

Authors

Ms Kathleen A. Ryan

BEd(Nurs) MEd(AdultEd) GAICD FAAQHC
Fellow ISQua ACHSMAF
Director of Clinical Governance

Adjunct Professor Michael C. Nicholl

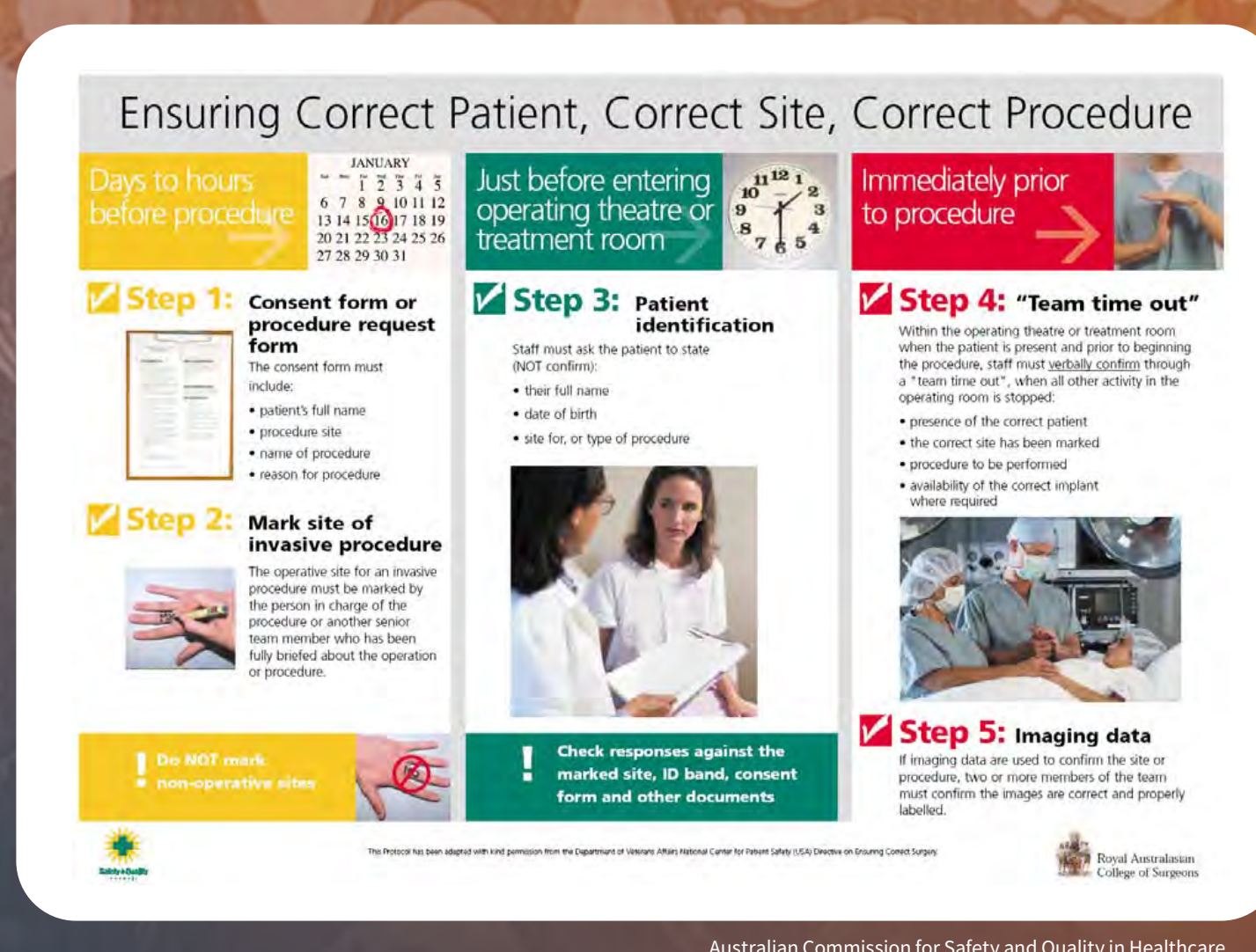
MBBS MBA(PubSecMgt) PhD FRANZCOG
FRCOG AFCHSM FAAQHC
Chief Executive | Clinical Excellence Commission

Incident Management Legislation and Policy into Practice: Review of Alternative Incident Management Methodologies in the New South Wales (NSW, Australia) Health System.

Introduction

Root Cause Analysis (RCA) methodology for serious incident investigation was embedded in NSW Health policy in 2001 and mandated under legislation in 2005. Outcomes and learnings from RCAs have led to the implementation of statewide patient safety improvement programs including:

- **Incorrect patient identification (Correct Patient, Correct Site, Correct Procedure)**
- **Between The Flags — detecting the deteriorating patient**
- **Sepsis Kills**



After 20+ years of applying RCA methodology for serious incident investigation, it is timely to explore how the NSW Health system has changed as a result as the number of serious adverse events and RCA conducted per year is relatively unchanged.

Approx 600 RCAs were conducted per year from 2012 to 2022. Incidents categorised as “clinical management” were the most frequently reported serious adverse event. Despite the utilisation of the resource intensive RCA investigation methodology, the rate of serious incidents has not significantly decreased over 10 years. This highlighted that the resources required for RCA investigation is disproportionate to systems improvement and harm reduction achieved and led to searching for more appropriate alternative investigation methodologies.

Conclusion

The reliance solely on Root Cause Analysis methodology has resulted in a resource intensive process which has not reduced the rate of patient harm as expected, and further evaluation is required to assess the most effective alternative methodology. Additionally, incident review processes including analysis of aggregated reviews should be strongly linked to Quality Improvement or to the science of improvement to effect systems change.

Further work is required to understand the elements and practice of conducting Serious Adverse Event Reviews which will lead to in-depth analysis, systems improvement and a reduction in the reoccurrence of incidents and patient harm.

Methods

The Clinical Excellence Commission as the lead agency for patient safety in NSW, Australia commissioned literature reviews of alternative investigation methodologies to RCA.

Interviews were held with clinical governance leads, subject matter experts, private sector representatives and other Australian jurisdictions to confirm views and evidence of the effectiveness of alternative methodologies.

Results

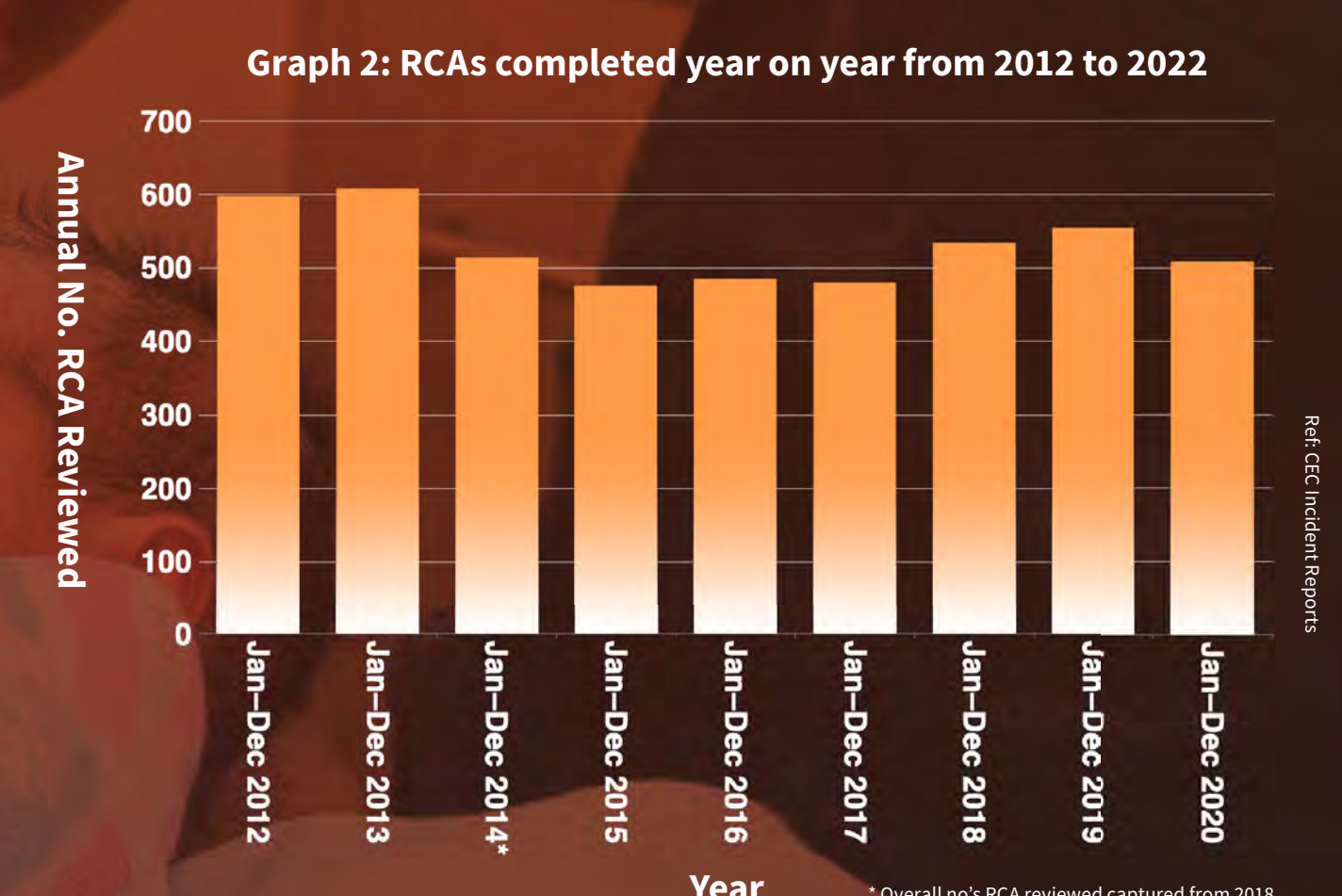
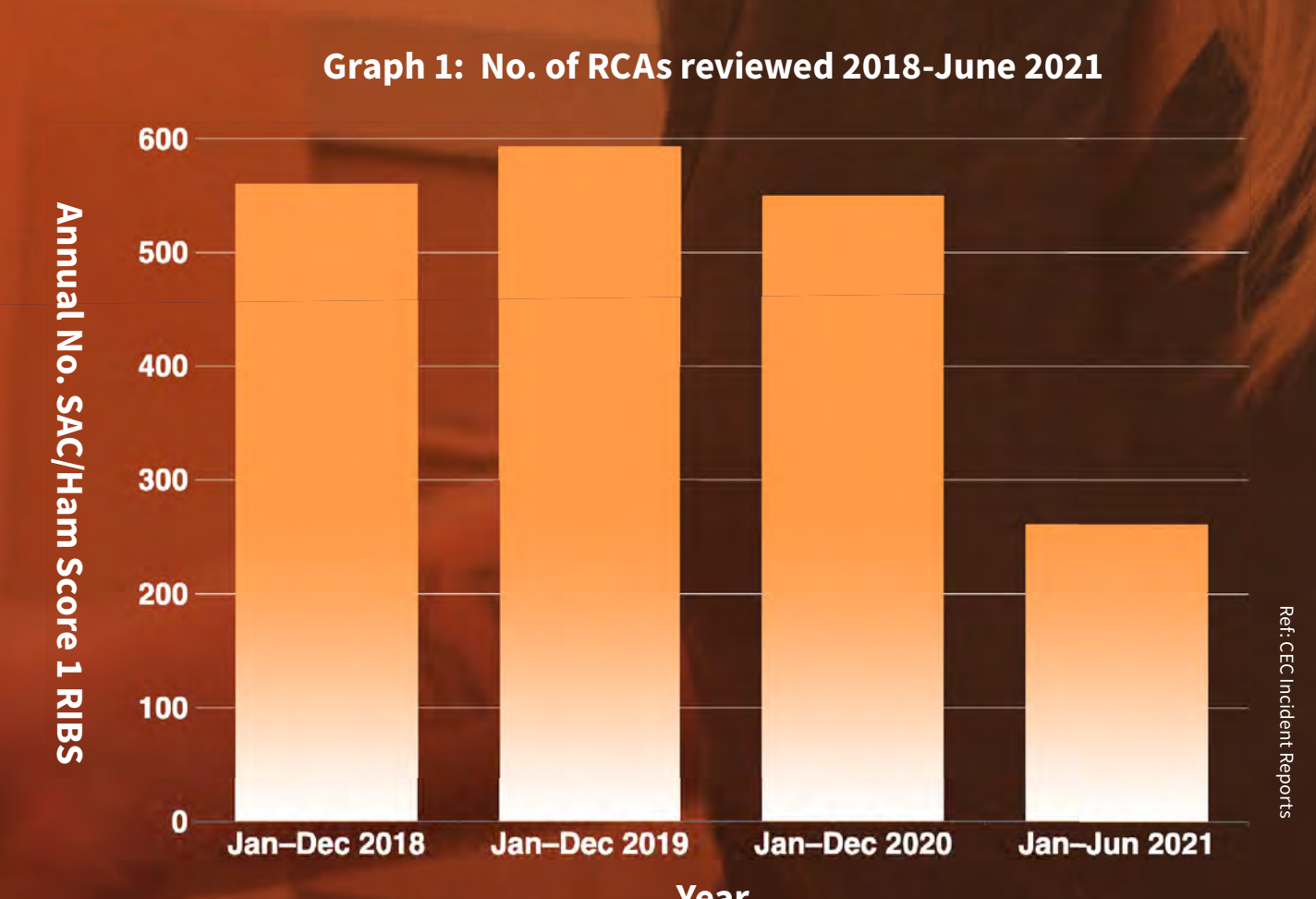
There was scant evidence to demonstrate the effectiveness of one methodology over any other. What was evident however, was the guiding principles across all investigation methodologies were consistently the same. That is, the purpose of incident analysis in identification and implementation of sustainable systems-based improvements to make patient care safer and reduce harm using systems thinking and human factors analysis.

As there was minimal evidence to demonstrate which methodologies led to improved clinical outcomes, or if any one methodology was better than the other, four methodologies were selected in NSW as alternatives to RCA and incorporated into a revised state-wide Incident Management policy. These methodologies are collectively referred to as Serious Adverse Event Review (SAER) and chosen due to extensive use, and varying degrees of evaluation across international health systems:

1. Root Cause Analysis and Action — RCA2
2. Systems Analysis of Clinical Incidents — London Protocol, 2nd edition
3. Concise Analysis, and
4. Comprehensive Analysis

From 2018 overall number of RCAs reviewed were captured.

Of note, the majority of recommendations would be classified as “weak”.



(Ref: Clinical Excellence Commission Biannual Incident Reports)