

# A DAY CARE ANAESTHESIA OUTCOMES REPORTING REGISTRY

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DAY CARE ANAESTHESIA SPECIAL INTEREST GROUP

# DAYCOR REGISTRY

A DAY CARE ANAESTHESIA OUTCOMES  
RECORDING REGISTER



# WHY RECORD OUTCOMES?

- ▶ Personal satisfaction and CPD activities
- ▶ Medical Record Requirements:

Completing a separation i.e. finalising the procedure episode with:

A Diagnosis with any co-morbidities

Noting a satisfactory result

Management of any unsatisfactory issues

# .....RECORDING OUTCOMES

- ▶ Documentation of management of any unsatisfactory issue:
  - ▶ PDNV, poor pain control, prolongation of return to work or to activities of daily living
  - ▶ Newly recognised co-morbidities: cardiovascular, respiratory, endocrine, cerebral, neurological
- ▶ Contribution to the Perioperative Surgical Home management plan
- ▶ Contribution to Quality Assurance activities

# WHY A REGISTRY?

Recording of all outcomes provides an opportunity for improvement:

- ▶ Better pain management, Less PDNV, Manage new co-morbidities
- ▶ Provides information for hospital and practitioner QA studies
- ▶ Improves Risk Management: where the figures are easily available for comparison studies

# .....WHY A REGISTRY

- ▶ To initiate discussion both informal (tea room) and formal (meetings)
- ▶ To enable the initiation of change in patient selection:
  - ▶ Change of patient status IP to DC
  - ▶ New procedures as day cases
- ▶ To evaluate success of initiation of any change
- ▶ Provides evidence of high standards for bodies responsible for safety and quality standards, Health Departments Private Health Funds

# ANYONE CAN SET UP A REGISTRY BUT

## IT NEEDS ACCEPTANCE:

- ▶ Clinical Speciality- easy (understands)
- ▶ Hospital- Ethics Committee- easy (understands)
- ▶ Hospital Administration- where's the money?
- ▶ Profession- "Great Idea" set it up for us!
- ▶ Statutory Bodies (Quango)- we approve your structural framework but we don't have any funding. There are potential sources.

## FINDING FUNDING:

?!



# Australian Commission on Safety and Quality in Health Care (ACSQHC)

- ▶ set up by AHMAC, the Australian Health Ministers Advisory Council in 2006
- ▶ ACSQHC then developed the National Safety and Quality Health Service Standards
- ▶ NSQHSS then goes about doing what it says it does but then doesn't communicate well

## QUANGO

# AUSTRALIAN COMMISSION ON QUALITY AND SAFETY IN HEALTH CARE

In partnership with “everyone”

Priorities over the next four years are:

- patient safety
- partnering with patients, consumers and communities
- quality cost and value
- supporting health professionals to provide safe and high-quality care.

# WHAT IS A CLINICAL QUALITY REGISTRY?

- ▶ Organised system monitoring the quality of health care within a specific clinical domain
- ▶ Routinely collects, analyses and reports data
- ▶ Identifies benchmarks and variation in clinical outcomes
- ▶ Feeds back to clinicians to inform clinical practice and decision making

# FRAMEWORK OF A REGISTRY

Guided by the Strategic principles for clinical quality registries (endorsed by Health Ministers in 2010)

- **recommends** National operating practices
- **specifies** National health information **arrangements** for clinical quality registries
- **provides a** National infrastructure **model** for the efficient design, build, development, operation and security of CQRs under national arrangements;
- **details** principles, guidelines and standards for best-practice design, build, development, operation and security of CQRs under national arrangements;
- **Identifies a set of Prioritisation criteria** for Australian clinical quality registries to support the Strategic principles for a national approach to the development of CQRs.

# HISTORY OF REGISTRIES “CQRS”

## Australian Commission on Safety and Quality in Health Care

- ▶ In September 2007, a paper recommending national operating and technical standards for clinical quality registries was approved.
- ▶ In November 2010, Health Ministers endorsed “Strategic Principles and Operating Principles for Australian Clinical Quality Registries”. Further noted that the Commission would:
- ▶ “draft national arrangements, including data and clinical governance, for Australian clinical quality registries, and prepare a costed infrastructure plan”.

# DATA COLLECTION FORMERLY

## PHONE CALL THE NEXT DAY

- ▶ Recovery nurse at commencement of shift
- ▶ Competence rapidly achieved- 2 minute calls
- ▶ Can identify person taking call as the patient

## BUT

- ▶ Interrupted by incoming patients from OR
- ▶ Maximum interviews/nurse 10 patients
- ▶ Call not answered
- ▶ Friday cases covered?(??Call on Saturday??)

# PHONE CALL THE NEXT DAY

## CALL NOT ANSWERED

May not be time to re-call patient

## POTENTIAL PROBLEMS WITH DATA COLLECTION

- ▶ Hurried discussion- may miss data
- ▶ Push even a slightly confused patient to answer- wrong response
- ▶ Direct questions are a common failing (not only of nurses)
- ▶ What happens to Friday cases (often highest number of day cases for any day of the week)

# PHONE SURVEY

Standard Protocol: Nurse phone call the following day

Return rate: Approximately 50% with first call

End of Day: Best daily rate 65% on recent review

Problems: Nurse time (= costs)

Nurse availability for “chase up” calls

Priority of follow up calls when busy

Friday Case follow up??



# NEW! THE SMS SURVEY

Method: SMS survey: Response to message sent next morning by SMS or Email

*Follow up message the next day (day 2) to non-responders*

Recent Review:

- ▶ 85% response rate following day.
- ▶ dramatic reduction in nurse time required
- ▶ small number of elderly patients do not have mobile or email access to respond therefore require a phone call next day

Cost: 40 cents/survey for collection and report

# SMS SURVEY

- ▶ Developed in collaboration with Dr John Sestan of Newcastle
- ▶ Designed to be hospital based
- ▶ Designed with the objectives developed for our SIG study (not ANZCA CPD)
- ▶ Possibility for additional studies within the survey system- based on findings
- ▶ Reports also compiled for hospital and Registry

# SMS METHOD

- ▶ At discharge, nurse confirms patient's mobile number and/or email address
- ▶ Nurse completes the log page
- ▶ SMS message and/or email sent automatically
- ▶ Patient responds, report received directly onto secure server
- ▶ Identified data available for clinician
- ▶ Data de-identified before recorded for reports

# SMS LOG INFORMATION

Patient ID (eg MRN), Mobile and/or email,  
ASA status, Age, Sex,  
Anaesthetist,  
Procedure.

Length of Procedure (standard time intervals)

Length of Recovery (standard time intervals)

Time of Discharge

PONV in Recovery? extent

Discharge Pain Score

Insurance status, Notes.

CAST x John

Secure | https://www.castme.com.au

CCST.co Log Menu

DayCOR [i] [refresh]

ID	<input type="text" value="141373"/>
Mobile	<input type="text" value="0462097715"/>
Email	<input type="text" value="apatient@provider.com.au"/>
ASA	<input type="radio"/> I <input checked="" type="radio"/> II <input type="radio"/> III <input type="radio"/> IV <input type="checkbox"/> e
Age & Sex	<input type="text" value="42"/> years <input checked="" type="radio"/> ♂ <input type="radio"/> ♀
Anaesthetist	<input type="text" value="Sleeman, Ken"/>
Procedure	<input type="text" value="General"/> <input type="text" value="Hernia Repair"/> <input type="text" value="Bilateral Inguinal"/>
Length of Procedure	<input type="radio"/> <30 min <input type="radio"/> 30-60 min <input checked="" type="radio"/> 1-2 hours <input type="radio"/> 2-4 hours <input type="radio"/> 4-8 hours <input type="radio"/> 8+ hours
Length of Recovery	<input type="radio"/> <30 min <input type="radio"/> 30-60 min <input checked="" type="radio"/> 1-2 hours <input type="radio"/> 2-4 hours <input type="radio"/> 4-8 hours <input type="radio"/> 8+ hours
Time of Discharge	<input type="radio"/> Midnight-6am <input type="radio"/> 6am-10am <input checked="" type="radio"/> 10am-2pm <input type="radio"/> 2pm-6pm <input type="radio"/> 6pm-8pm <input type="radio"/> 8pm-Midnight
PONV in Recovery	<input checked="" type="radio"/> None <input type="radio"/> Nausea <input type="radio"/> Retching <input type="radio"/> Vomited <input type="radio"/> Prolonged
Discharge Pain Score	<input type="text" value="2.5"/> (0 - 10)
Insurance	<input type="text" value="Public"/>
Notes	<input type="text"/>

Cost: 1 / 91

# PROCEDURE SELECTION

Drop down menus:

- ▶ Specialty
- ▶ Site: (if multiple)
- ▶ Name of procedure: Every procedure likely to be performed (even THR)

# DROP DOWN MENUS

► Specialty:

Cardiac,  
Dental/Max. Face  
Endoscopy  
ENT  
General  
Gynaecology  
Neurosurgery  
Obstetrics  
Ophthalmology  
Orthopaedic  
Plastics  
Radiology  
Urology  
Vascular  
Other

CAST x

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CAST Log Menu

DayCOR

ID	141373
Mobile	0462097715
Email	apatient@provider.com.au
ASA	<input type="radio"/> I <input checked="" type="radio"/> II <input type="radio"/> III <input type="radio"/> IV <input type="checkbox"/> e
Age & Sex	42 years <input type="radio"/> ♂ <input type="radio"/> ♀
Anaesthetist	Sleeman, Ken
Procedure	General Hernia Repair Bilateral Inguinal
Length of Procedure	<input type="radio"/> <30 min <input type="radio"/> 30-60 min <input checked="" type="radio"/> 1-2 hours <input type="radio"/> 2-4 hours <input type="radio"/> 4-8 hours <input type="radio"/> 8+ hours
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PONV in Recovery	<input checked="" type="radio"/> None <input type="radio"/> Nausea <input type="radio"/> Retching <input type="radio"/> Vomited <input type="radio"/> Prolonged
Discharge Pain Score	2.5 (0 - 10)
Insurance	Public
Notes	



# SMS SURVEY SCREENS

Screen details: Menu

Alerts - own screen and on report screen

Log Screen- Discharge Nurse enters details

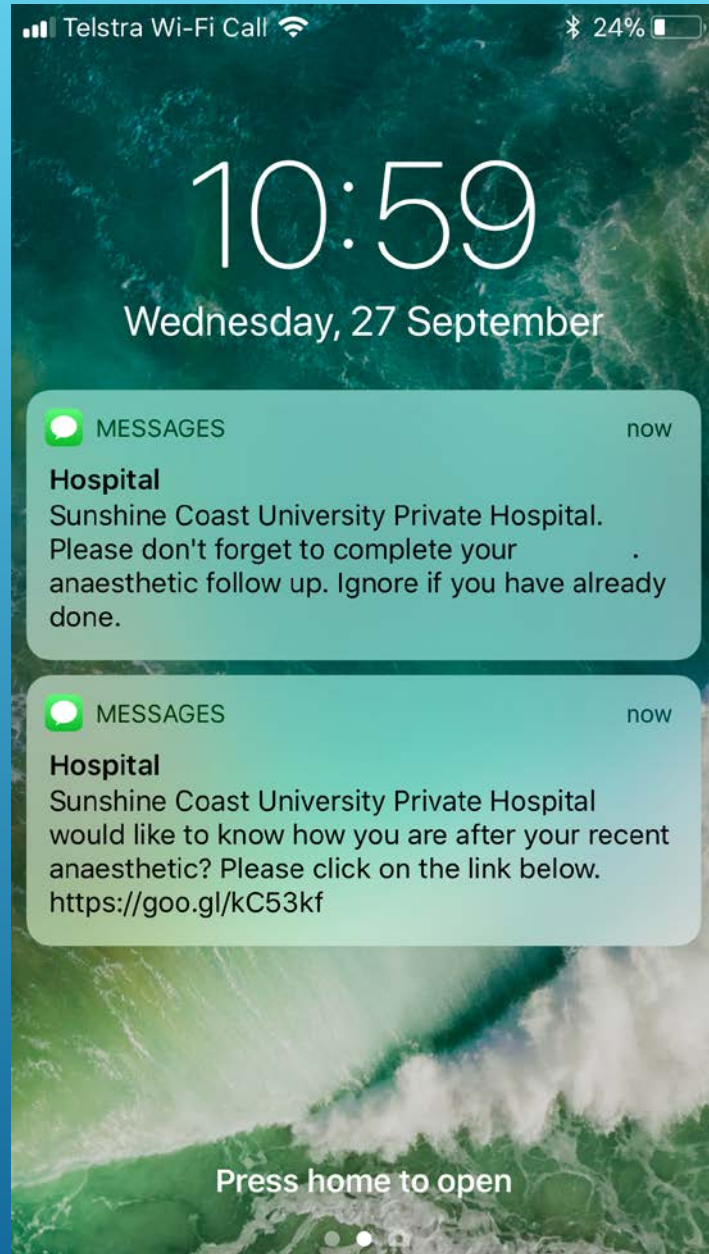
Report screen – for each patient and daily group

Library- Search for lists-anaesthetists, extra surveys

Active- Patients still to respond

Account screen- Hospital registration details

Review- to seek details of case(s) and alerts



CAST

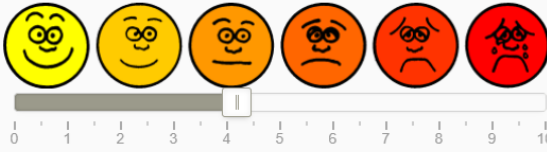
Secure | https://www.castme.com.au

Back Preview Menu

5. In the 24 hours **after** discharge from the Sunshine Coast University Private Hospital what was the worst PAIN you experienced?

Please indicate your response on a scale from 0 to 10, where 0 is **No pain** and 10 is **Severe pain**.

Touch or click your response on the scale below



0 1 2 3 4 5 6 7 8 9 10

No pain Severe pain

6. Please rate the quality of your SLEEP on the first night after surgery?

Select one of the responses below

Very poor Poor Average Good Very good

7. Did you have any CONFUSION (or more confusion than usual) in the 24 hours after discharge?

Select one of the responses below

Yes

No

8. Did you have any FALLS in the 24 hours after discharge?

Select one of the responses below

Yes

No

9. Did you follow your post-operative INSTRUCTIONS?

Select one of the responses below

Yes

No ...

What was the problem with the post-operative INSTRUCTIONS?

Select the best response below

I wasn't given any post-operative INSTRUCTIONS

The post-operative INSTRUCTIONS were not written out and I forgot them

I didn't understand the post-operative INSTRUCTIONS they were confusing

I didn't agree with the post-operative INSTRUCTIONS

Other ...

10. Have you recommended all your regular MEDICATIONS?

Select one of the responses below

Yes

No ...

11. Are you on track to return to WORK, or if you don't work, your normal daily activities as **planned**?

Select one of the responses below

Yes

No ...

12. If you had a **POSITIVE** experience, please tell us about it:  
LEAVE BLANK IF **NO POSITIVE** EXPERIENCE

Leave blank if no POSITIVE experience

# SMS METHOD VULNERABILITY?

- ▶ “I believe the system meets and exceeds the Privacy Act 1988 requirements w.r.t. health data” (Dr John Sestan personal communication)
- ▶ Relies on input from discharge nurse which is probably the most reliable method- alternatives are ward clerk or anaesthetist who could populate a lot of the screen but must be there when the last case leaves.....

# BARRIERS TO DATA COLLECTION

HOSPITAL OR DAY CLINIC COOPERATION

ETHICS AND FUNDING

The Commission: “Particular barriers to national reporting include restrictions on the disclosure, collection, and use of patient-level data, and varying hospital and jurisdictional data governance arrangements”.

“To overcome these barriers National health information arrangements for clinical quality registries have been developed”.

# NATIONAL HEALTH INFORMATION ARRANGEMENTS

The Commission: Australian healthcare organisations and clinical quality registries will, in partnership with jurisdictions, routinely

- ▶ disclose, collect, analyse and report patient-level data
- ▶ monitor and report on the appropriateness and effectiveness of specific healthcare interventions.

# REGISTRY INFRASTRUCTURE MODEL

To address the development, maintenance and operation of dedicated CQR information systems, the Commission has developed the *Infrastructure model* for:

- ▶ *best-practice design,*
- ▶ *development,*
- ▶ *operation and*
- ▶ *security of Australian CQRs under national arrangements.*

# INFRASTRUCTURE MODEL:

- ▶ supports monitoring and reporting of the appropriateness and effectiveness of healthcare based on models developed by the Commission, NEHTA (National e-Health Transition Authority) and CQR experts
- ▶ specifies best-practice CQR design, development, operation and security
- ▶ features centres (or clusters) as the preferred model for CQR operation
- ▶ promotes improved interoperability with existing clinical information systems (potential for future linkage with the Personally-Controlled Electronic Health Record)
- ▶ supports the improvement and sustainability of existing CQRs;
- ▶ encourages and assists with the development and establishment of new CQRs
- ▶ provides efficiencies in data collection through, eg reduced data entry duplication
- ▶ optimises levels of information and system security
- ▶ allows scalability and future-proofing of CQR design
- ▶ improves capabilities for the generation of ad-hoc and routine reports
- ▶ facilitates improved statistical analysis and benchmarking



# CONSULTATION INSTRUCTIONS:

National Safety and Quality Health  
Service Standards guide for day procedure services  
380 page draft document

## Target audience and purpose

This resource is for day procedure services implementing the NSQHS Standards (second edition).

## Consultation dates

“Consultation on this resource will run until 24 May 2017”.

ANZCA and the ASA were not invited

# NATIONAL SAFETY AND QUALITY HEALTH SERVICE STANDARDS GUIDE FOR DAY PROCEDURE SERVICES

## ACTION 1/28

The health service organisation has systems to:

- a. monitor variation in practice and expected health outcomes
- b. provide feedback to clinicians on variation in practice and health outcomes
- c. review performance against external measures
- d. support clinicians to participate in clinical review of their practice
- e. use information on unwarranted clinical variation to inform improvements in safety and quality systems and practice
- f. record the risks identified from unwarranted clinical variation in the risk management system

## Key tasks

- ▶ Identify key external data collections, registries, audits or reports that cover the specific areas of clinical practice relevant to high-risk patients, or procedures or services offered by the organisation.
- ▶ Support and encourage clinicians to participate in national and jurisdictional clinical quality registries.
- ▶ In collaboration with clinicians, review and compare clinical practice data from within the organisation, and from other similar geographic areas or health service organisations.

And it goes on.....

**NATIONAL SAFETY AND QUALITY HEALTH  
SERVICE GUIDE DAY PROCEDURE SERVICES 1.28  
GOES ON**

# NATIONAL SAFETY AND QUALITY HEALTH SERVICE GUIDE DAY PROCEDURE SERVICES

## Key Tasks(cont'd)

- ▶ Identify any areas of practice that vary from best practice, where there is widely differing practice within the organisation or where there is variation from practice in other similar services
- ▶ Investigate the reasons for any variation, and determine whether it is unwarranted variation in the safety and quality of care.
- ▶ Identify what actions should be taken to ensure practice changes to align with best practice.
- ▶ Address issues of inappropriate resource allocation (including workforce) to ensure practice changes align with best practice

# CQR REQUIRES

- ▶ Governance structure: Accountability, oversee adequate resources and optimal output
- ▶ Steering Committee: Clinical decisions (outliers, unexplained variance) day to day management issues
- ▶ Operational Structure
- ▶ Data quality, security and custodianship
- ▶ Ethics and privacy
- ▶ Information output: Reports to stakeholders

# REGISTRY: OPERATIONAL STRUCTURE

- ▶ Director, ideally with expertise in the clinical field being monitored by the CQR
- ▶ Registry Manager(+/-), overseeing the day-to-day operations of the CQR
- ▶ Statistical and Epidemiological support
- ▶ Data Coordinator
- ▶ Staff to undertake the tasks of data collection, entry and cleaning (tidying up)
- ▶ Administrative support

# HOSPITAL LEVEL

- ▶ Governance: Hospital Board
- ▶ Steering Committee: Up to the hospital's usual practice for such committees [Suggest Director of Day Care Services, Anaesthetist representative(s), nursing, administration, risk management]
- ▶ Leader or nominated Anaesthetist: for reference
- ▶ IT advice: when necessary

# REPORTS THAT MUST BE GENERATED AND PROVIDED BY CQRS OPERATING UNDER NATIONAL ARRANGEMENTS

- ▶ 1. Routine annual CQR reports: Aggregated data Open to the public
- ▶ 2. Routine jurisdiction Reports: (clinicians and patients not identified) Jurisdiction and private hospital ownership groups
- ▶ 3. Routine unit reports Quarterly CQR Risk-adjusted granular data limited to the contributing provider unit with comparators at national / jurisdictional / peer group level Confidential to the contributing provider unit
- ▶ 4. Routine clinician reports (patients identified) Confidential to the contributing clinician

(ACQSHC)



# REPORTS THAT MUST BE GENERATED AND PROVIDED BY CQRS OPERATING UNDER NATIONAL ARRANGEMENTS (CONT'D)

- ▶ **5. Ad hoc jurisdiction reports:** Ad hoc CQR Risk-adjusted unit-level data limited to the jurisdiction with comparators at national/jurisdictional/peer group level (clinicians and patients not identified) Not for publication
- ▶ **6. Ad hoc unit reports:** Risk-adjusted granular data limited to the querying unit. Confidential to the contributing unit
- ▶ **7. Ad hoc clinician reports:** Ad hoc authorised clinician Risk-adjusted granular data limited to the querying clinician (patients identified) Confidential to the contributing clinician

(ACSQHC)

# SUMMARY

## HOSPITAL AND DAY CENTRES WILL REQUIRE:

- Clear and detailed knowledge of their outcomes for accreditation purposes
- Competent personnel to perform the data insertion- which should not be a problem
- Appropriate responses to the standards of Quality Assurance for accreditation

An Outcomes registry provides the opportunity for us to be satisfied and quality and safety to be ratified

# SMS SURVEY IS THE WAY

- ▶ Response by SMS or email to request the next day
- ▶ Reminder sent after a further 24 hours
- ▶ Friday cases covered
- ▶ Cost 40 cents per survey for 1000 surveys  
(20/day = 100/week = 10 weeks = \$400)
- ▶ Smooth transition to the reporting system
- ▶ Reports available for clinicians, hospitals , health jurisdictions as well as for the public

**TWITTER HANDLE**

**@daycor\_registry**

