Overview

• Who we are and what we do
• Pre-hospital research
• Data sources
• Data linkage
• Opportunities
Information Support, Research & Evaluation

- Performance measure development
- Trauma management
- Cardiac outcomes
- Clinical Research Program
- Queensland Health
- External research collaboration
- Universities – Qld & interstate
- National Heart Foundation
- Commission of Children & Young People
- Drug trials
- Organisational Research Support
- Evaluation & strategy development
- Service delivery
- Mentoring paramedic research
- External research collaboration
- Research expertise and data provision
- Governance
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Mentoring paramedic research
Governance
Why is research important for the QAS?

• Support and inform QAS decision making
  – clinical practice, service delivery, operations & policy development

• Develop the prehospital health profession
  – interaction of industry, paramedics & academics

• High quality research ➔ evidence-based prehospital care
Patient journey
Data Sources

- VACIS (Clinical data set)
- QACIR (Incident-based data)
- SHE (Workforce Incidents)
- DCARF (Death & Cardiac Arrest)
- STEMI Data Capture
- Surveys (Purposive)
- Time limited special collections
Where are you now?

How Can We Make It Better?

how Are you now?
Patient outcomes

• Better understanding of patient journey and health trajectory (pathway)
• How changes in clinical procedures/protocols affect patient outcomes
• Impact of operational policies
• Impact of clinical interventions
Data linkage

- Emergency Department Data Collection (EDIS)
- Queensland Hospital Admitted Patient Data Collection (QHAPDC)
- Registry of Births, Deaths and Marriages (Deaths)
QAS Data Linkage

• Internal reporting
• External collaboration
• Master linkage file
• Research opportunities
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- % patients ROSC at hospital
- Discharged alive from hospital

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Cardiac Outcomes

- KPIs - Internal reporting and Report on Government Services (ROGS)
Quality of life?
New Cardiac Outcomes

• QAS OHCA Registry
  o 2013 and 2014 calendar years – EDIS, QHAPDC and Qld Death Registry (individual patient level)
  o Australian Resuscitation Outcomes Consortium (Aus-ROC)
  o Annual linkage planned

• Paramedic academic studies – QHAPDC and DR
  o PhD – long term study (2002 – 2014) on adult out of hospital cardiac arrest
    ➢ Description of trends over time of demographic characteristics, interventions and outcomes by incidence rates
    ➢ Evaluation of the impact of changes in resuscitation guidelines and clinical interventions on patient outcome
  o Masters
    ➢ Paramedic skill level and survival to discharge
      • CCPs more than doubled survival to discharge
      • Relationship between adrenaline administration and poorer patients outcomes
Patient non-transport (2013-2014)

1. QAS non-transport (Event 1) and a subsequent (within 48hrs) ED presentation (Event 2)
   – Triage category, Mode of arrival, Departure status, Admitted patients

2. ED presentation (Event 1) and a subsequent (within 48hrs) QAS non-transport (Event 2)
   – Triage category, Mode of arrival, Departure status, Admitted patients

3. Death registry
   – Within 48hrs
   – Within 30 days
   – > 30 days
External collaboration

• Beyond the Emergency
  – Representation - # times presented to QAS over 12 month period
External collaboration

• SPOT-ON (hospital avoidance strategy)
  – QAS transport to most appropriate location for care based on their clinical presentation
  – Clinical pathways guide to assist QAS and GPs
  – Integrated care solution for lower acuity patients
Master Linkage File

• Ongoing access to patient outcomes
• Facilitate routine (linked) data provision
  • Trauma Register
  • Qld Cardiac Outcome Registry
• Timely and efficient provision of linked data for project research
• Temporal analysis
  • Healthcare utilisation
  • Patients’ health status
• Identify cohorts
  • Benefits to individual patients
  • Broader health system
  • Communities
• Information continuity – single patient record!
Resource for research and better health outcomes

- Enhance system performance assessment
- Enable improved decision making
- Improved service planning
- Development of new patient-based performance indicators
- Care coordination – clinical integration
Any questions?

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