

Blood 2019

Come along to the first Transfusion Professionals study day on Saturday 19 October. There are some interesting topics being discussed. Come and meet the Transfusion Professional Network Steering Committee and others working in the area of transfusion.

There has been a late change to the program, with the session on indigenous cultural beliefs about transfusion unfortunately having to be substituted. However, we have a replacement session "Blood Bank in the Wild: Transfusion science and medicine experiences from volunteering with Mercy Ships (NGO)", to be delivered by Katie Gould, a scientist from Australian Red Cross Blood Service. Katie has worked on the Mercy ships and will discuss the challenges of transfusion in these circumstances.

This event is free for all ANZSBT members, non-members cost \$50. *See program page 5.*

As well as the study day there is an ANZSBT Transfusion Professionals program on Tuesday 22nd, 08.30 to 10.00.

The Annual General Meeting for the group will occur on Tuesday lunchtime (meeting room 7). Come and meet your representatives and have your say about where the group is headed in 2020.

What's happening around Australia and New Zealand?

Victoria:

The RhD immunoglobulin in obstetrics audit has been finalised and is available on the website. Some of the main findings have been:

- The need for improved documentation and clear communication
- Education of women should include, not only product information, but also when to contact your health professional for sensitising events
- While health services noted 48 reportable events in the audit, only 9 were reported to Serious Transfusion Incident Reporting (Vic, Tas, NT & ACT)
- During the data collection period, 288 potential errors were found, the majority of these related to missed, or inappropriate routine prophylaxis.
- At delivery 11 women who delivered an Rh D negative baby were administered RhD im-

munoglobulin.

Work is ongoing to support health services in improving processes around RhD immunoglobulin administration.

Queensland:

Health services in Queensland are working on iEMR to resolve any problems with the system. A number of health services are working on implementing subcutaneous immunoglobulin programs for suitable patients.

New Zealand

The Transfusion Nurse Specialists are about to embark on a new audit looking at transfusion practice. This will be an observational audit.

This group along with their DHB colleagues are preparing their next audit looking at RhD usage and Keilhauer's.

There are many new projects and initiatives going on within the New Zealand Blood Service it is a busy and exciting time at the moment.

BloodSafe eLearning Australia: Iron Deficiency Anaemia courses

BloodSafe eLearning Australia have now released six case-based Iron Deficiency Anaemia courses for healthcare professionals such as doctors, including general practitioners (GPs), nurses and midwives, laboratory and scientific staff, trainees and students caring for patients with, or at risk of, iron deficiency and iron deficiency anaemia.

IDA: Essentials

IDA: Paediatrics

IDA: Preoperative

IDA: Heavy Menstrual Bleeding

IDA: Maternity

IDA: Chronic and Complex

Free access available at <https://learn.bloodsafelearning.org.au/categories#ida-courses>

Who are your Transfusion Professional Network representatives?

Trudi Verrall: Trudi Verrall is the Clinical Education Lead for BloodSafe eLearning Australia. She has been in this role since 2010, and has provided advice and review of the program since

its conception in 2007.

Prior to this Trudi worked as a Transfusion Nurse Consultant at the Women and Children Health Network and Country Health in SA. trudi.verrall@sa.gov.au

Angie Monk: Registered nurse and midwife with over 40 years experience across a broad range of specialties. She has held numerous senior positions in health services in UK, Hong Kong and Western Australia, currently working at Joondalup Health Service, where she has worked for the last 20 years. Angie has been recognised for her work as a finalist (WA, 2009) in midwifery awards for her work in designing and implementing an emergency response team in obstetrics and in 2016 WA nursing awards for her work developing a PBM program. In 2016 she was awarded Australian Nurse of the Year for services to nursing and midwifery. Angie is an active member of a number of PBM and Transfusion committees, including current chair of the TP network.

Chris Akers: Transfusion Nurse working at Alfred Health in Victoria, since 2005 and with Blood Matters (Victorian blood management and safety program) since 2014. I have been involved in a number of safety and PBM activities, including use of an electronic blood administration tool and a member of the ACSQHC National Patient Blood Management Collaborative. At Blood Matters I am involved in oversight of the Serious Transfusion Incident Reporting program, a haemovigilance program across 4 states and territories.

Maria Burgess, Clinical Nurse Consultant Transfusion. ACT Blood Counts Program.

Maria developed a passion for transfusion medicine while working at the National Blood Authority as a project officer in 2006 exploring opportunities to support Transfusion Nurses within Australia. In 2008 Maria returned to the clinical nursing and was appointed as the ACT Transfusion Clinical Nurse Consultant (CNC).

As the Transfusion CNC Maria has championed and successfully embedded a number of PBM and haemovigilance initiatives across the Territory. Some examples include:

Project Manager: National Patient Blood Management Collaborative; lead by the Australian Commission on Safety and Quality in Health Care

Canberra Hospital Project Manager: Improving PBM in Obstetrics Clinical Practice Improve-

ment (ACT Public Service Excellence Award and IHF World Hospital Congress Excellence Award.)

Clinical Nursing Consultant: for the introduction of Subcutaneous Immunoglobulin (SCIg) Home Based Therapy in the ACT

Maria also participates in a number of committees:

Member of the National Haemovigilance Advisory Committee (2008 - 2019)

Member, Australian New Zealand Transfusion Nurse Practitioners Group (2010 - 2019)

Member (Chair from 2019), Canberra Hospital Blood and Blood Products Governance Committee (2010 -2019)

Member, Calvary Hospital Blood and Blood Products Governance Committee (2010 - 2019)

Member BloodSafe Elearning Australia Reference Group (2014-2019)

ACT Appropriate Use Blood Reference Group (2008 -2019)

Liz Thrift: Transfusion Nurse Specialist: New Zealand Blood Service

Liz has over 40 years of nursing experience, which started in the UK both for the NHS and for private hospitals. In 2001 Liz relocated with her family to the channel islands working in Guernsey, this is where her interest in Transfusions began, Liz had a fabulous time living in Guernsey but in 2004 the family relocated again to New Zealand.

Liz started working for the blood service in 2005 as the Transfusion Nurse Specialist (TNS) based in Palmerston North. Liz is one of 6 TNSs working for the blood service where they provide support and education to all Nurses, Doctors and Midwives and anyone else that requires help. The TNS group also audit all hospitals that provide transfusions.

Liz became an active member of the ANZSBT 8 years ago by becoming a member of the educational subcommittee and then a member of the Transfusion Practitioners Network 6 years ago. Liz is now on Council and on Clinical Practice Improvement Committee.

ISBT Basel - A few highlights by Linley Bielby

This year the 29th Regional Congress of the ISBT was held in Basel, Switzerland from 22-26

June 2019, amid an unusual European heatwave. Basel is a pretty city located on the very fast running Rhine River in northwest Switzerland, close to the borders of France and Germany. Its medieval old town centre is dominated by the 16th-century, red-sandstone Town Hall and the 12th-century Gothic cathedral is a popular tourist stop.



There were 2676 participants at the congress from 96 countries, 75 exhibitors, 51 scientific sessions, 3 workshops and 1 breakfast session.

Along with enjoying all the offerings of the congress, as the Chair of the ISBT Transfusion Practitioner (TP) Forum steering committee, there are meetings that I attend. One is providing a report of our TP activities to the Clinical Transfusion Working Party (CTWP) of which the TP Forum is a sub-committee. This is a really interesting as you hear about all the activities that are undertaken, along with getting the odd job as well.

One very interesting area is the work that is being done to update Wikipedia. This work is being led by Lise Estcourt (Consultant Haematologist for NHS Blood and Transplant, and Senior Clinical Lecturer in Transfusion Medicine).

A survey showed that many junior medical staff are using Wikipedia as a main source of information. Lise has undertaken and coordinated members of the CTWP to update Wiki topics, with over 500 edit made in the last year. These updates and new pages now include information that is publically available on the ISBT website.

There are now 140 transfusion related pages:

- 52 pages related to laboratory transfusion and blood groups
- 51 related to clinical transfusion
- 12 to haemovigilance and transfusion reactions
- 13 to blood components.

Work is continuing to include other topics.

There have been an amazing number of page views. For the month of May 2019, there were 33,285 views on blood transfusion page, 19,075 on postpartum bleeding, 9,739 on fresh frozen plasma and 6,022 on red blood cells.

There were many interesting and informative sessions with just a few highlighted below.

Applying Drones to supply blood to remote areas: Rwanda's experience.

Jonathan Rowell was as a replacement speaker for Thomas Muyombo (Biomedical Services, Rwanda Ministry of Health – National Blood Service, Kigali, Rwanda)

Jonathan provided background on Rwanda's high maternal mortality of 22-24/100,000 live births, with greater than 600 young women dying in child-birth each year. They needed to deliver blood, quickly and across distances, and they began exploring the use of drones to do this.

The requirements of a drone was speed (to beat the golden hour), ability to take-off and land, range greater than 100kms, ability for be able to communicate with the vehicle and to be able to cope with the physical conditions - temperature, humidity and pressure. The drone needed to be able to carry 2.5kg (4 units of blood), and be of a reasonable cost.

The South African Blood Service (SABS) engaged a German company Quantom and they developed a prototype that has a maximum take-off weight of 13kg, speed of 180km/h, can fly for greater than 90 minutes,; with a range is 180kms, wing span 3.5m and can take off in 60km/h winds. It has helicopter capacity and a safety glide profile. The drone can be monitored in real time on a LED screen. The flight path can be loaded into google maps to monitor the terrain on route.

To date they developed five drones that were named via a SABS staff competition. They are developing a drone school and airport and want to develop their SABS staff to be able to coordinate all the drone deliveries. Their emphasis is on saving lives and building internal competence.

Batteries power the drones and the electricity cost to charge these is approx. \$1 per charge. The cost of the aircraft was considered inexpensive compared to cars, and in time will be less than \$10,000.

This is ground breaking and the implications are far reaching for countries having to provide blood over vast distances. This technology could be beneficial to some of our remote areas of Australia.

Development of detailed transfusion exposure information from patient electronic health records using natural language processing. Presented by Barbee Whitaker (Office of Biostatistics and Epidemiology/CBER, US Food and Drug administration)

Barbee described that currently the Centre for Disease Control (CDC) requires manual reporting of reactions or other fatalities. She explained some fascinating work that is being done to validate the use of artificial intelligence (AI) to interrogate electronic medical records (EMR) to look for transfusion exposure and reactions.

To test it, AI using a natural language tool was applied to nursing notes and then validated by manual review of 15 nursing notes. The algorithm was then applied to 34,000 EMR nursing notes with 100 reviewed manually for validation and there was 100% compliance.

This now opens to door to be able to use this tool to detect transfusion exposure and reactions thus reducing the need for manual review and can then lead to automated reporting.

Following finalisation of the pilot this tool will be open to all who have EMRs.

This has potential to help track all reactions once we are all using EMRs.

TP networking session



Sixteen TPs or TP champions (pictured) attended the TP networking session from India, Ireland, UK, Belgium, Italy and Australia. At the session two groups discussed and shared ideas about challenges such as implementing PBM, education and technology (EMRs). The hour and half session flew by.

Comments shared by the participants about

the sessions included:

Great opportunity to share knowledge, learn about how others are doing things and opportunities to work together.

Thank you for enlightening us on how to include clinicians in the PBM loop.

Most enjoyable session at ISBT. Thank you.

Very helpful. Good to know we all are in the same boat :-)

Keep doing TP networking sessions

Next year the international ISBT congress is being held in Barcelona from 6-10 June.

Plans are underway to hold some fabulous TP sessions, so this should be a good excuse for you to travel to Spain to come along and join us.



Another date to put in your diary is the regional congress in Brisbane being held 16-19 November 2021.

If you would like any information about joining ISBT or the TP group please let me know at

lbilby@redcrossblood.org.au

Key events: 2019

Blood 2019, October 20-23, Perth.
<http://www.blood2019.com/>

ISBT 30th regional congress, November 16-19, Bangkok, Thailand

2020

4th Peri-operative Patient Blood Management Symposium, February 14-15 Brisbane.

2021

ISBT Regional congress, November 16-19, Brisbane.

Transfusion Practitioners Study Day

Saturday 19th October 11.00 - 16.00

Perth Convention and Exhibition Centre

Programme

1030 *Registration & coffee*

1050 *Welcome*

 NSQHS Standard 7: Met	
1100	<i>What do the accreditation surveyors really want?</i> Jo Blacker (King Edward Memorial Hospital, WA)
1130	<i>How to win friends and influence people ... with data!</i> Amanda Esson (Department of Health, WA)
1200	<i>Solving a sticky Situation - implementation of an electronic blood labelling system</i> Angie Monk & Sarah Bennett (Joondalup Health Campus)

1230 *Lunch* Networking & Catchups

 Tools of the Trade	
1315	<i>Transfusion Education and Training Resources</i> Dr Anastazia Keegan (Australian Red Cross Blood Service, WA)

 Lessons Learned	
1400	<i>Indigenous cultural beliefs about transfusion</i> Tracey Spigiel or Maree Perry (Australian Red Cross Blood Service, SA/QLD)
1445	<i>We may have all come on different ships, but we are in the same boat now.</i> Alison Badger NZBLOOD Service

1530 *Afternoon Tea* Networking & Catchups

Special thanks to **HealthRFID** for sponsoring the study day and to **Vifor Pharma** for sponsoring lunch



Your Transfusion Professional Representatives

Area	Name
ACT	Maria Burgess
New South Wales	Penny OBeid
New Zealand	Liz Thrift
New Zealand Blood Service	Fiona King
Northern Territory	Susan Dalkie
Queensland	Susan Kay
South Australia	Barbara Parker
Tasmania	Dawn Richardson
Victoria	Chris Akers & Adrienne Wynne
Western Australia	Angie Monk
Australian Blood Service	Bev Quested
ANZSBT Council	Debbie Pinchon
BloodSafe e-learning	Trudi Verrall