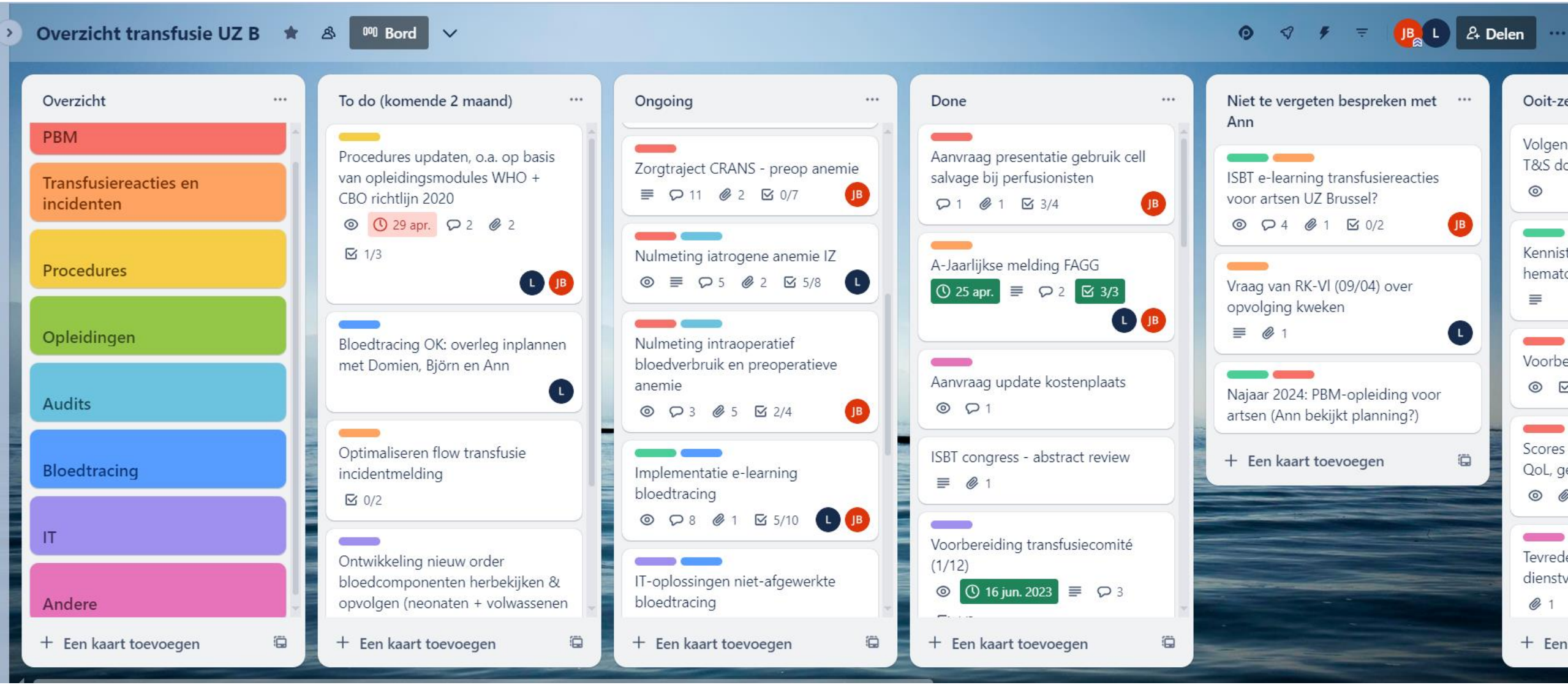
Training (PBM) project management

Multi-Year plan

Different levels

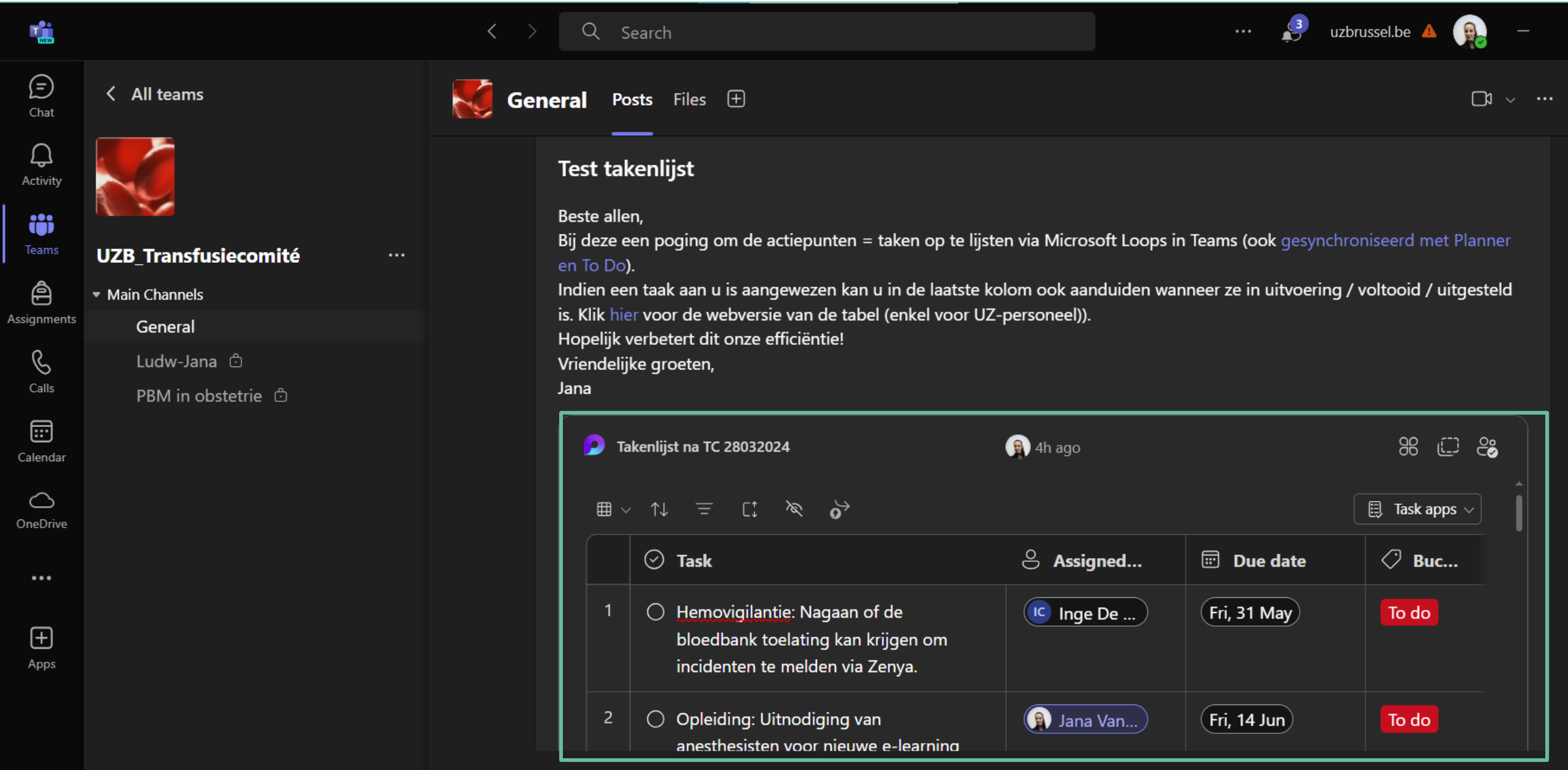


Some examples of the TP role in University Hospital Brussels



Time management: Microsoft Loop component in Teams group for actions by Transfusion Committee

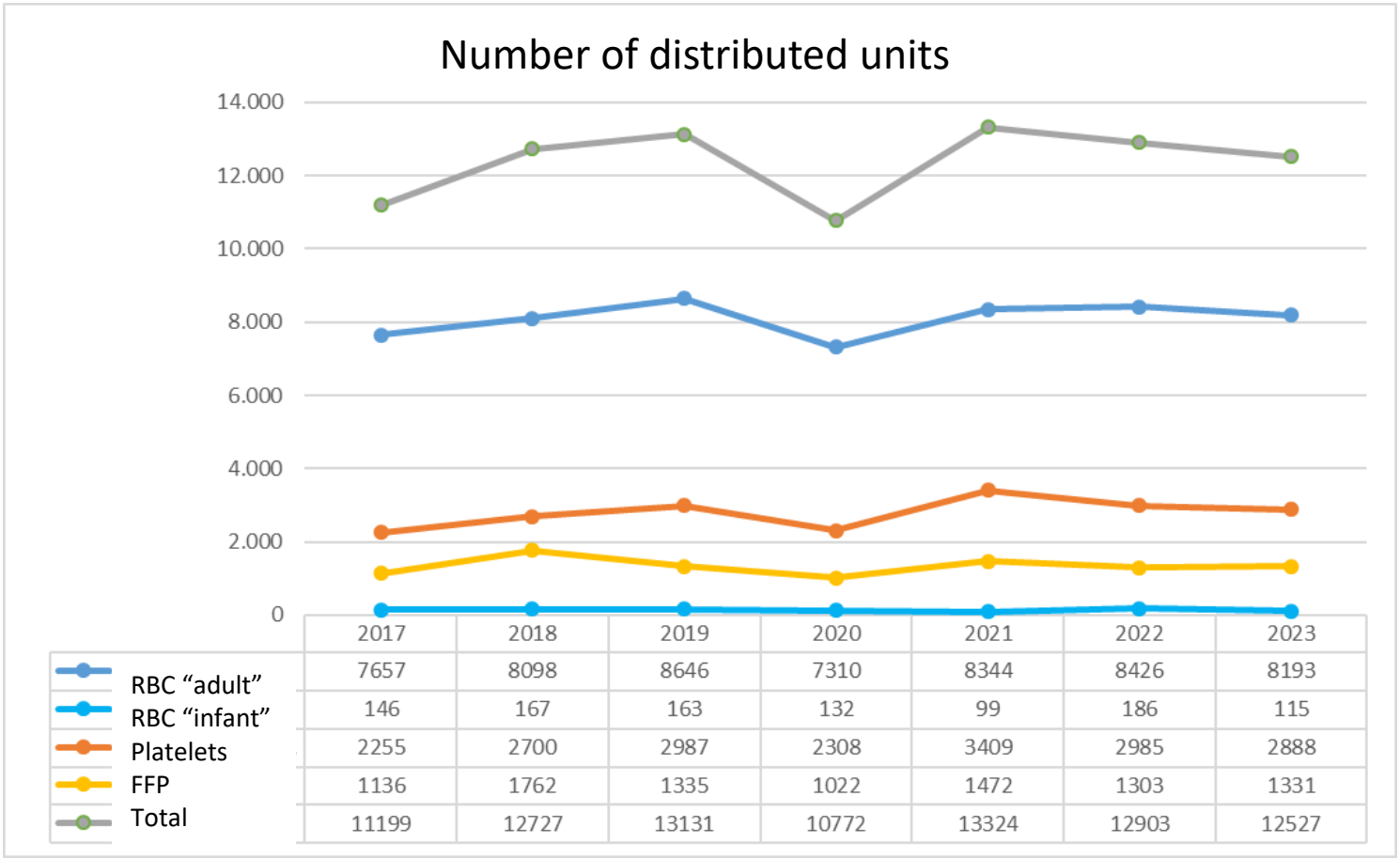
YouTube: [How to use Loop components in Teams | Microsoft 365 TimeSavers]



Some examples of the TP role in University Hospital Brussels

1) Haemovigilance charts: annual overview
2) Training: e-learning blood tracking/scanning
3) Communication on single-unit transfusion
4) Audit massive haemorrhage, flowchart MHP
5) Data cell salvage
6) Data PBM (in obstetrics)
7) Collaborations as Subject Matter Expert with IT: mock-ups…

BLOOD USE BY UNIVERSITY HOSPITAL BRUSSELS



	2017	2018	2019	2020	2021	2022	2023
RBC “adult”	7657	8098	8646	7310	8344	8426	8193
RBC “infant”	146	167	163	132	99	186	115
Platelets	2255	2700	2987	2308	3409	2985	2888
FFP	1136	1762	1335	1022	1472	1303	1331
Total	11199	12727	13131	10772	13324	12903	12527

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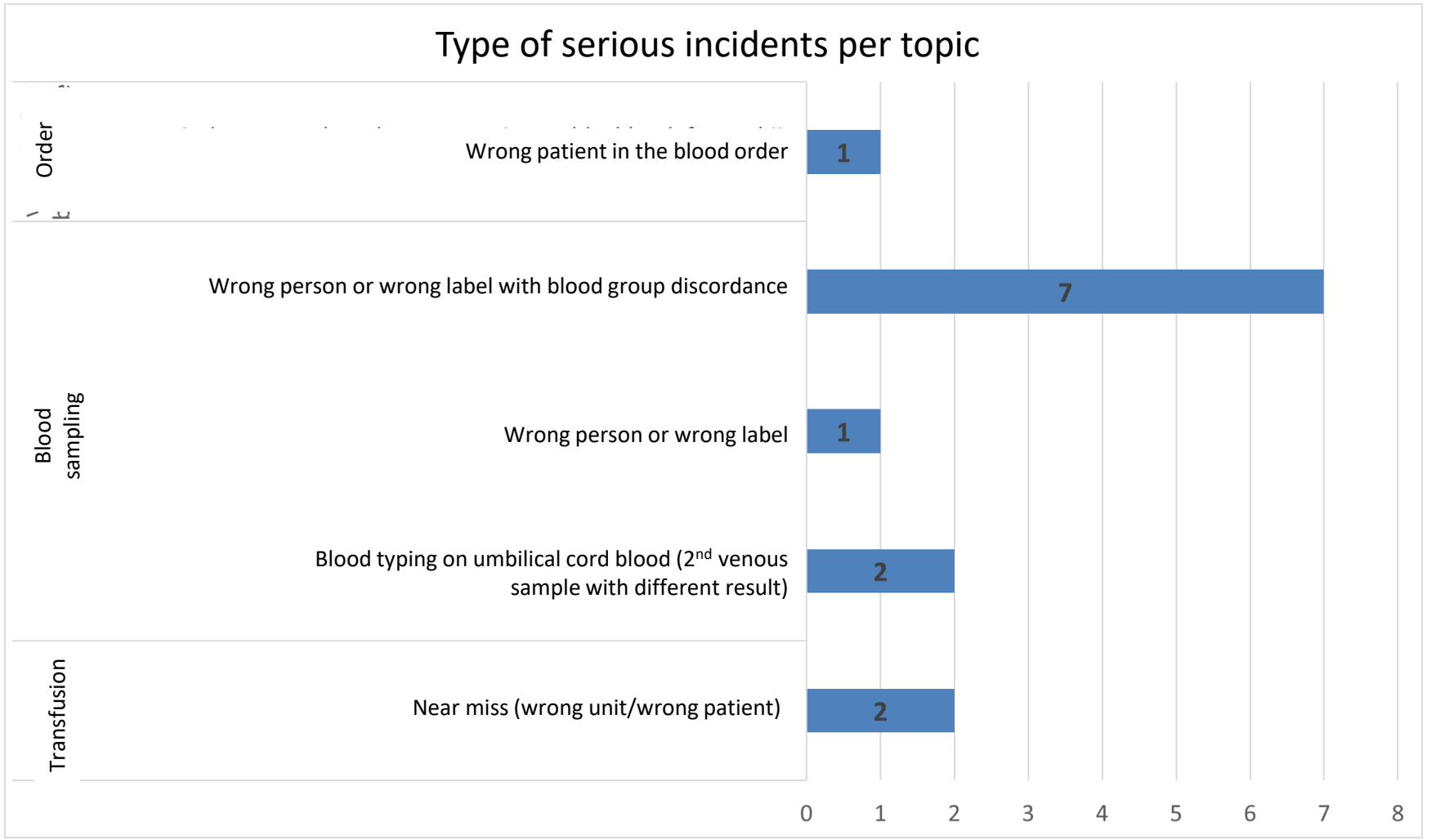
HAEMOVIGILANCE – OVERVIEW INCIDENTS 2023



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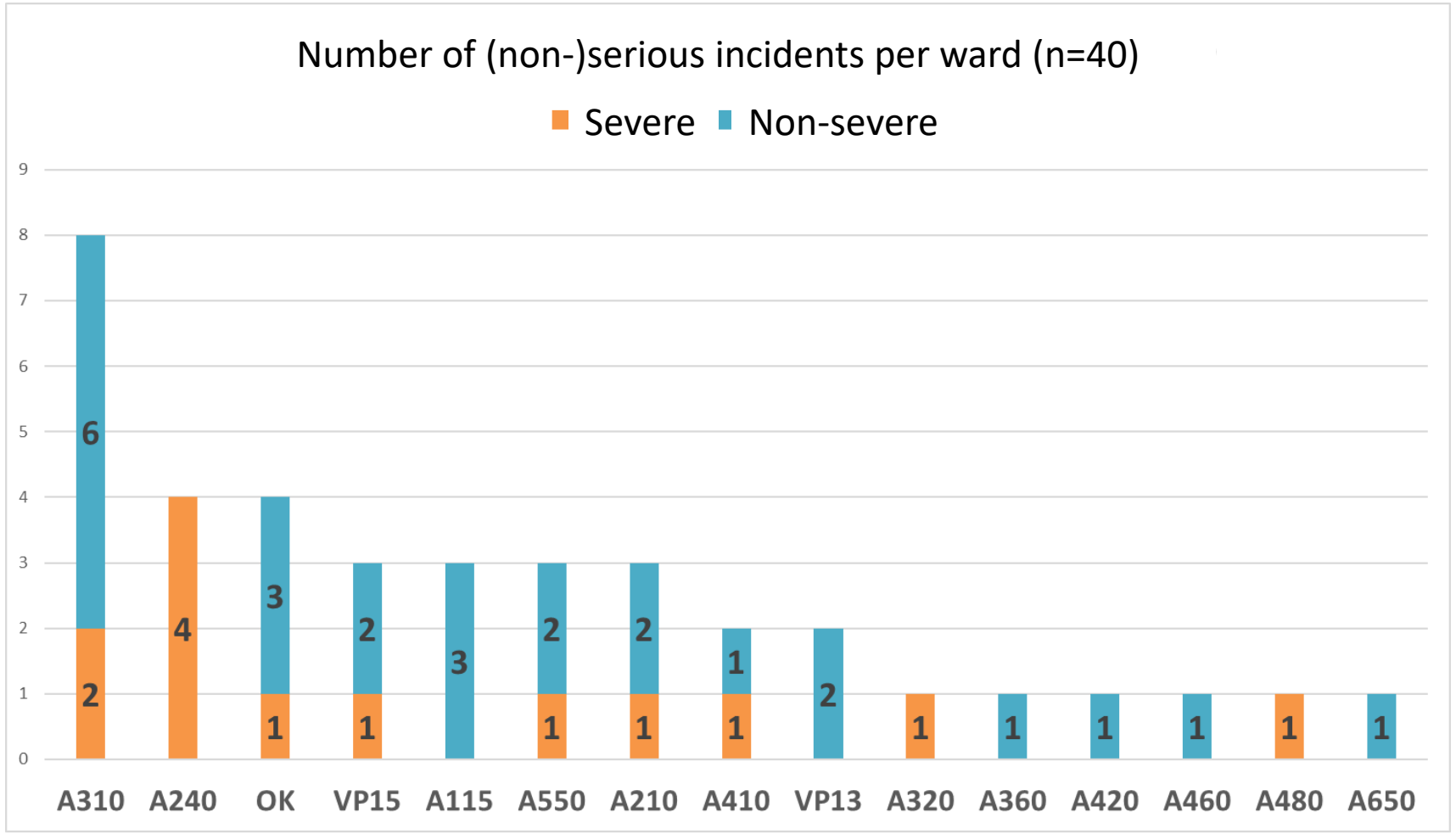
HAEMOVIGILANCE – OVERVIEW INCIDENTS 2023



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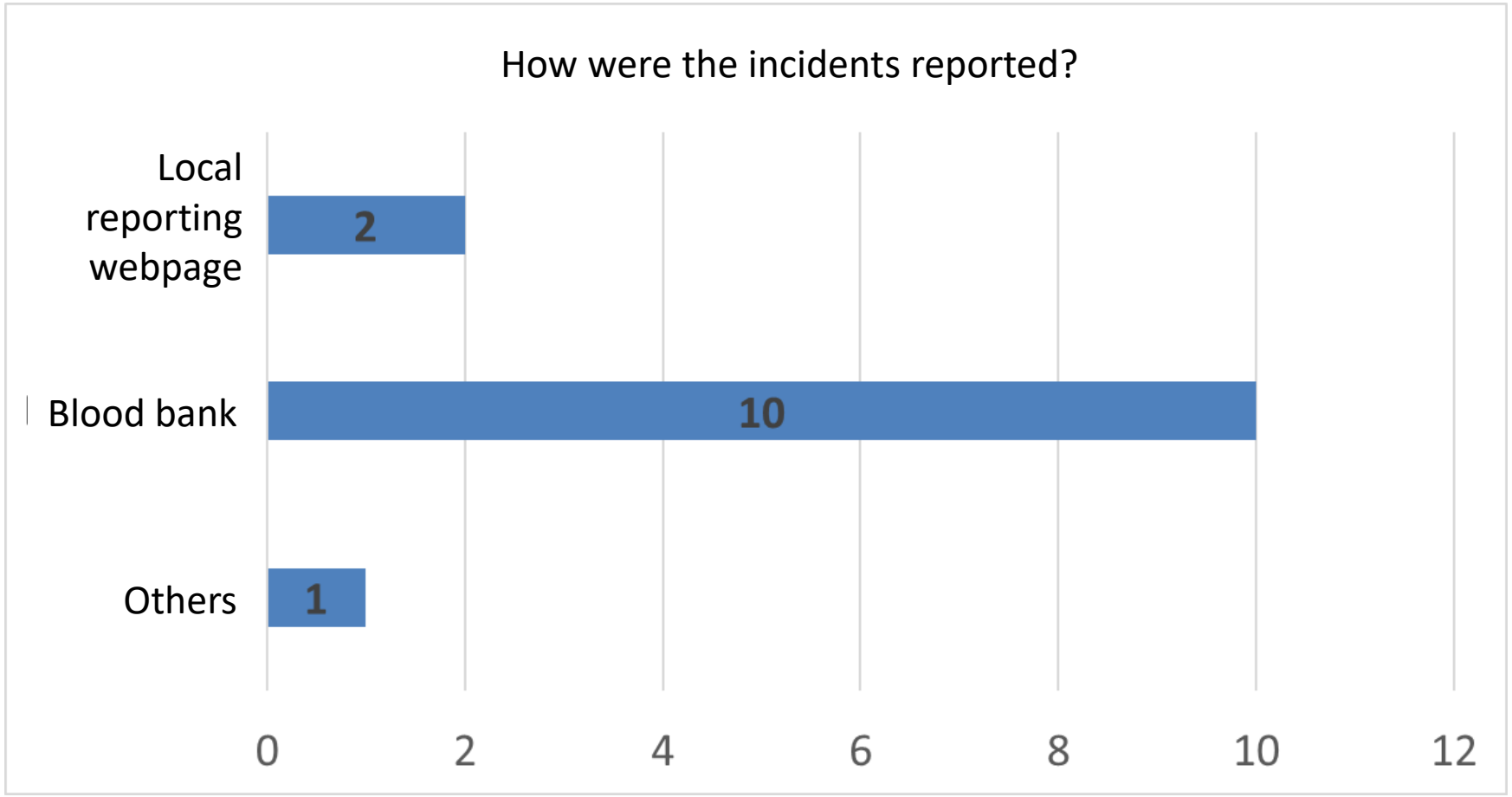
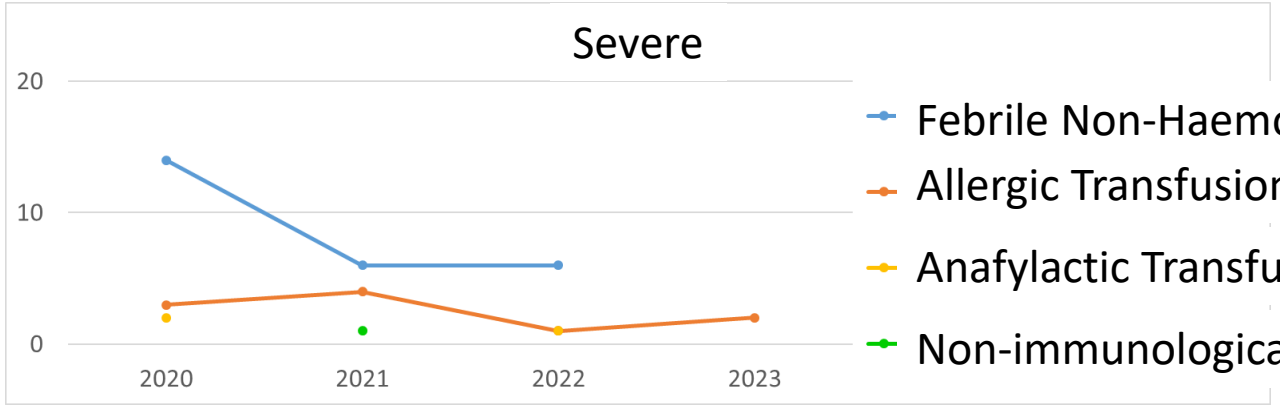
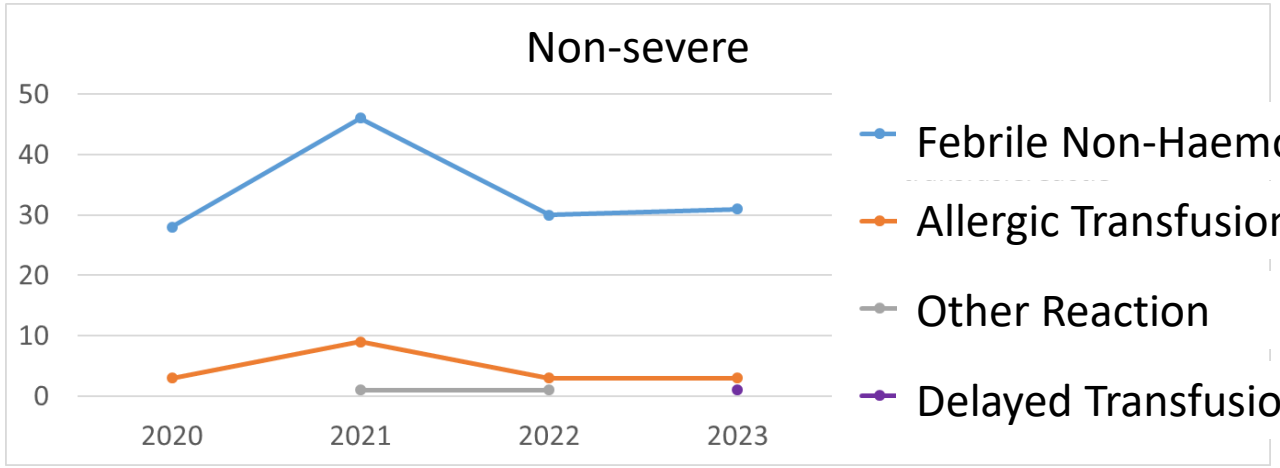
HAEMOVIGILANCE – OVERVIEW INCIDENTS 2023

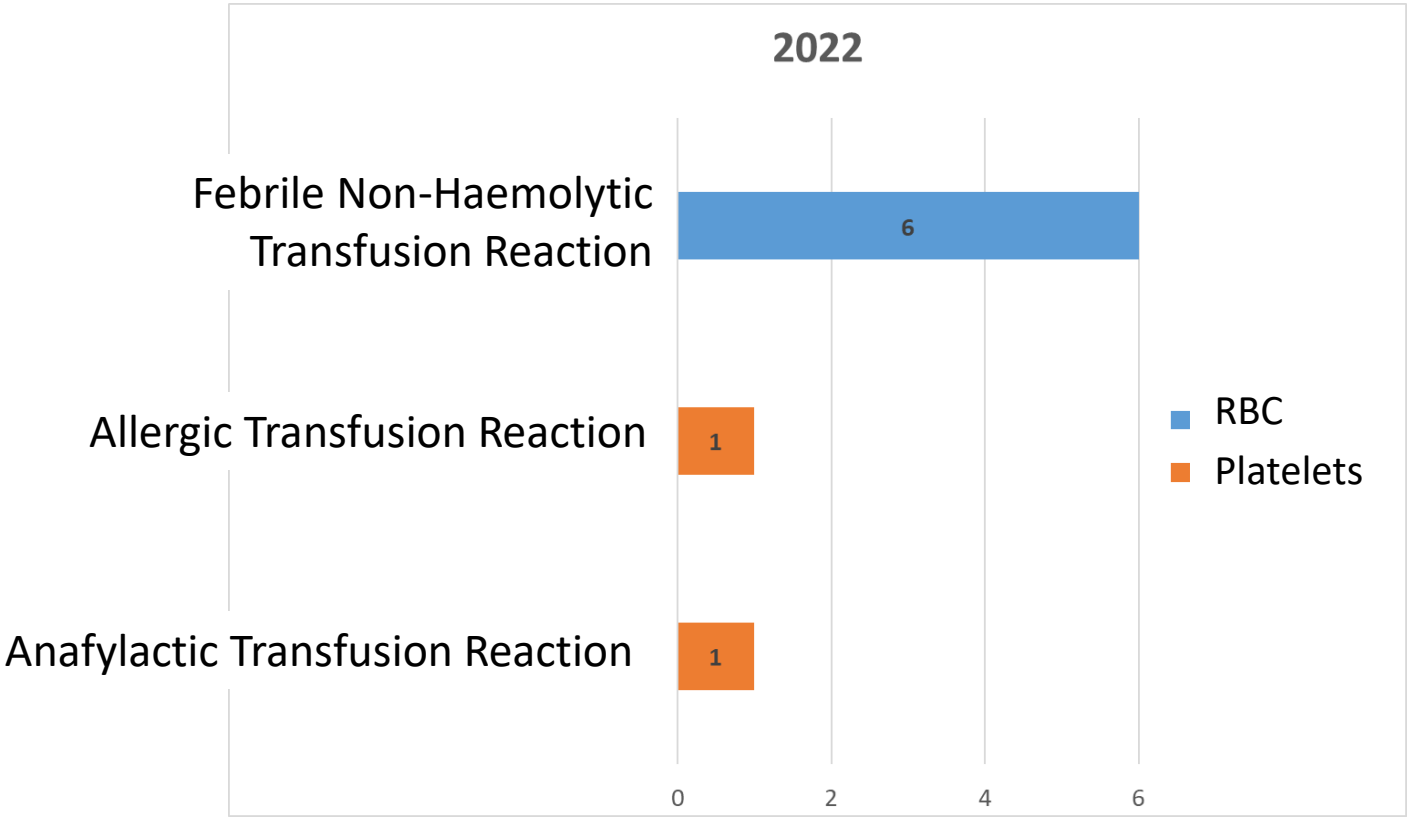


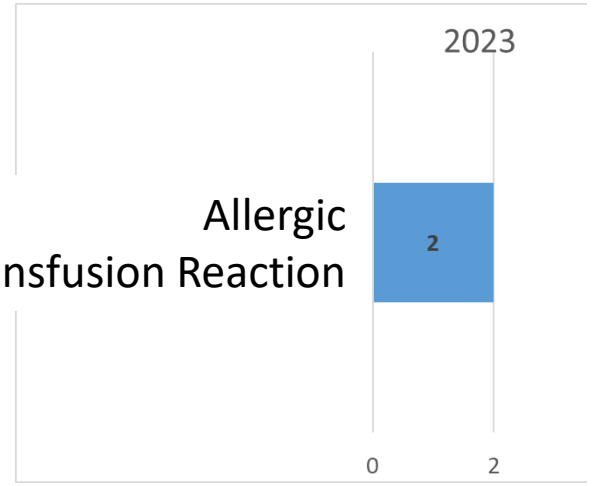
HV – OVERVIEW TRANSFUSION REACTIONS: EVOLUTION PER TYPE



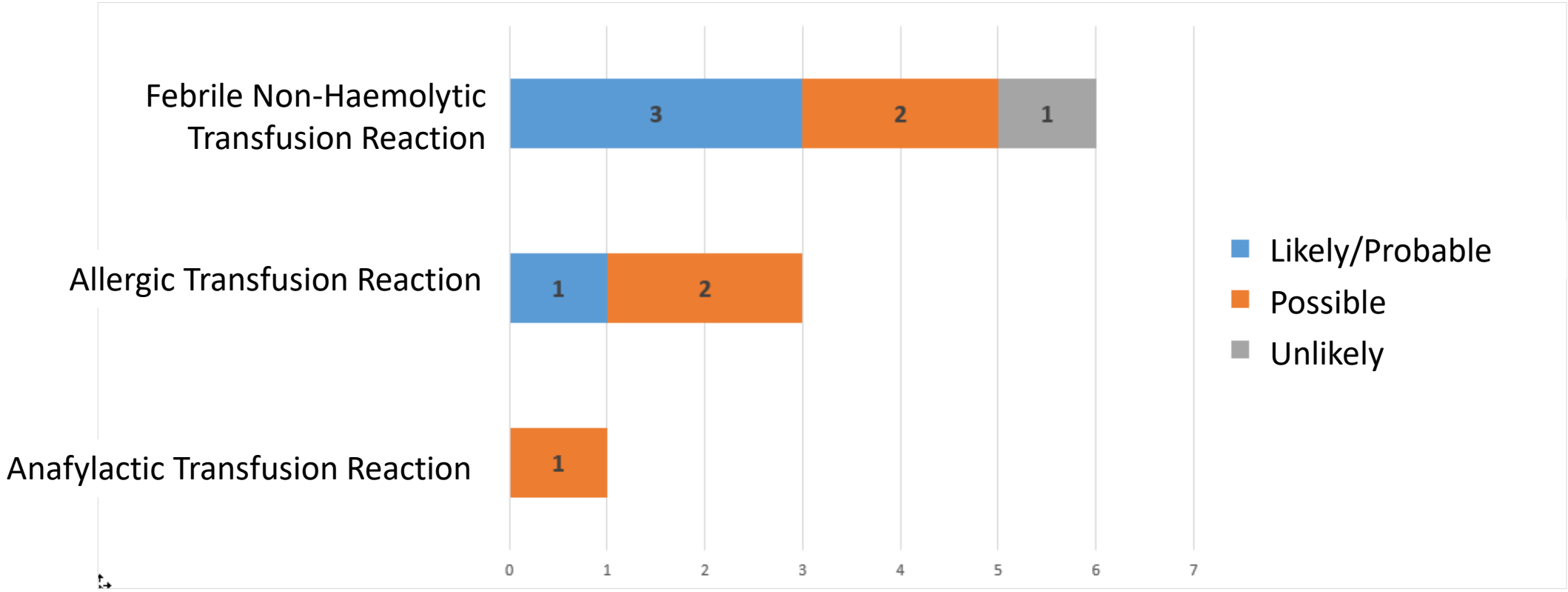


HV –TYPE OF **SERIOUS** TRANSFUSION REACTIONS PER BLOOD COMP.

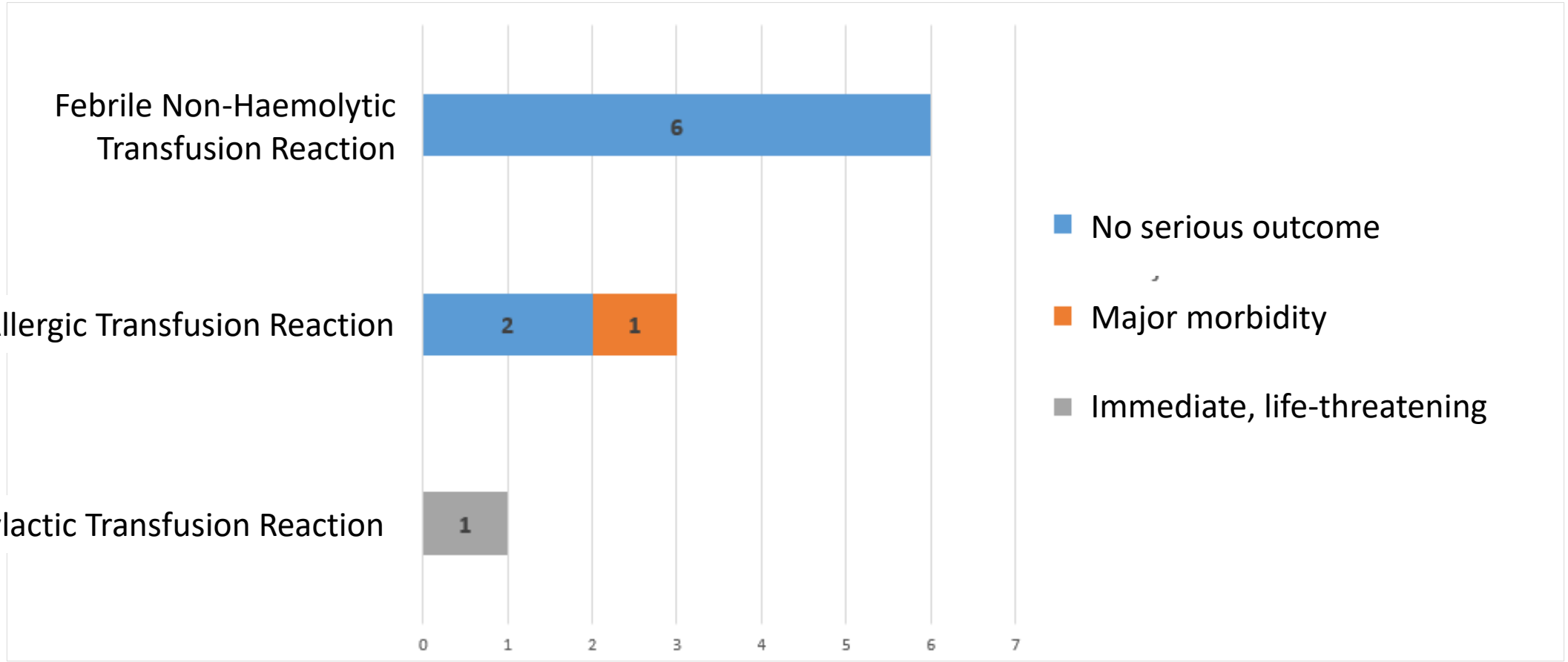




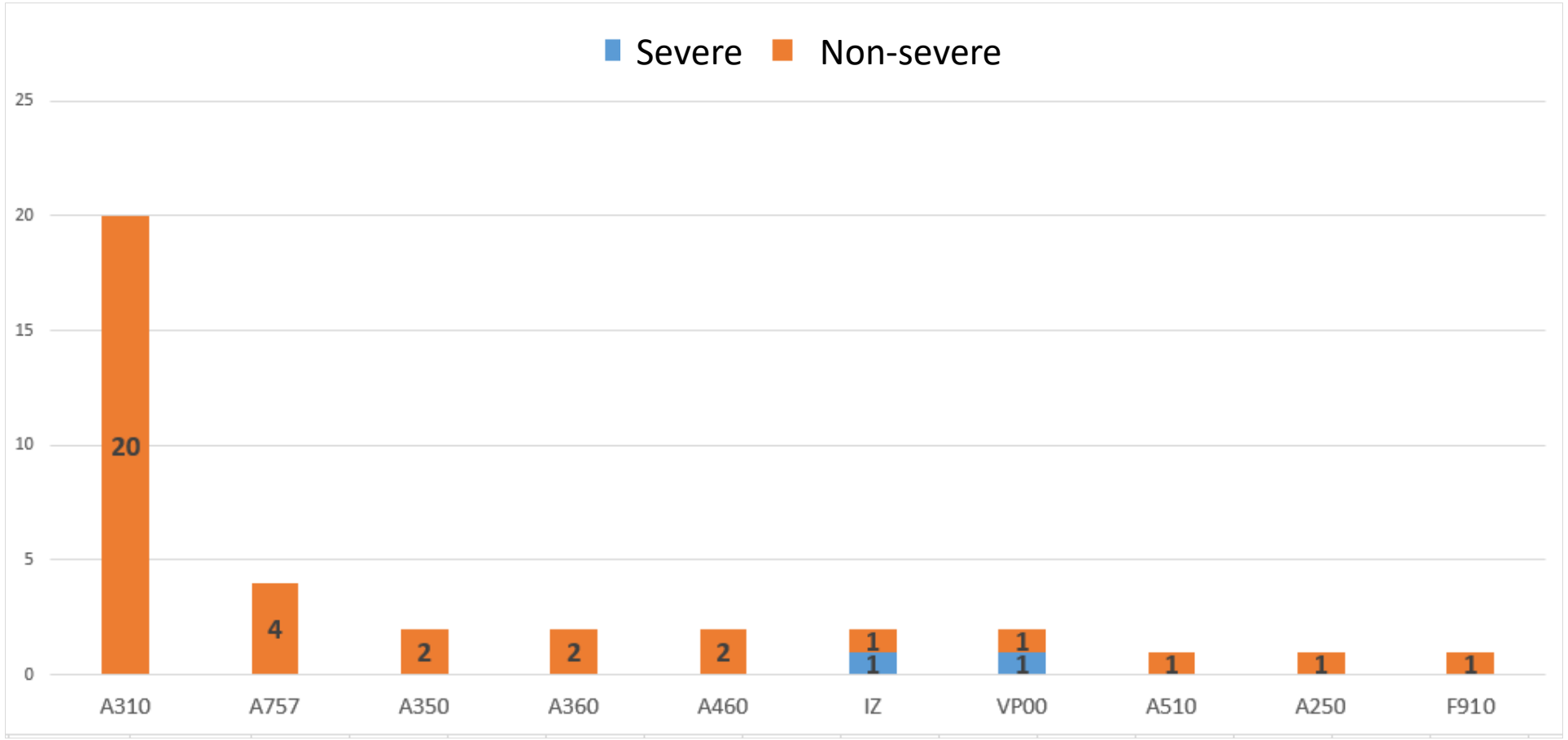
HV –IMPUTABILITY PER TYPE OF TRANSFUSION REACTION (2022-23)



HV – OVERVIEW TR: SEVERITY PER TYPE OF SERIOUS REACTION (2022-23)



HV –NUMBER OF (NON) SERIOUS TRANSF. REACTIONS PER WARD (2023)



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TRAINING: E-LEARNING BLOOD TRACKING/SCANNING

1) Blood is costly
2) Correct storage and transport of blood components
3) Blood tracking
    - What is blood tracking?
    - Blood tracking at the University Hospital Brussels
    - What to do in case of a technical problem
    - When to record which parameters during transfusion
    - What if blood components have to be returned to the blood bank?

Welke controles? Wat bij technisch probleem scanner?

d-teach online training

Herinner je je Thomas? Het is bijna ochtend en zijn shift zit er bijna op. Het is druk op de afdeling. Patiënt Mika moet bloed krijgen en er is net een nieuwe patiënt, Louise, bijgekomen die eveneens bloed moet ontvangen. Logistiek medewerkster Anne gaat op vraag van Thomas naar de bloedbank om de bestelde bloedcomponenten te gaan halen.

Anne scant de unit voor “Afhaling” en “Aankomst” en verwittigt Thomas dat het bloed in de koelkast

TRAINING: **INTERACTIVE** E-LEARNING

Op welke momenten en waar moeten de bloedzakjes gescand worden voor de bloedtracing?

- [ ] Afhaling in de bloedbank
- [ ] Aankomst in de bloedbank
- [ ] Aankomst op de afdeling in medicatieruimte
- [ ] Start transfusie in medicatieruimte
- [ ] Start transfusie bij patiënt
- [ ] Einde transfusie in medicatieruimte
- [ ] Einde transfusie bij patiënt

SUBMIT

Even denken...

Weet jij waarom bloedcomponenten **kostbare** en **schaarse** producten zijn?

Stel nu dat Thomas inderdaad een technisch probleem heeft met de scanner, wat zou hij dan moeten doen? Plaats volgende acties in de juiste volgorde:

De helpdesk bellen	stap 1
Controleren identificatiebandje patiënt en bloedzak	stap 2
De scanner uitzetten, heropstarten en opnieuw inloggen	stap 3
Controleren of de scanner verbonden is met het netwerk "UZ Brussel intern"	stap 4

Bekijk hieronder de volledige weg die het bloed aflegt van de donor tot de ontvanger:

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d-teach online training

VUB

Single-unit distribution of RBC

stable
normovolemic
adult patients
without clin. sign. bleeding
>1 day hospitalisation

Non applicable

- RBC for OR, ambulatory ward haemato-oncol. and gastro-enterology
- acute bleeding
- apheresis/exchange transf.
- infants or children

Order 1 unit
(exceptionally more units allowed if necessary)

→

1 unit per patient released by blood bank

→

immediate* transfusion of 1 unit RBC

→

Re-assess patient: laboratory and/or clinical assessment

Other units
max. 24h stand-by
in blood bank

*ICU: 1 RBC max. 24h
in blood fridge (+2 à +6°C)

AUDIT MASSIVE HAEMORRHAGE TEMPLATE

Demographics, patient characteristics	Medical record number
	Admission number
	Admission date : start & end
	Age
	Sex
	BMI
	Ethnicity
	Blood type
	Antibody screen
	Diagnosis
	Name of surgery
	Duration of surgery
	Injury Severity Score (ISS) ? Abbreviated Injury Scale (AIS)?
	Admission Glasgow Coma Scale (GCS) score
	Did the patient have a pre-existing bleeding risk? = Preadmission anticoagulation (= Active prescription for an anticoagulant or anti-PLT agent at the time of hospital admission)
	Trauma: mechanism of injury: Blunt (Yes, type:.../No), Penetrating (Yes, type:…/No)

Activation of MHP	Type of hemorrhage
	Subtype of hemorrhage
	Cause of massive hemorrhage
	Date and time of activation MHP
	Name coordinating clinician(s)
	Name coordinating nurse(s)
	Clinical unit/ward MTP initiated
	Systolic blood pressure at time of activation MHP
	Temperature at time of activation MHP
	Heart frequence at time of activation MHP
	Estimated blood loss at time of activation

AUDIT MASSIVE HAEMORRHAGE TEMPLATE

Transfusion	Number of transfused RBC from emergency stocks
	Number of transfused RBC from emergency stock blood bank (uncrossmatched)
	Number of transfused RBC (gekruist)
	Number of transfused plasma
	Number of transfused Platelet Concentrates
	Number of returned RBC
	Number of wasted RBC (non-conform storage, etc.)
	Number of wasted plasma
	Number of wasted Platelet Concentrates
	Plasma : RBC transfusion ratio
	Platelets : RBC transfusion ratio
	Time to first RBC transfusion
	Time to first plasma transfusion
	Location of transfusion during MHP: emergency department, theatre, intensive care unit, delivery ward
	Use of blood warmer
	> 10 units RBC transfused in 24h?
	> 4 units RBC transfused in 4h?

Conventional Coagulation Assays: haematologic parameters	Hb (g / dL) [Baseline, lowest, post-resuscitation]
	Platelet count (10^9 / L) [Baseline, lowest, post-resuscitation]
	INR [Baseline, lowest, post-resuscitation]
	Prothrombin time (PT) [Baseline, lowest, post-resuscitation]
	Activated Partial Thromboplasin Time (APTT) [Baseline, lowest, post-resuscitation]
	Fibrinogen mg / dL [Baseline, lowest, post-resuscitation]
	pH [Baseline, lowest, post-resuscitation]
	Base deficit [Baseline, lowest, post-resuscitation]
	Maintainance stage: hourly monitoring of haematologic parameters?
ROTEM	ROTEM used to guide hemostatic resuscitation?

AUDIT MASSIVE HAEMORRHAGE TEMPLATE

Coagualation testing versus transfusion	Patient had a Hb result within 24 hr of MHP activation
	Patient had an INR result within 24 hr of MTP activation
	Patient had a PLT count result within 24 hr of MTP activation
	Patient had a fibrinogen level result within 24 hr of MTP activation
	1 Patient with INR > 1.5 received at least 1 unit of FFP within an hour after the result
	Patient with a PLT count < 50,000/µl of blood received 1 unit of PLT within an hour after the result
	Patient with fibrinogen level < 200 mg/dl or 2 g/l of blood received 2 g of fibrinogen concentrate within an hour after the result
	Patient with fibrinogen level < 150 mg/dl or 1.5 g/l of blood received 4 g of fibrinogen concentrate within an hour after the result
	Patient had a ROTEM EXTEM assay result within 24 hr of MTP activation
	Patient had a ROTEM FIBTEM assay result within 24 hr of MHP activation
	Patient with ROTEM EXTEM A10 <45 mm and ROTEM FIBTEM A10 >13 mm received 1 unit of PLTs within an hour after the result
	Patient with ROTEM EXTEM A10 < 45 mm and ROTEM FIBTEM A10 < 13 mm received 2g of fibrinogen concentrate within an hour after the result
	Patient with CT > 80 s received at least 1 unit of FFP within an hour after the result

Cell salvage	Cell salvage volume reinfused (mL)
Hemostatic agents	Anti-fibrinolytica: tranexaminezuur [Exacyl®] en aprotinine [Trasylol®] > administration of tranexamic acid within 24 hr of MTP activation
	Stollingsfactoren: fibrinogeen [Riastap®], protrombinecomplex-concentraat [Cofact®, Confidex®], geactiveerde stollingsfactoren [Novoseven®], Factor VIII + factor von Willebrand [Haemate P®], Factor VIII [Advate®]
	Antidota anticoagulantia: Idarucizumab [Praxbind®], Protaminesulfaat [Protamine Sulfaat Leo Pharma®]
Vasopressine-analogen	Desmopressine [Minirin®]
Calcium	
Crystalloids vs Colloids	Volume of intraoperative crystalloid (mL)
	Volume of intraoperative colloid (mL)
Additional measures	What was implemented to stop bleeding (Surgical management, angiography, other…)?
Temperatuur	Temperatuur patiënt
	Wat gebruikt om hypothermie te vermijden?

AUDIT MASSIVE HAEMORRHAGE TEMPLATE

Outcome	Trauma-induced coagulopathy
	Intensive care : length of stay (days)
	Hospital length of stay (days)
	Number of ventilator-days
	Peripartum hysterectomy (in case of obstetric haemorrhage)
	Hospital mortality
	Survival after the initial 24 hours after MHP activation
	Survival at discharge
	Survival at 30 days
Administration	Cessation of MHP: date and time
	Debrief documented within 72 hours?
	Time from MHP activation to arrival of first red blood cell from the blood bank
	Was the patient's identity known at the time of activation?
Communication	Feedback about multidisciplinary collaboration and communication [orally and retrospectively collected by the Transfusion Practitioner]: Were the blood bank, emergency lab, perfusionist notified of massive blood loss? Were the blood bank, emergency lab notified of MHP cessation?

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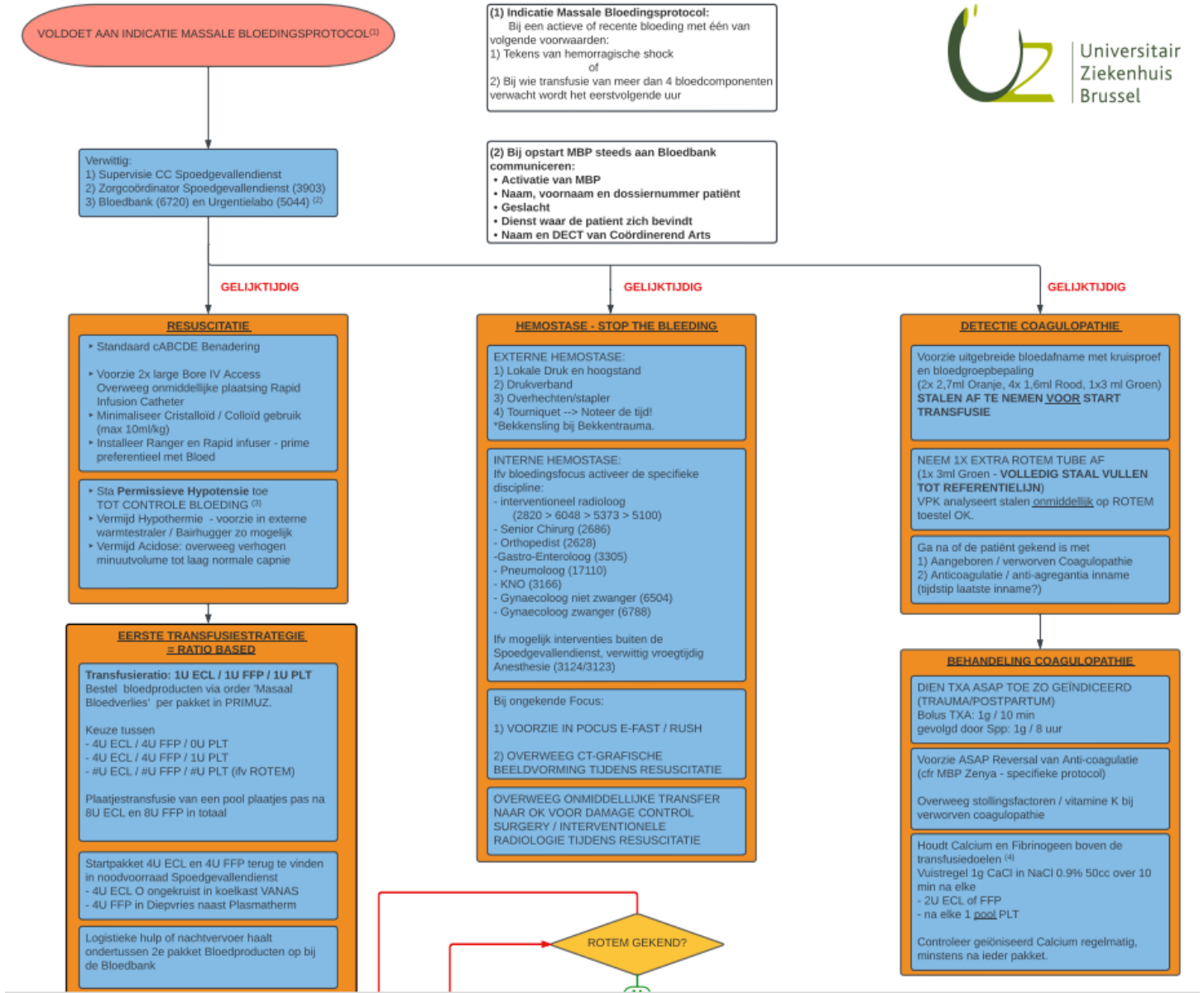
References:
Broxton 2018 - Implementation of a Massive Transfusion Protocol: Evaluation of Its Use and Efficacy
Sanderson 2020 - How well does your massive transfusion protocol perform? A scoping review of quality indicators
Margolin 2023 - Massive Transfusion Protocol Adherence: Relationship to Trauma Patient Outcomes
Shields 2019 - Obstetrical hemorrhage reporting and systems learning

AUDIT MASSIVE HAEMORRHAGE – REPORT: RECOMMENDATIONS

Recommendations	Objectives	Improvement action (SMART)	Planning (who, when)	Barriers and challenges	Outcome	Follow-up
3. Advice of haematologist should be requested especially in case of life-threatening coagulopathy	Optimal treatment of coagulopathy (final aim: reducing and managing the blood loss)	a) Adding some haematological aspects to the massive haemorrhage protocol + clearer instruction to contact haematologist. b) Including the consulting a haematologist as an indicator in annual overview of massive haemorrhages	a) A. De Becker: Q1 2024 b) J. Vanden Broeck: rest 2024	More experience in this topic needed for haematologists of our hospital	Advice haematologist should be asked <u>at least</u> for every activation of MHPs ≥ 4 hours or if >3 ROTEMs	A. De Becker, J. Vanden Broeck

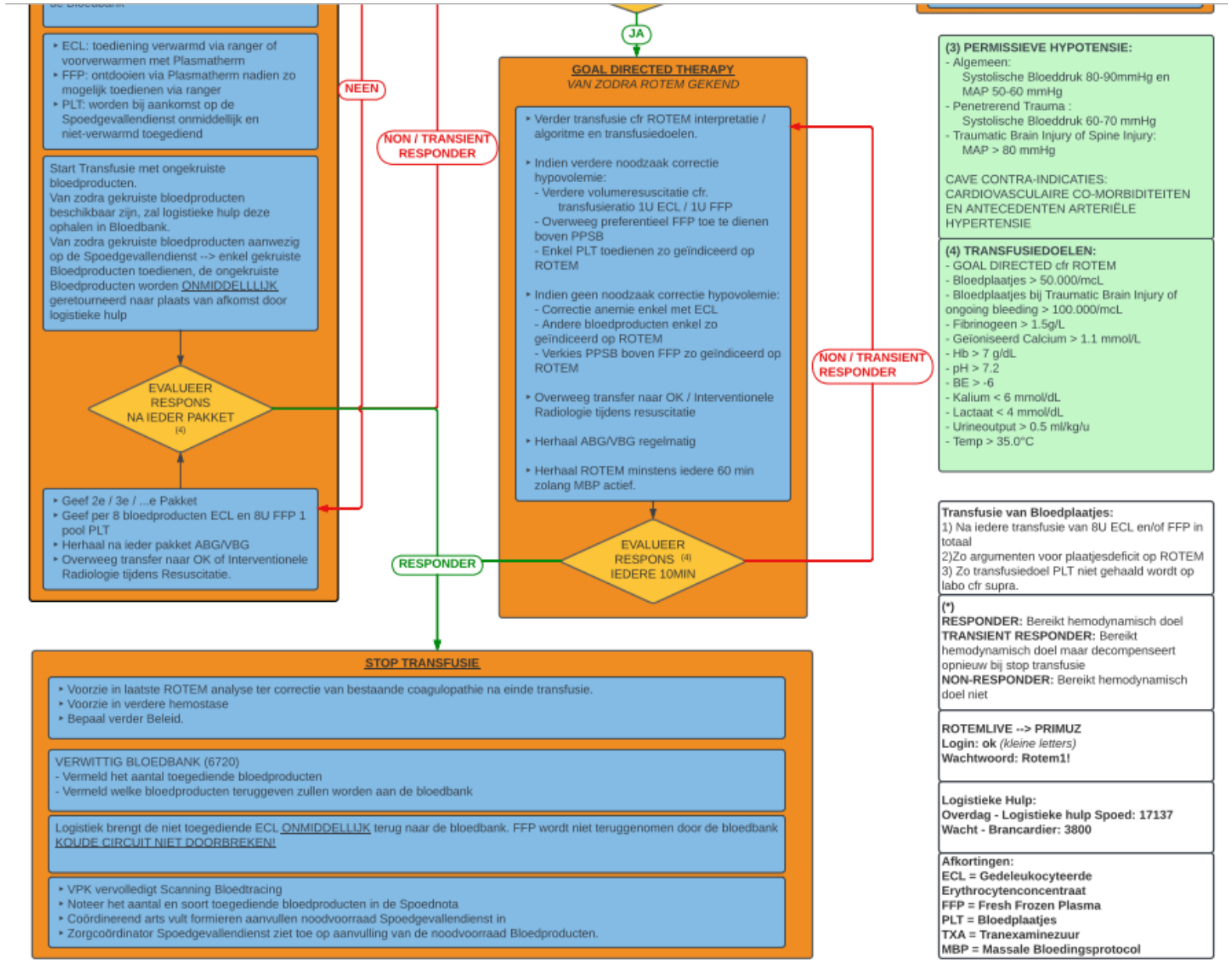
CHALLENGES FLOWCHART MASSIVE HAEMORRHAGE PROTOCOL

⇔ easy and quick to understand in emergencies



CHALLENGES FLOWCHART MASSIVE HAEMORRHAGE PROTOCOL

⇔ easy and quick to understand in emergencies



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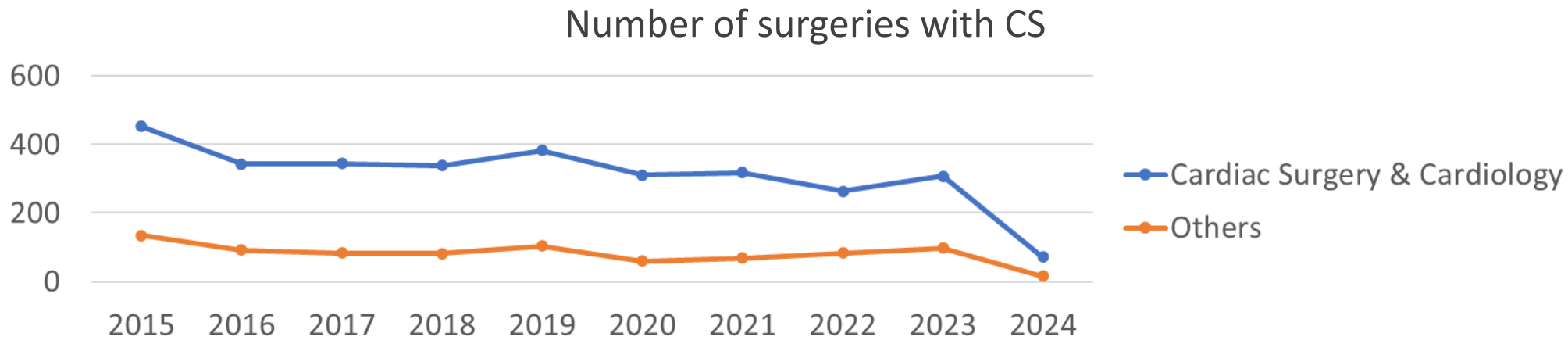
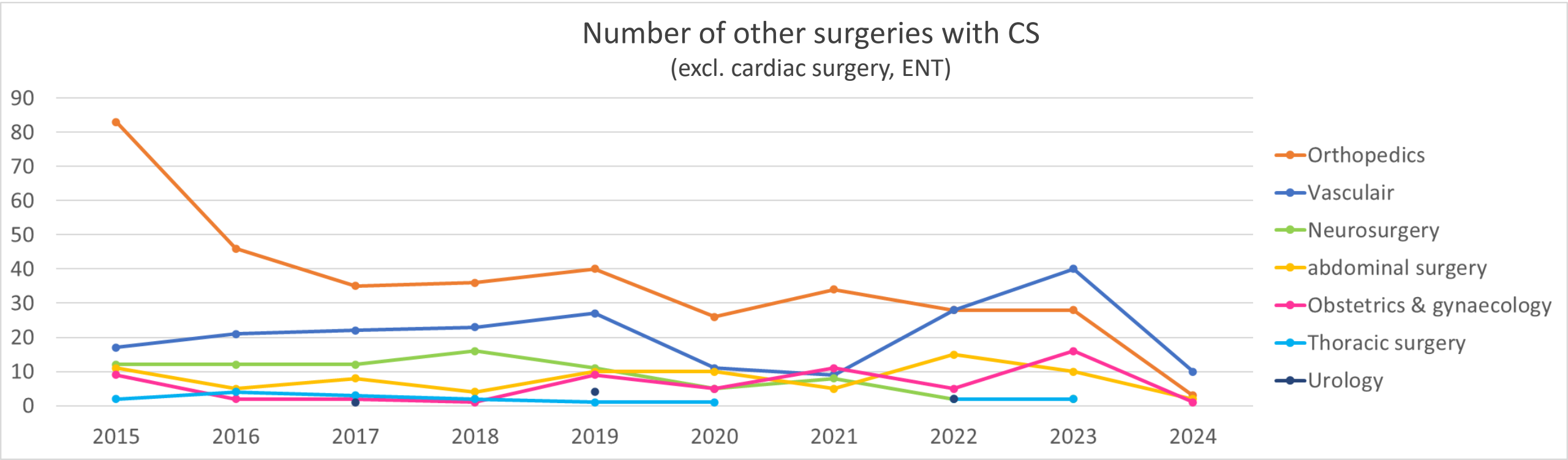
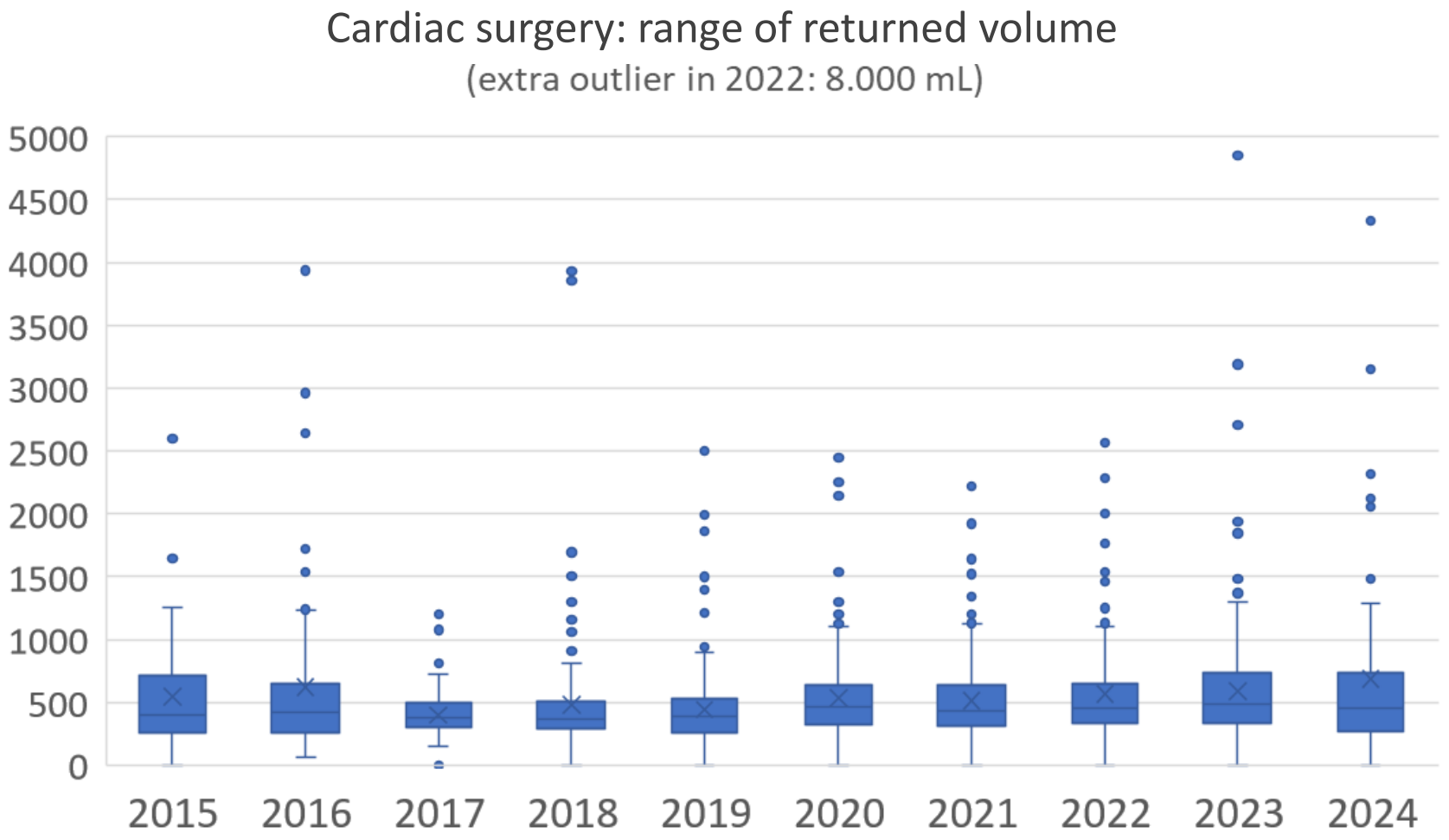
VUB

USE OF CELL SALVAGE

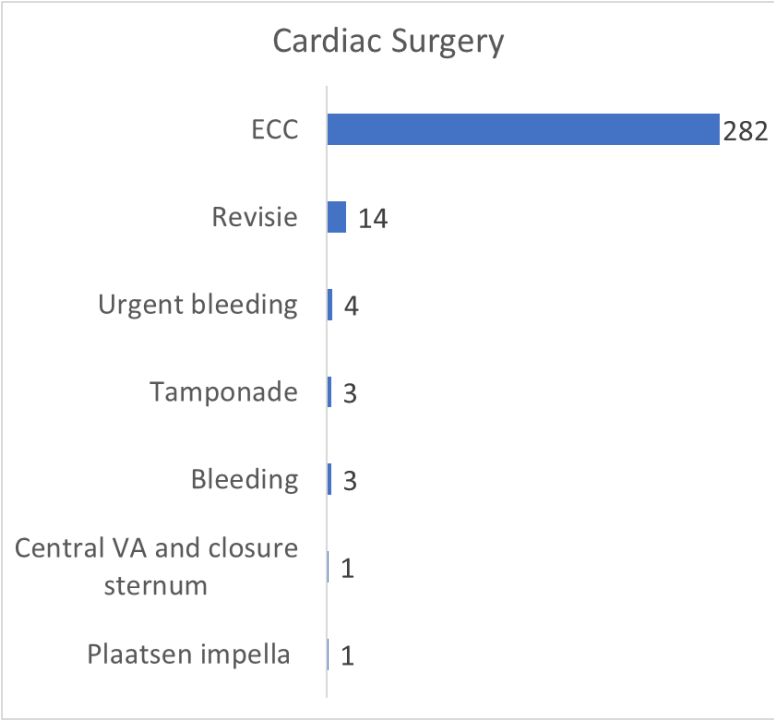


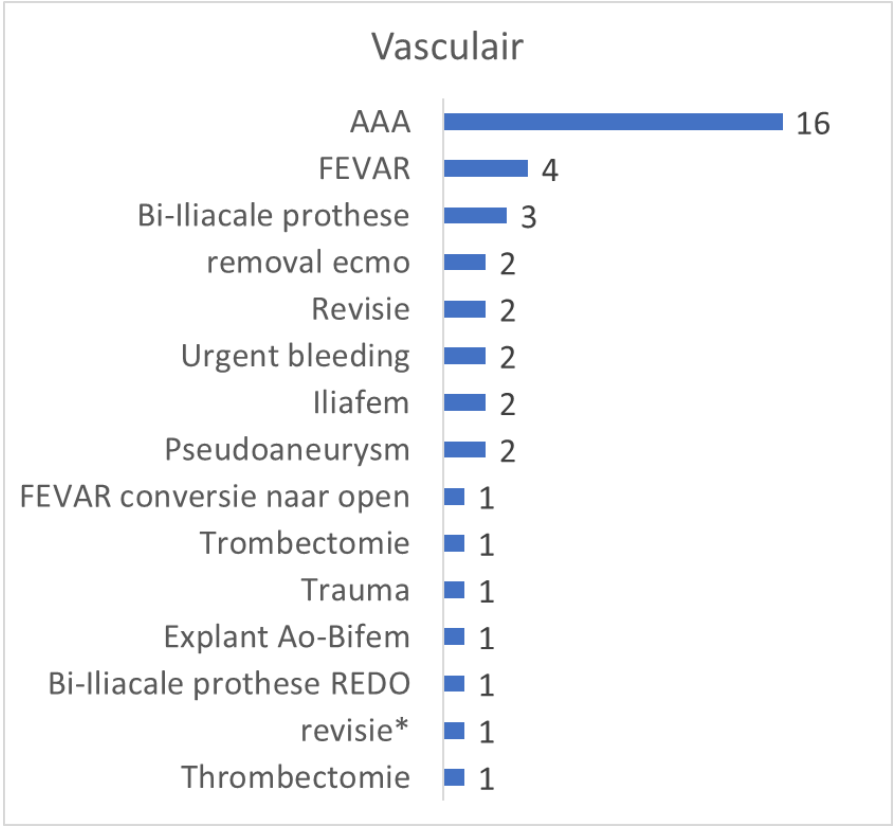


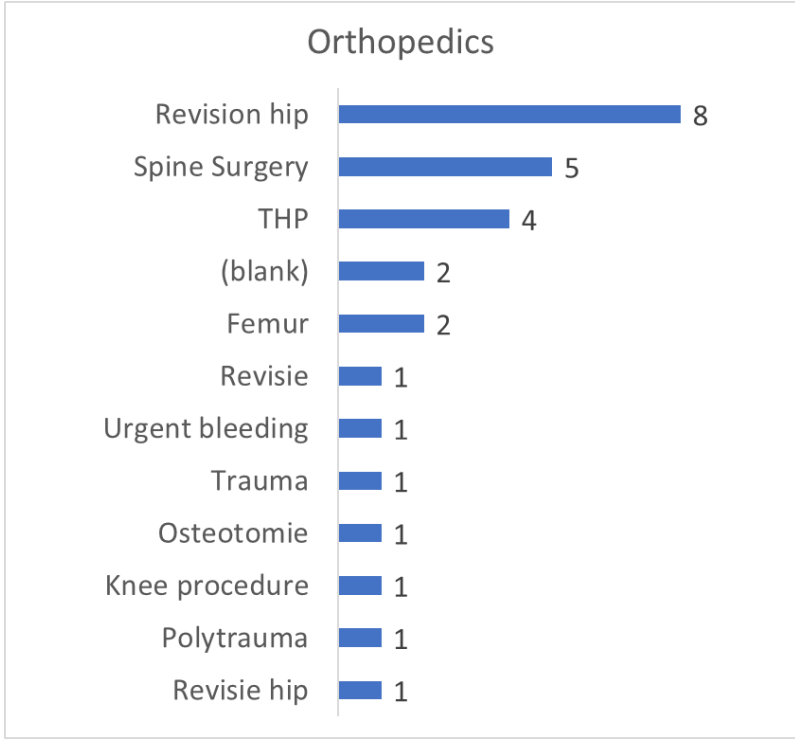
USE OF CELL SALVAGE

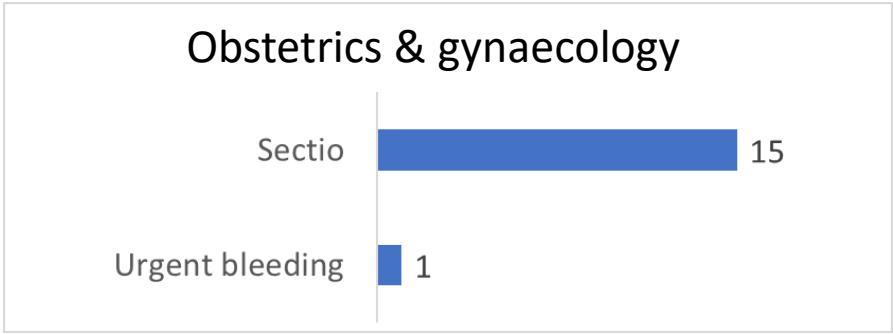


INDICATION CELL SALVAGE PER MEDICAL DISCIPLINE (2023)









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INCIDENT REPORTING ON CELL SALVAGE?

TERM	DEFINITION	WHAT TO REPORT
Cell Salvage	Events and reactions in relation to the use of intraoperative and postoperative cell salvage.	This category currently includes: • Adverse events due to operator error, where the event has the potential to impact on patient care • Adverse events due to machine or disposable failure where the event has the potential to impact on patient care • Adverse events related to the availability of trained staff which impact on the patient • Adverse clinical events during the cell salvage process, such as hypotensive events • Pathological reactions to ***reinfused*** blood

Recommendations:

- Review suitability of cell salvage documentation (paper or electronic) and its appropriate use. Ensure the record of cell salvage is accessible and complete, particularly in relation to communicating pertinent details at handover

Action: Cell salvage leads, theatre teams, hospital transfusion teams

- Establish clear responsibilities and lines of reporting for cell salvage incidents. Review pathways and structure for governance and communicate these processes to all stakeholders

Action: Cell salvage leads, theatre leads, HTC, clinical governance leads

DATA EXPORT: PBM (IN OBSTETRICS) + RH D PROPHYLAXIS

IV iron, fibrinogen concentrate, tranexamic acid, anti-D immunoglobulins

- Record number, date and time of administration, name/number of prescribing clinician
- Date of birth, weight (before pregnancy), BMI, etnicity
- Gravidity, parity, expected delivery date, delivery date and time, multiple pregnancy, delivery: vaginal (normal/instrumental), caesarean section (elective/emergency)
- Oral supplements in pregnancy: iron, multivitamins, others, unknown
- Antepartum/peripartum bleeding, amniocentesis, chorionic villus sampling, external cephalic version, abdominal trauma, extra-uterine pregnancy, miscarriage/abortus/still birth, pregnancy-related hypertensive disease: pre-eclampsia
- Lab results (+ date)
  - ABO & Rhesus D blood type
  - Screening and identification anti-D antibodies & titer anti-D antibodies if positive
  - Kleihauwer Betke test
  - Flow cytometry
- Record number baby + ABO blood type & Rhesus D, birth weight and length

(to compare with all O Rh negative pregnant/delivered women who didn't receive any of these medications?)

Order for Desmet, Arthur (XXXXXXX)

Prescriber

Prescribing ward: A210 Neonatology

Prescriber : Dr. COOLS, Filip Tel. : 6763

Destination

Transfusing ward: A210 Neonatology

☐ >3 hours after this order 22/07/2022 13:00

☐ immediate, crossm.

☐ Urgent, uncrossmatched

Transfusion history

Patient

Gestational age: 34 weeks 2 days

Postnatal age: 0 week 21 days

Extra information:

☐ Weight neonate (g):

☐ Other:

Blood component(s)

	Number :	Specific requirements:
RBC	1	☐

⇨ Indication

Anaemia of prematurity (top-up transfusion)
Postnatal blood loss (bv. intraventricular, pulmonary, gastro-intestinal or iatrogenic due to catheter insertion)
Perinatal blood loss (foetomaternal transfusion, placenta/vasa praevia, umbilical cord rupture or abruptio placentae)
Surgery
Exchange transfusion
Other

Plasma

⇨ Indication

Platelets

⇨ Indication: ...

Reconstit. whole blood 0

...

Non-complete transfusion record in the OR: Mock-up pop-up for anaesthesiologists

Were these blood components transfused during the surgery?		
Unit number	Transfused	Timing
XXX	☑	10:15
YYY	☐	
ZZZ	☐	

Save

Thank you &
let’s continue the good work as TPs

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BeQuinT
Belgian Quality in Transfusion

Health
Food Chain Safety
Environment