



MONASH
Faculty of
Medicine,
Nursing and
Health Sciences



Early career fundamentals

Measuring quality in MBS

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Age of surgeon and outcomes

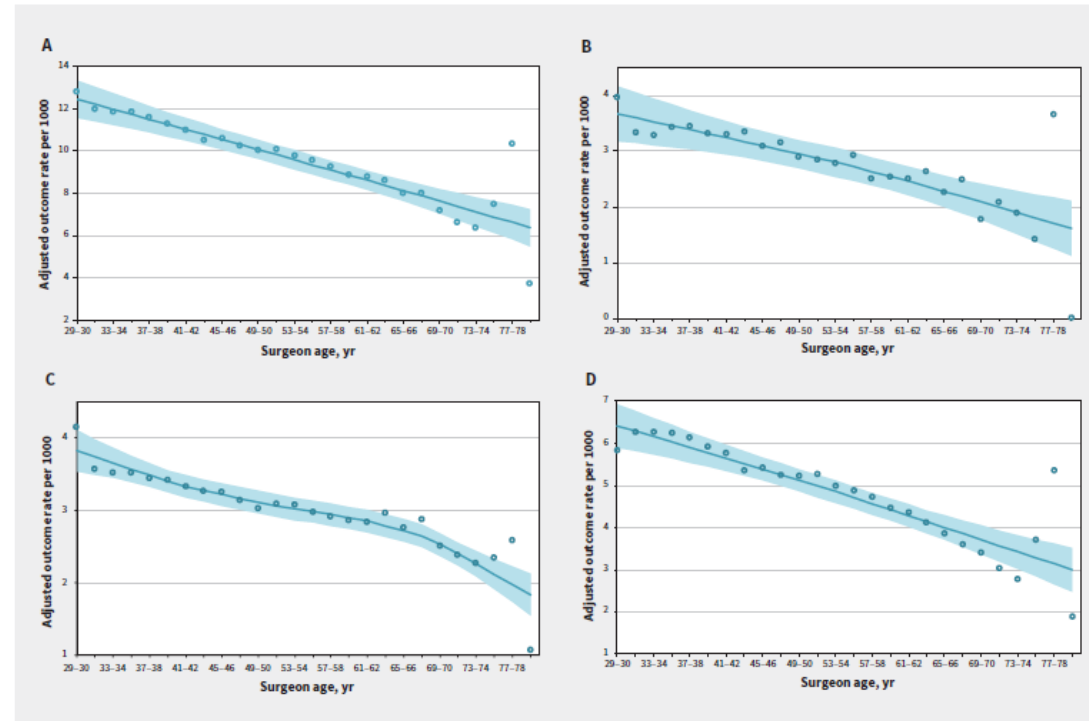
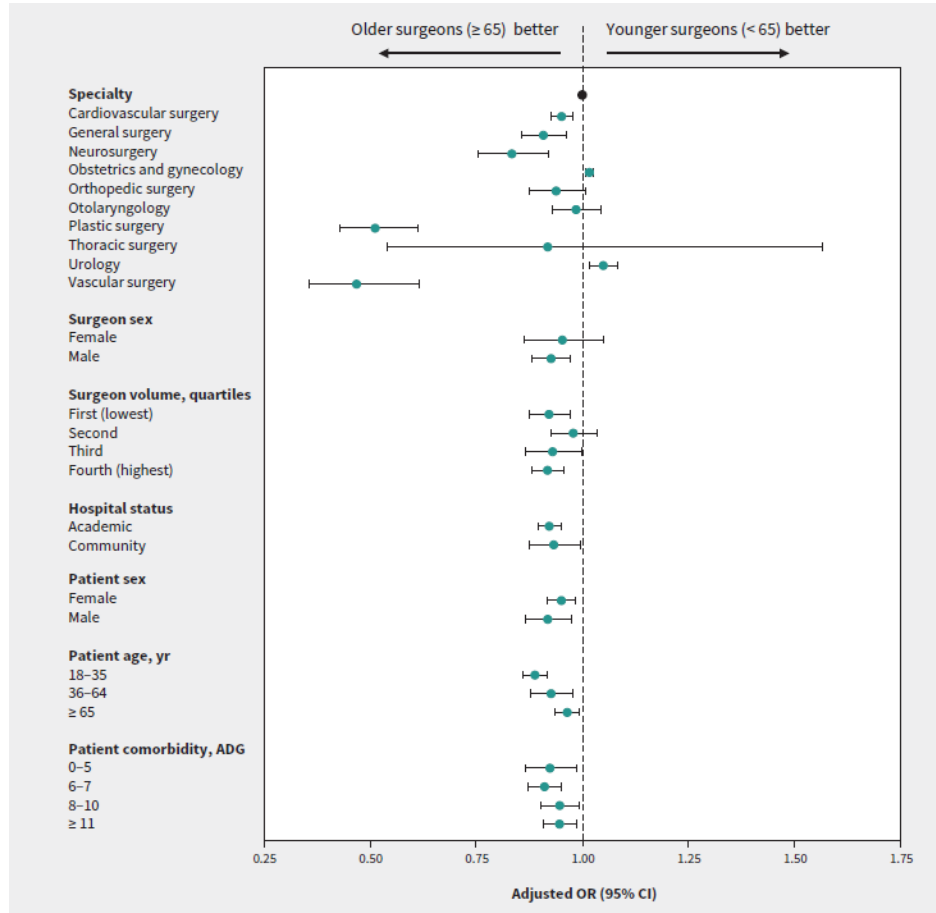
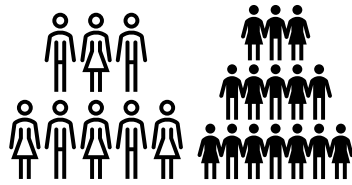


Figure 1: Adjusted outcome rate per 1000 events of (A) composite outcome (comprising death, readmission or complication within 30 d), (B) mortality (C) readmission and (D) complication by surgeon age (yr). We used locally weighted scatterplot smoothing to generate a line of best fit (solid line), with the shaded area representing the 95% confidence interval.

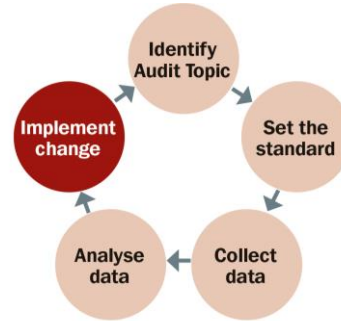
Improving surgical outcomes



Technical training ✓



Case Load ✓
Peer Support



Surgical Audit



Reflective practice



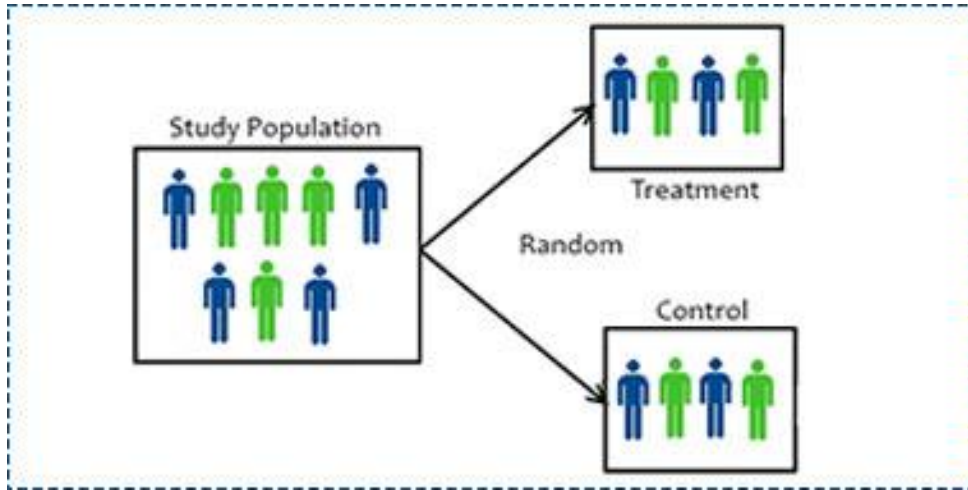
What is a registry?



- Registries prospectively collate purposeful data
 - Heath Service
 - Clinical Quality
 - Disease or treatment
 - Product or device
- Whole population
 - Often rely on opt-out process
- Complete follow-up
 - Cross-linkages
 - PROMS/PREMS

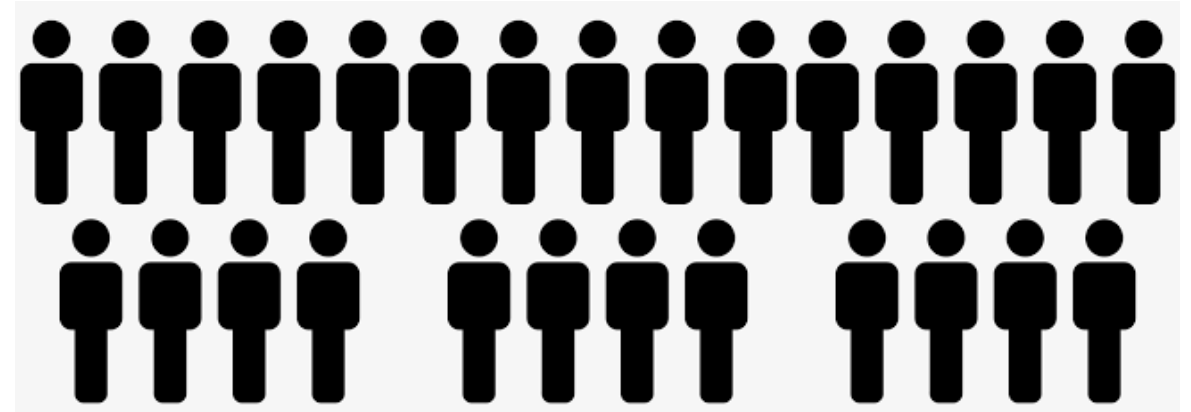
CQR is different to a clinical trial

Clinical Trial



- Investigational
 - Dictate the treatment plan
- Sample of a population
- Very detailed information to detect any positive or negative outcome

Registry

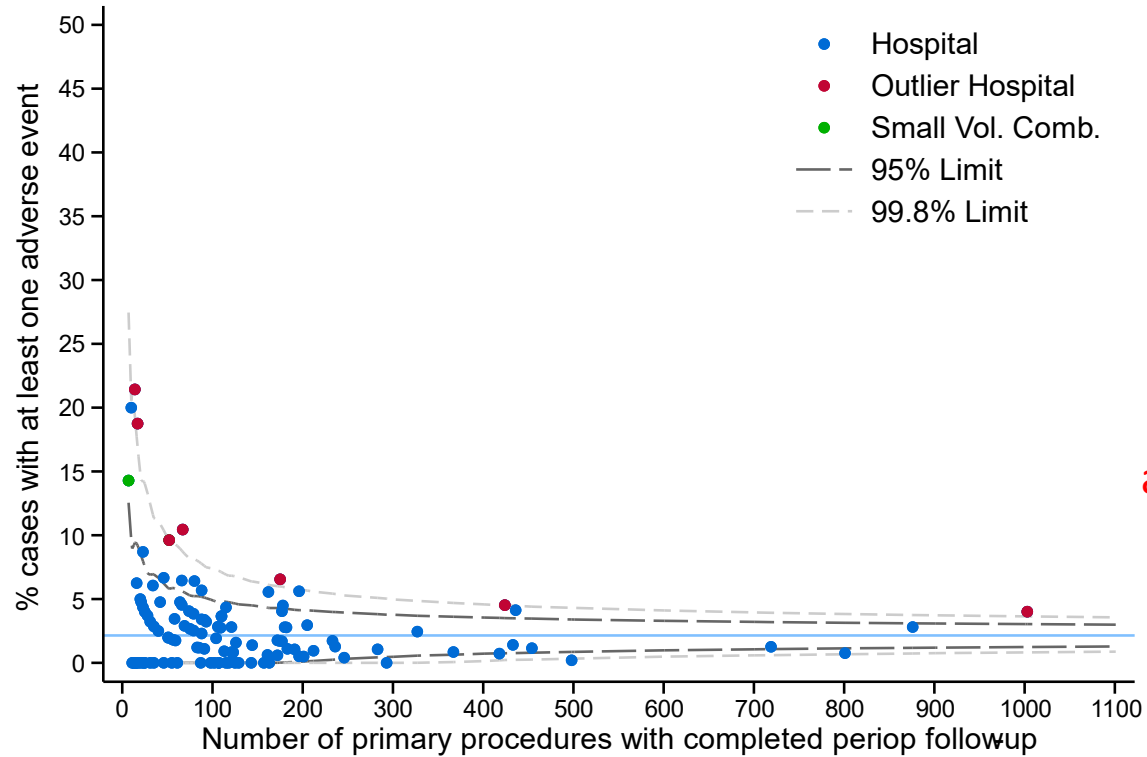


- Observational
 - Look “backwards” at the intervention
 - “post-market surveillance”
- Ideally entire population
- Looking for “FLAGS”

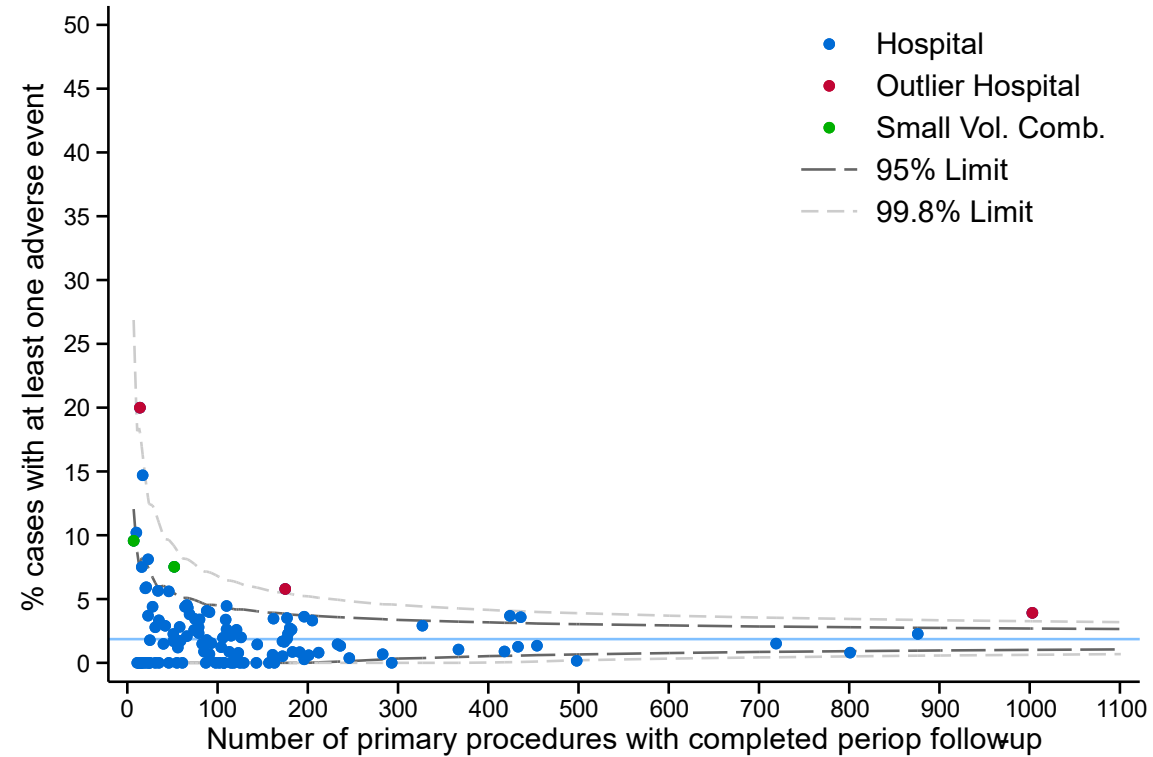
Impact of risk adjustment

Outcome: at least one of return to theatre / admission to ICU / re-admission to hospital (< 90 days)

Crude Un-adjusted: Primary procedures



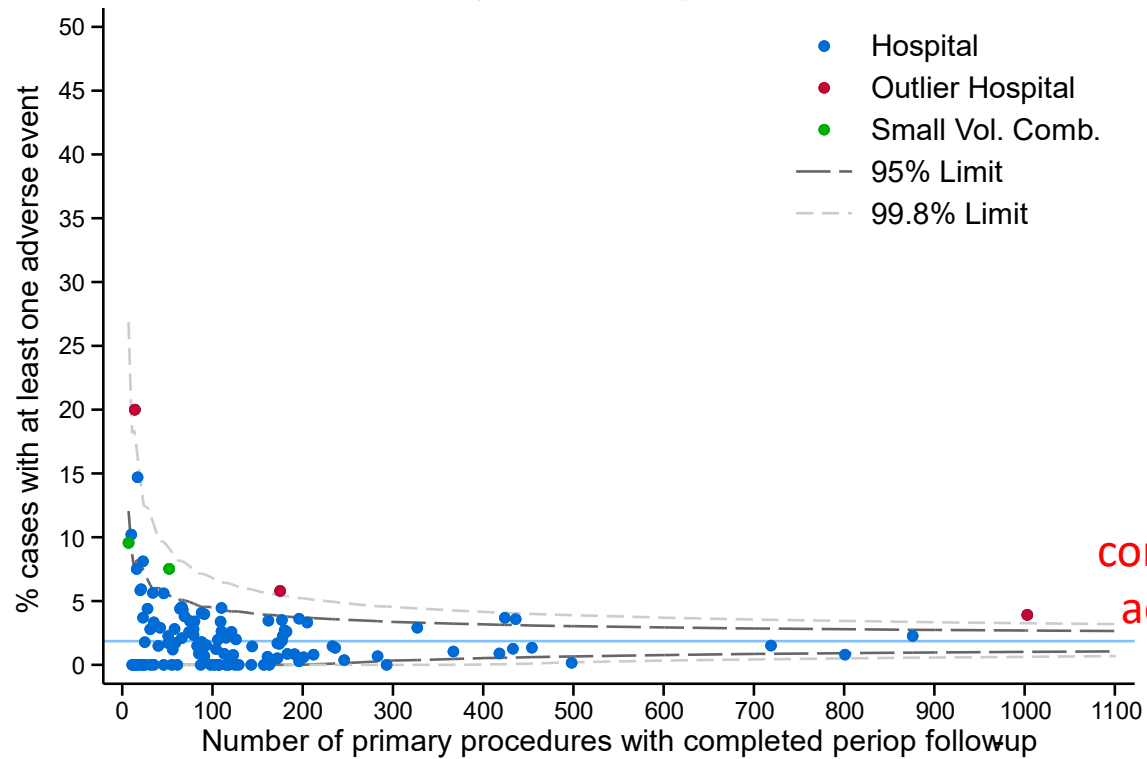
Risk-adjusted: Primary procedures



Impact of data completeness

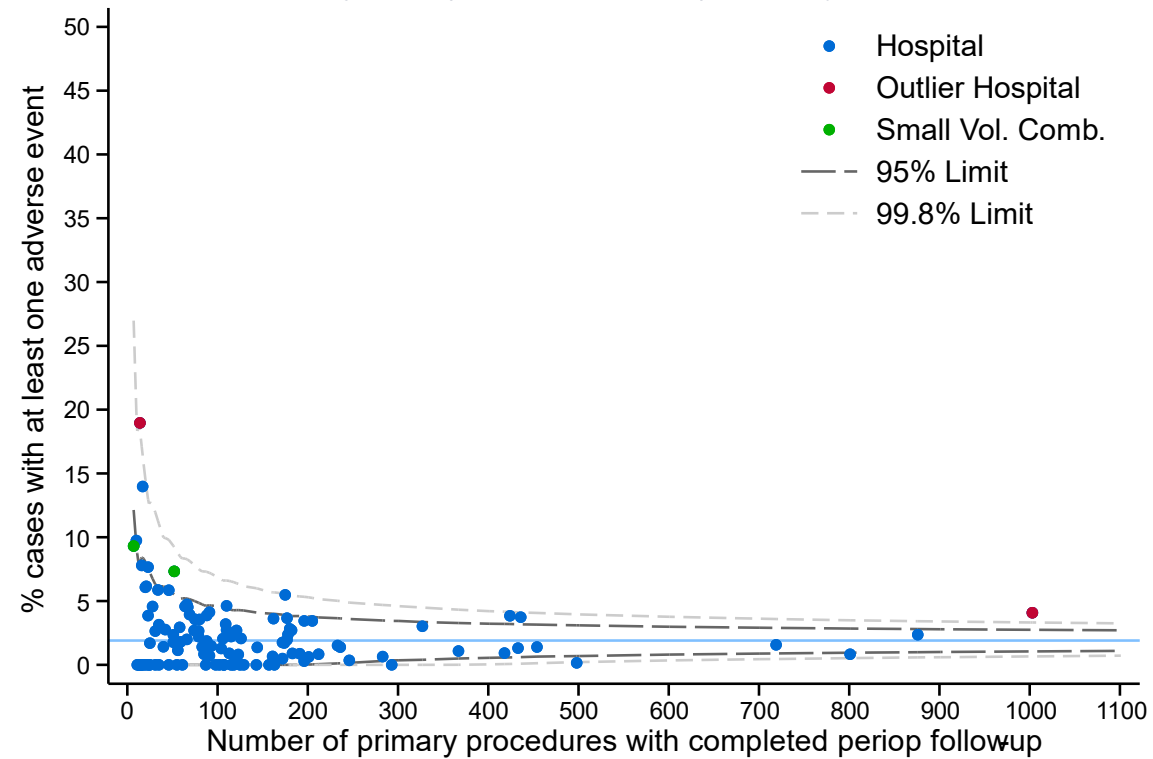
Outcome: at least one of return to theatre / admission to ICU / re-admission to hospital (< 90 days)

Risk-adjusted: Primary procedures



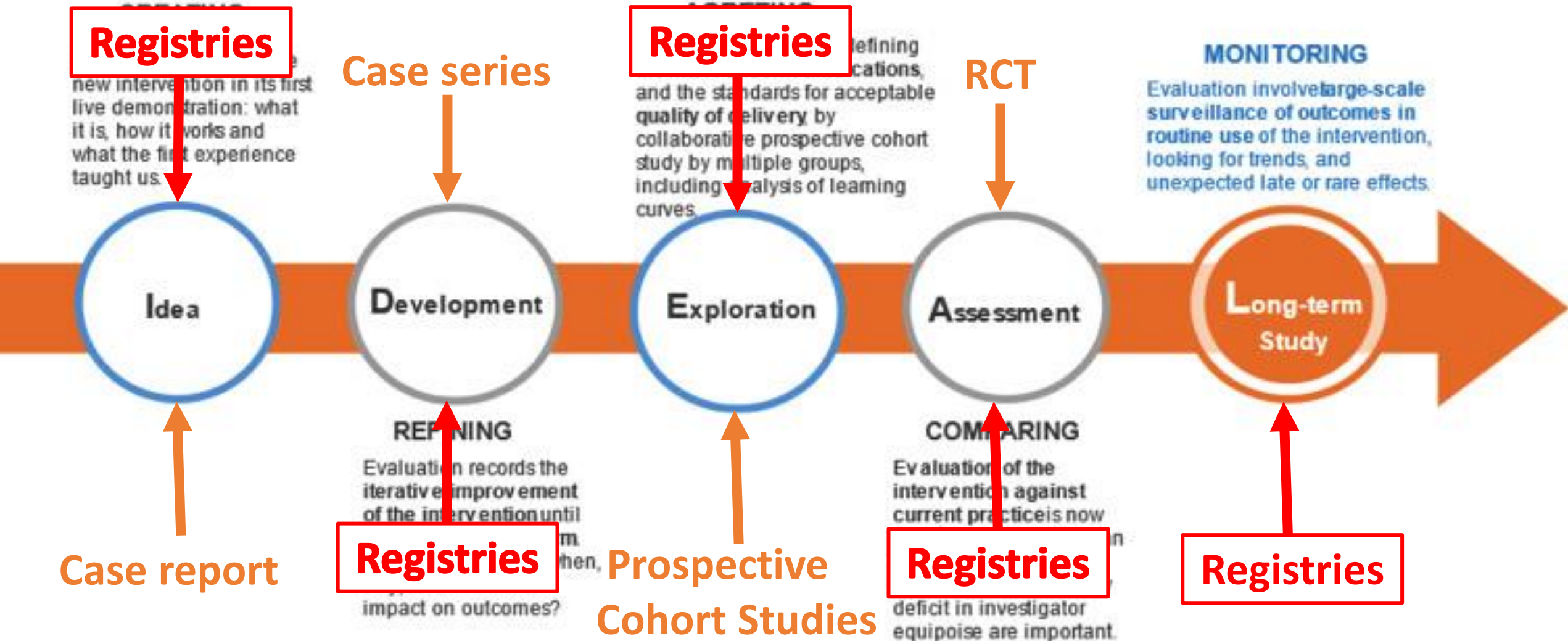
➔
Add
hospital
completeness
adjustment

Risk-adjusted (w/ completeness): Primary procedures



The IDEAL evaluation pathway

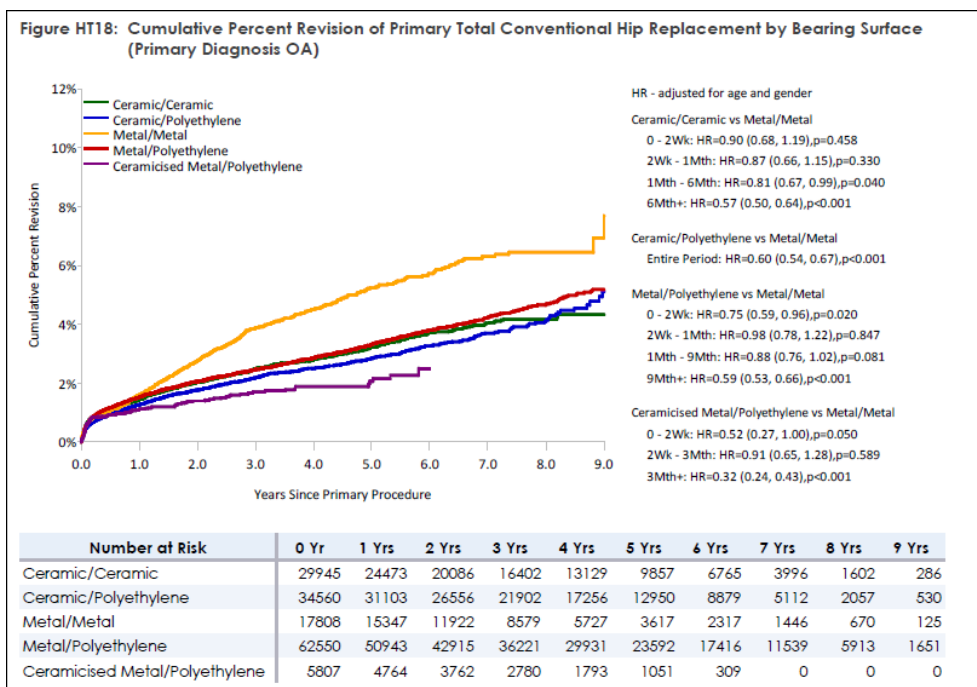
defines the types of evaluation which are appropriate at successive stages in the life cycle of complex interventions



Have registries improved patient outcomes?

Australian Orthopaedic Device Registry

Led to the withdrawal of the DuPuy™ metal-on-metal Hip Replacement



Prostate Cancer Outcomes Registry - Vic

Documented improvement in clear margins with prostatectomy for cancer



How have registries improved practice?



- Processes required to provide good information into the registry support good practice
 - Accurate demographic data
 - Accurate procedural data
 - Need to follow-up patients provides an opportunity to re-engage with patients
 - Practice level
 - Registry level
- Observer (“Hawthorne”) effect
 - More likely to follow practice-guidelines
- Healthy competition

Conclusion

- You are well trained
- Find a supportive environment
- Build up your case load
- Measure your outcomes regularly and predictable
 - Weekly audit/M&M
 - Logbook and database with annual review of outcomes
 - Peer review
 - Benchmarking
- Participate fully to get best opportunity to improve

Acknowledgements

BSR Steering Committee

Chair Prof Ian Caterson

ANZMOSS Prof Wendy Brown (Clinical Director), A/Prof Andrew MacCormick (Clinical Lead NZ), Dr Jacob Chisholm, Prof J Hamdorf

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