



Clinical Practice Improvement Centre

The key ingredients for improving patient outcomes in Queensland

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Queensland - The Sunshine State

During 2008/2009 in Queensland Health

- 442,531 people admitted to same day
- 881,794 people admitted to hospital
- 43,210 babies born





Queensland Population: 4.3 million

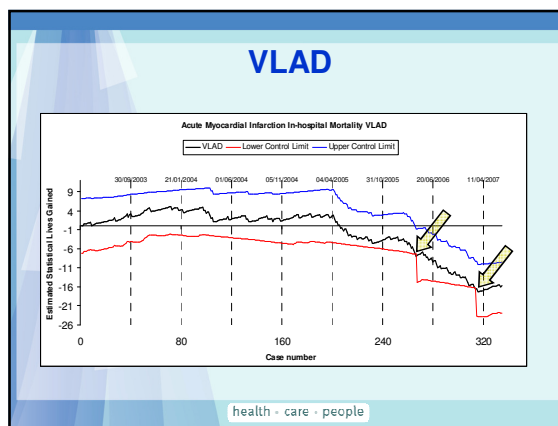
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Variable Life Adjusted Display (VLAD)

A VLAD is a type of statistical process control chart that visually represents treatment outcomes for selected clinical indicators


- A monitoring/screening tool of clinical indicators
- Displays trends over time within a hospital
- Compares individual hospitals with the state average

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A few 'vital signs' detected

Pneumonia In-hospital Mortality



Hospital higher rate than state

- Junior doctor did not notify consult about a positive blood test (Enterococcus infection) affecting treatment with appropriate antibiotic

Hospital lower rate than state

- A high number of low risk patients were admitted which could have been simply treated within the community [antibiotic therapy with recommendations]

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A few 'vital signs' detected

Laparoscopic Cholecystectomy Complications of Surgery

Hospital higher rate than state

- Clinical Director identified a locum's management of cases flagged as concerning - Locum surgeons since this event are now only given less complex cases to manage with supervision by a senior surgeon

Hospital higher rate than state

- A Laparoscopic clip applicator which had been re-used a number of times failed to secure the cystic duct in a laparoscopic cholecystectomy

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The key ingredients to improve patient outcomes...

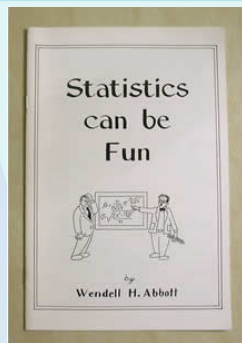
- Statistical Methodology
- Feedback Mechanism
- Governance
- Leadership



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Statistical Methodology

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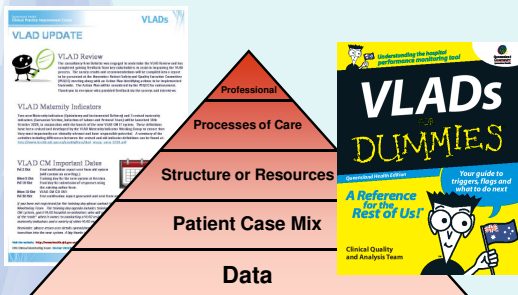
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Statistical Methodology

- Ease of interpretation
- Statistical rigour
- Results disseminated frequently to promptly detect issues & monitor action taken
- Easily identify when to review – flagging
- Easily identify what to review – trends
- Risk Adjusted
- Clinically relevant indicators

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Provision of useful resources

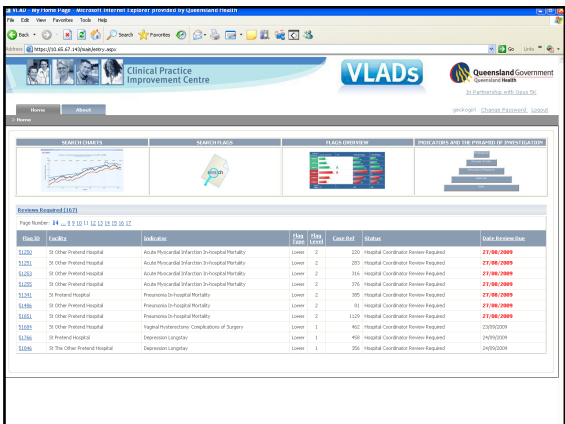


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Feedback Mechanism

(Information Technology)

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ID	End Date	Start Date	most prevalent	Risk/High/Low/Severe	Administrative	Significance	Frequency	LOS	Beddays	LOS	Beddays	LOS	Beddays
13220	21.06.2009	21.06.2009	0.00191000	0000	00	00	00	00	00	00	00	00	00
13221	21.06.2009	21.06.2009	0.00191000	0000	00	00	00	00	00	00	00	00	00
13222	21.06.2009	21.06.2009	0.00191000	0000	00	00	00	00	00	00	00	00	00
13223	21.06.2009	21.06.2009	0.00191000	0000	00	00	00	00	00	00	00	00	00
13224	21.06.2009	21.06.2009	0.00191000	0000	00	00	00	00	00	00	00	00	00
13225	21.06.2009	21.06.2009	0.00191000	0000	00	00	00	00	00	00	00	00	00
13226	21.06.2009	21.06.2009	0.00191000	0000	00	00	00	00	00	00	00	00	00
13227	24.05.2009	24.05.2009	0.00191000	0000	00	00	00	00	00	00	00	00	00
13228	24.05.2009	24.05.2009	0.00191000	0000	00	00	00	00	00	00	00	00	00
13229	24.05.2009	24.05.2009	0.00191000	0000	00	00	00	00	00	00	00	00	00

VLAD CM - IT System

- Generated, viewed and downloaded in VLAD CM
- VLAD graphs & notifications
- VLAD hospital response
- VLAD Team feedback of VLAD response
- Patient Safety and Quality Executive Committee feedback of VLAD response
- Status of notifications

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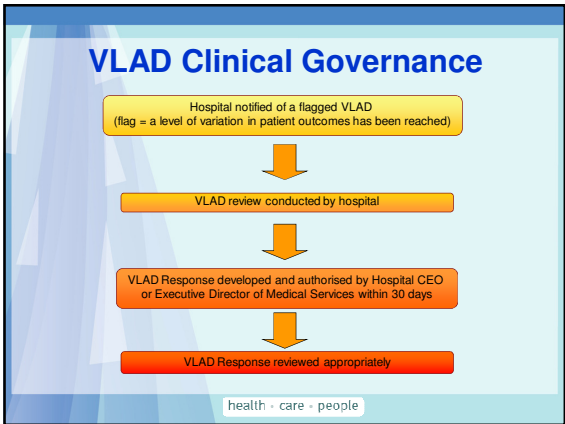
Feedback Mechanism

- Easily accessible to clinicians, managers etc
- Good level of security
- Level of auditability
- All-in-one system
- Automation of menial tasks
- System to efficiently support business processes and clinical governance
- Other external supporting resources

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Clinical Governance

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% variation & notification levels

Variation between hospital & state average	Mortality indicators
30%	Level 1
50%	Level 2
75%	Level 3

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% variation & governance actions

Variation between hospital & state average	Mortality indicators	Clinical Governance Action
30%	Level 1	+Hospital Review +VLAD Team Review
50%	Level 2	+Hospital Review +VLAD Team Review
75%	Level 3	+Hospital Review +VLAD Team Review +Patient Safety & Quality Executive Committee Review

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% variation & notification levels

Variation between hospital & state average	Mortality indicators	Non-mortality indicators
30%	Level 1	
50%	Level 2	Level 1
75%	Level 3	Level 2
100%		Level 3

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- ### Clinical Governance
- Line management responsibility and accountability
 - Roles and responsibilities clearly articulated - VLAD Implementation Standard
 - Structured and clear guidelines on reviewing VLADs and reporting
 - Transparency & accountability - public reports
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Leadership

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Leadership

Leadership is essential at ...

- Corporate (Queensland Health)
- Hospital Management
- Clinical



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Maternity indicator journey

- ✓ Question was raised around the responsive potential of the perineal tears indicator prompting a review of all Maternity Indicators
- ✓ Question taken to the State-wide Maternity Group
- ✓ Maternity Indicator Working group formed to:
 - review current QH VLAD maternity clinical indicators (caesarean sections, inductions and perineal tears)
 - identify other clinical indicators to be monitored using the VLAD



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Indicator Working Group




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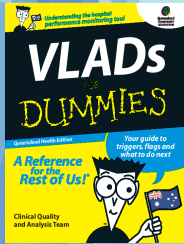
- Statistical Methodology
- Feedback Mechanism
- Governance
- Leadership
- **Commitment**



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For a free copy of VLADs for Dummies or for more information....

Visit the website:
<http://www.health.qld.gov.au/quality/vlad.asp>

or

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