

# Best Practice in South Australia

Sue Ireland

Manager

Blood, Organ & Tissue Programs


SA Department of Health



Government  
of South Australia

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SA Health



BloodSafe - 6 years on

BloodSafe e-learning

Red Cell Utilisation Study

Inventory Management  
(BloodMove)

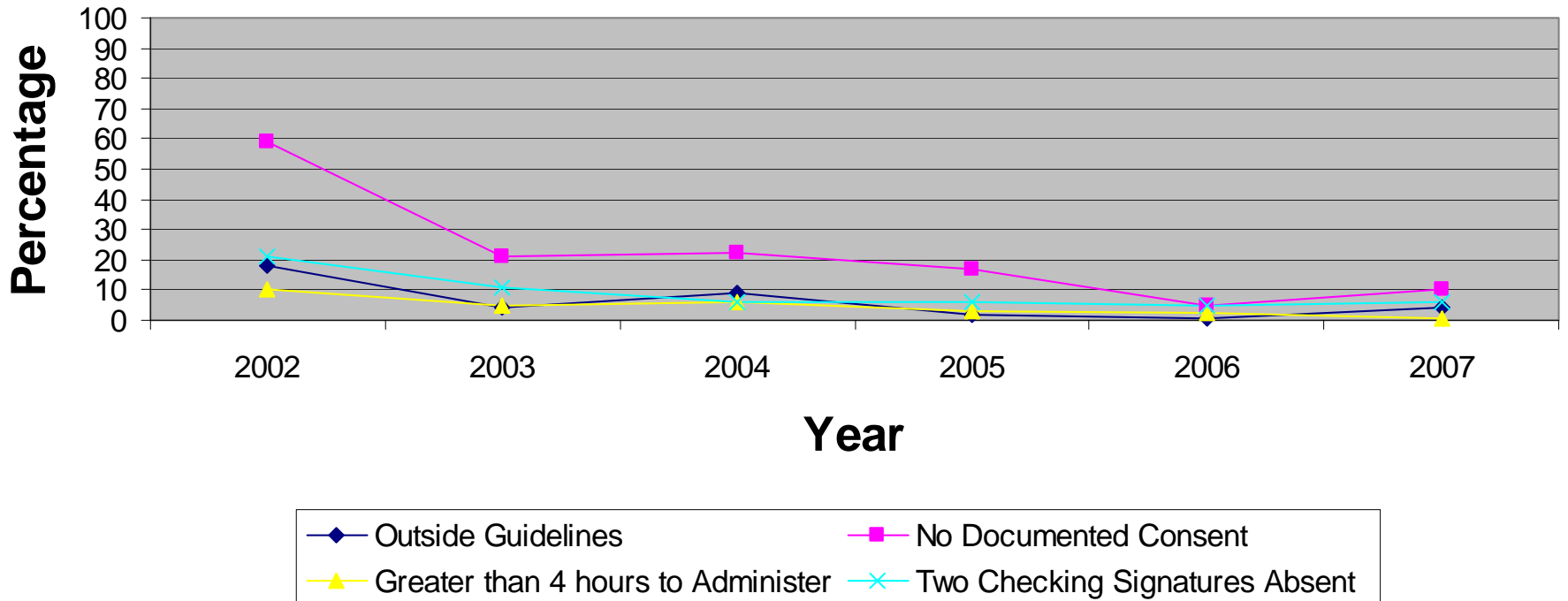


# BloodSafe..... 6 years on

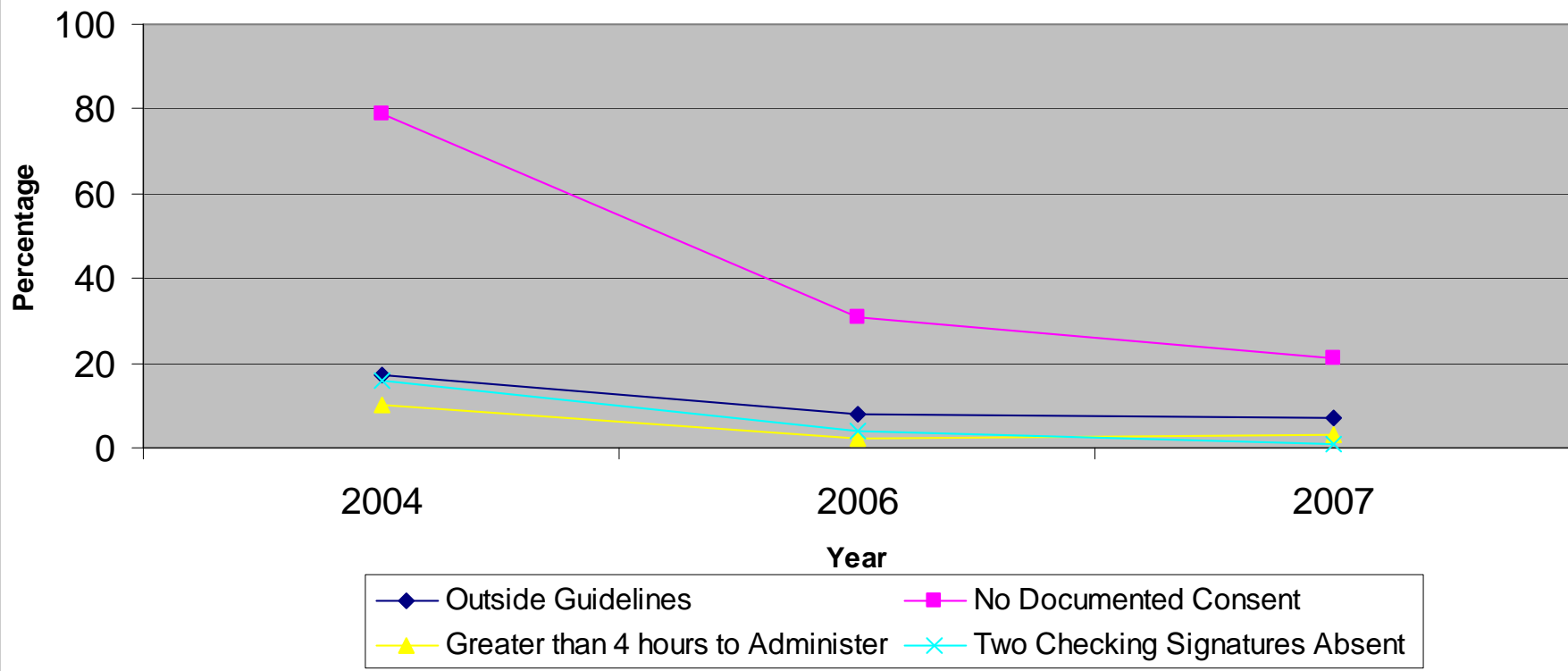
# BloodSafe 2002-2008

- > Best Practice staffing in 2008
  - 4 BloodSafe nurses in metro teaching hospitals with nursing and medical support from ARCBS
  - BloodSafe nurse assisting private hospitals
  - Project Manager BloodSafe e-learning
  - IVIG Clinical Practice nurse
  - 3 staff supporting Haemophilia Treatment Program
  - Administrative support
  
- > Red Cell Casenote Audits
  - Transfusion outside NHMRC Guidelines
  - No documented consent for transfusion
  - > 4 hours to administer
  - 2 checking signatures absent in the bedside check

## Major Metropolitan Hospital Red Cell Audits 2002-2007




## Smaller Metropolitan Hospitals 2004-2007





## BloodSafe current themes

- > Paediatric Transfusion resource kit developed
- > AIMS adverse event data in 1<sup>st</sup> National Haemovigilance Report, Jan 2008  
([www.nba.gov.au/haemovigilance](http://www.nba.gov.au/haemovigilance))
- > Platelet expiry reduction with TMS
- > BloodSafe 'catch up' for Country Health & Private during 2008 with 6 project appointments (0.4 fte private + 1.3 fte country)



**BloodSafe e-learning  
.....a tool to assist with  
ACHS accreditation**



## BloodSafe e-learning

- > Registrations as of 1 May = 3,006
  - 50% Nursing and midwifery
  - 18% Medical
  - 32% Laboratory staff and other staff groups
- > Endorsed as a relevant professional development tool
  - CME points – approved by College of Anaesthetists and other medical colleges being approached
  - CNE points – in process via Royal College of Nursing
  - Adopted by University of Adelaide and Flinders University Medical Schools as part of pre-placement training for medical students

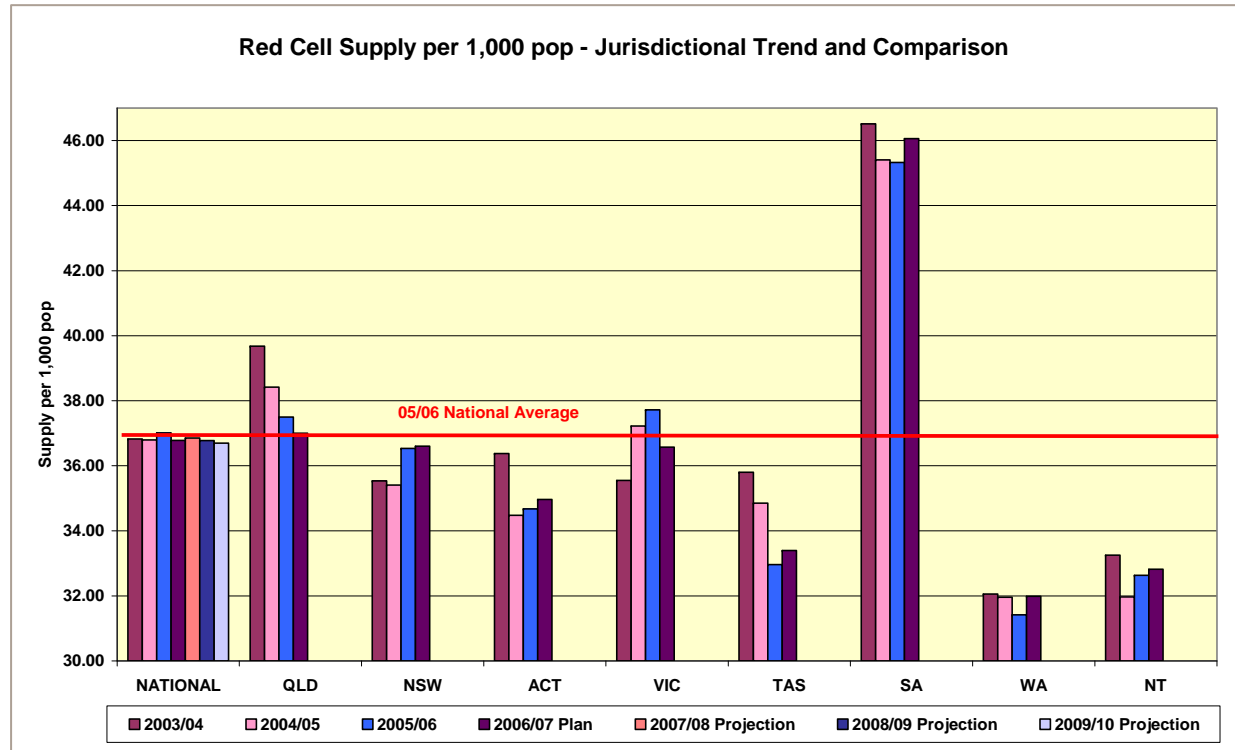
# BloodSafe e-learning – 2008/09

- > Future content
  - Post partum Haemorrhage module for Midwives
  - Iron Deficiency Anaemia module
  - Reporting tools to assist administrators in monitoring uptake (in accordance with privacy principles using self-identification)
- > Aim to develop a model for a national program
  - Consider best model for ongoing sustainable transfusion education to support accreditation
  - Transition from state-based local initiative to nationally supported ongoing education program
  - Steering Committee membership to include ANZSBT, ARCBS, NBA, representatives from other States/Territories and advisors in national IT innovation with SA Health as lead agency



# Red Cell Utilisation Study

# High Red Cell Issues per capita



Graph courtesy of the ARCBS



# History

- > BloodSafe program success in improving rates of clinically appropriate transfusions
- > SA red cell issue rate still 22% higher than national average in 2005/06
- > Need for a whole of state approach to identify the impact of other factors on SA's utilisation rate
- > Needed a study partner & NSW Clinical Excellence Commission (Dr Paul Tridgell) undertaking a similar study!!



# SA Public Sector Issues and Utilisation for the 2006 Calendar Year

- > Approximately 47,600 whole blood and red cell units issued for use in the public sector
- > 96% of issues put to therapeutic use
- > Of the units used therapeutically, 90% were matched to inpatient records (unmatched rate comparable to NSW)
- > Reasons for non-matching include:
  - small country hospitals where matching of data was not considered time effective for the study
  - patients transfused in emergency departments (no valid URN recorded)
  - coroner's cases where the hospital patient record is yet to be finalised (missing morbidity records)
  - blood issued at one site but transfused at another site or incomplete data capture.




# Key statistics from public hospital dataset

- > 5.2% of blood packs transfused went to interstate residents at an average of 4.5 units per transfused patient hospital stay (1.9% of admissions)
- > 38.5% of blood packs were transfused in elective admissions at an average of 2.8 units per transfused patient hospital stay
- > 61.5% of blood packs were transfused in emergency\* admissions at an average of 3.5 units per transfused patient hospital stay

\* Emergency admissions are those that should occur within 24 hours. They are inclusive of, but not limited to, those that occurred through an Emergency Department.

# Preliminary observations against NSW dataset

- > Red cell issues per capita 24% higher than NSW for study period 2005-2006
- > Acute inpatient activity separations/1000 residents were 22% higher than NSW
- > SA Cost(liness) weighted acute separations/1000 residents were 19% higher ([www.aihw.gov.au](http://www.aihw.gov.au))
- > When applying NSW rate of blood usage by casemix DRGs to SA study hospitals
  - Overall observed rate only 0.5% higher than expected
  - High variability across DRG groups with Ortho +9% (Hip/Knee +11%), CardioThor +8%, Haem -20%, MedOnc +35% than expected



# Inventory Management (aka BloodMove)

# Inventory management & System wastage reduction

- > Profile raising of discard rate through introduction of blood wastage as a regional performance indicator in SA Health (KISS principle)
  - Monthly and year-to-date volumes not put to therapeutic use
  - Combined volume red cells/plts/FFP/cryo issued vs discarded
  - % discarded and \$ value of discards based on product unit price
- > Product management observations from Operation Southern Rebound Exercise 9 April
  - Need for capacity for intensive management of fresh product as an extension of regular management processes
  - Reliance on distribution via taxis/commercial couriers not ideal



## Future developments

- > Country Health BloodSafe to include activities to assist with O Neg discard rates arising from hospital storage
- > IMVS, SouthPath, W&CH Laboratory Medicine Division to form SA Pathology on **1 July 2008**
- > SA Pathology initiatives
  - New IT system for SA Pathology within 12 months will enable monitoring of 70% of non-ARCBS holdings in the State
  - Plans for SA Pathology Blood (Inventory) Management Unit – credits to Ken Davis & David Roxby



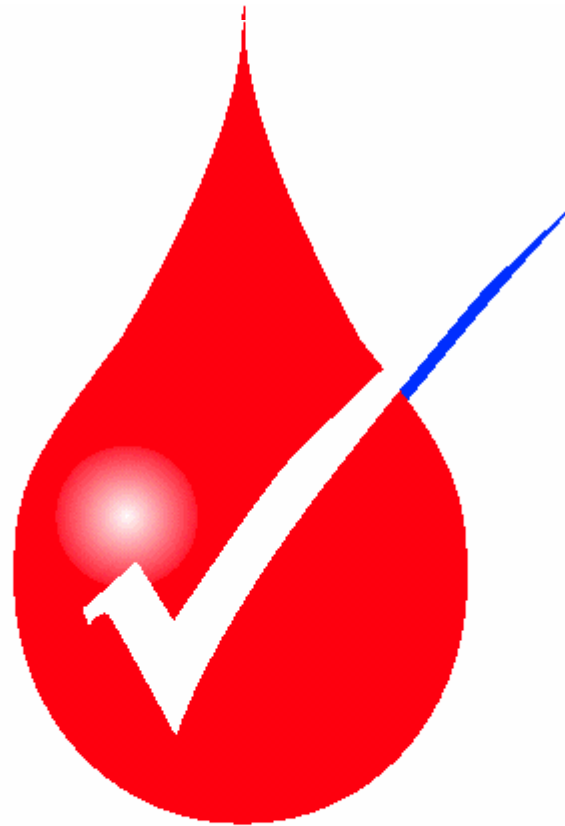
# Key contacts in SA

- > Dr Kathryn Robinson- Medical Advisor
- > Dr Bev Quested - Nursing Advisor
- > David Peterson - e-learning Project Manager

> Visit our websites

[www.health.sa.gov.au/bloodsafe](http://www.health.sa.gov.au/bloodsafe)

[www.bloodsafelearning.org.au](http://www.bloodsafelearning.org.au)



**BloodSafe**

SAFETY AND QUALITY IN ACTION



# **Government of South Australia**

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SA Health