

HEALTH SERVICE ACCREDITATION PROGRAMS: THEIR ROLE, CONTRIBUTION AND ASSOCIATED CHALLENGES

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We will review health service accreditation programs

- **role,**
- **contribution,** and
- **associated challenges,**

to driving quality, safety and organisational improvement.

Role or purpose of accreditation programs
or
why is there a need for external review?

Regulation of healthcare

- ❖ Shift in philosophy by governments from the 1970's onwards: framework for services.
- ❖ Strategy for the abatement or control of risks to society (Sparrow 2000). Part of a broader regulation strategy.
- ❖ Part of network that seeks to regulate conduct in the health sector – been called “nodal governance” (Shearer et al., 2003).

The healthcare revolution

First US ICU:
1955 Dartmouth,
New Hampshire







Regulation of healthcare

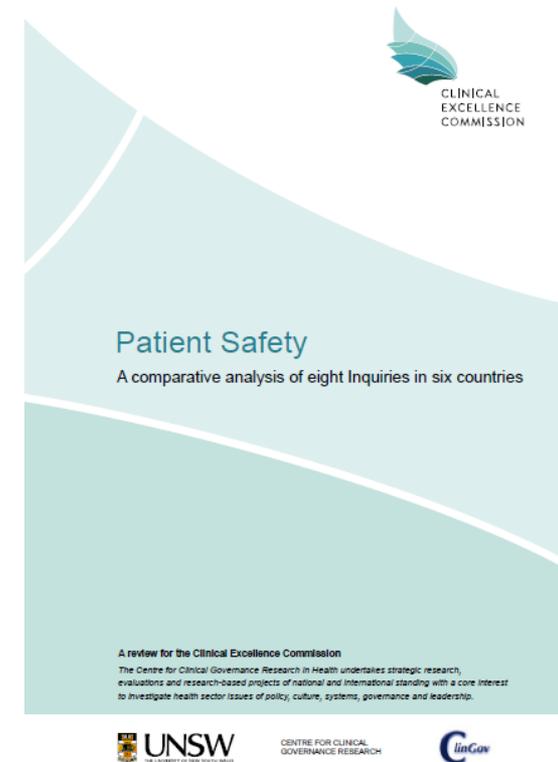
Over 25 years ago, the need was recognised for system-wide safety interventions to enable collective learning and improvement process.

Department of Health. *An organization with a memory: report of an expert group on learning from adverse events in the NHS*. London: HMSO, 2000:46.

A common problem: patient safety 2006

An examination of eight inquiries into patient safety identified a number of common themes:

- Some health care was far below standard;
- Quality monitoring processes were deficient;
- Individual care providers and patients raised the concerns;
- Critics were often ignored or abused;
- Teamwork was deficient; and,
- Patients and families were not informed members of the team.



Hindle et al., (2006: 5)

A common problem: patient safety 2013

An examination into patient safety identified number of causes, among them:

- A culture not focused on the patients;
- Organisation ignored negative information;
- Standards and methods of measuring compliance which did not focus on the effect of a service on patients;
- Too great a degree of tolerance of poor standards and of risk to patients;
- Communication failures, between agencies, to share their knowledge of concerns;

THE MID STAFFORDSHIRE
NHS FOUNDATION TRUST
PUBLIC INQUIRY

Chaired by Robert Francis QC

Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry Executive summary

A common problem: patient safety 2013

An examination into patient safety identified number of causes, among them:

- Assumptions that monitoring, performance management or intervention was the responsibility of someone else;
- A failure to tackle challenges to the building up of a positive culture, in nursing in particular but also within the medical profession;
- A failure to appreciate until recently the risk of disruptive loss of corporate memory and focus resulting from repeated, multi-level reorganisation.

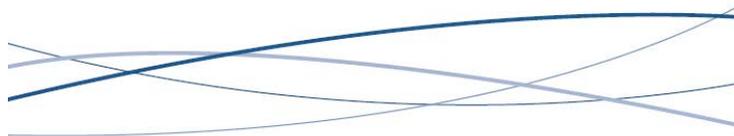
THE MID STAFFORDSHIRE
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Regulation of healthcare

**A promise to learn
– a commitment to act**



**Improving the Safety of Patients
in England**

National Advisory Group on the
Safety of Patients in England

Berwick Report (2013)

What is your health system's
capacity to analyse, monitor or learn
from safety-related information at
the healthcare organisational level?

August 2013

ECRI Institute's Top 10 Patient Safety Concerns for Healthcare Organisations 2017 <https://www.ecri.org/Pages/default.aspx>

1. Information management in EHRs.
2. Unrecognized patient deterioration.
3. Implementation and use of clinical decision support.
4. Test result reporting and follow-up.
5. Antimicrobial stewardship.
6. Patient identification.
7. Opioid administration and monitoring in acute care.
8. Behavioural health issues in non-behavioural-health settings.
9. Management of new oral anticoagulants.
10. Inadequate organisation systems or process to improve safety and quality.

A common problem: patient safety

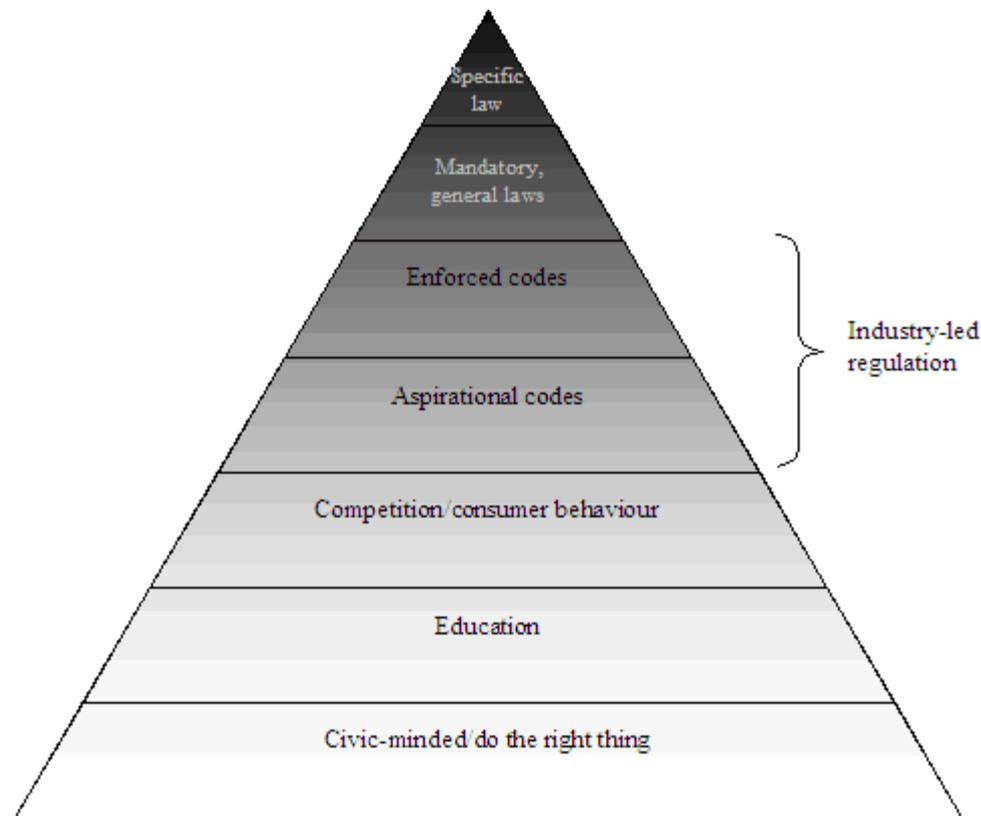
Frontline clinicians perceive quality determined by:

- Primary responsibility of individual
- Dependent on the individual's mastery of technical and interpersonal aspects of care
- Mistrust about disclosure policy
- Ability to negotiate a system of obstacles with insufficient resources
- Avoiding administrative and bureaucratic impositions

Expert based quality improvement models advocate:

- Recognition of healthcare as a complex system
- Acknowledgment of the importance of coordination of healthcare processes
- Positive attitude to disclosure of error
- Adherence to the concept of continuous improvement
- Central preoccupation with patient-centred care

Regulation of healthcare



Regulation of healthcare

Principles of good regulation:

- ✓ Proportionate
- ✓ Targeted
- ✓ Accountable
- ✓ Transparent
- ✓ Consistent
- ✓ Agile
- ✓ Understanding of context
- ✓ Accurate assessment of risk that threaten the achievement of the goal

Cayton and Webb (2014)

Regulation of healthcare

Accreditation:

“ ... a health service accreditation program is a mechanism that reviews and assesses an organisation’s quality improvement initiatives and ongoing efforts to demonstrate that minimum safety and quality standards are being achieved.”

Greenfield and Pawsey (*in press*)

Regulation of healthcare

Accreditation model:



How widespread is health service accreditation programs?

- Accreditation of health organisations is practised around the world; more than 70 national bodies
- An international organisation: ISQua
The **I**nternational **S**ociety for **Q**uality in Healthcare



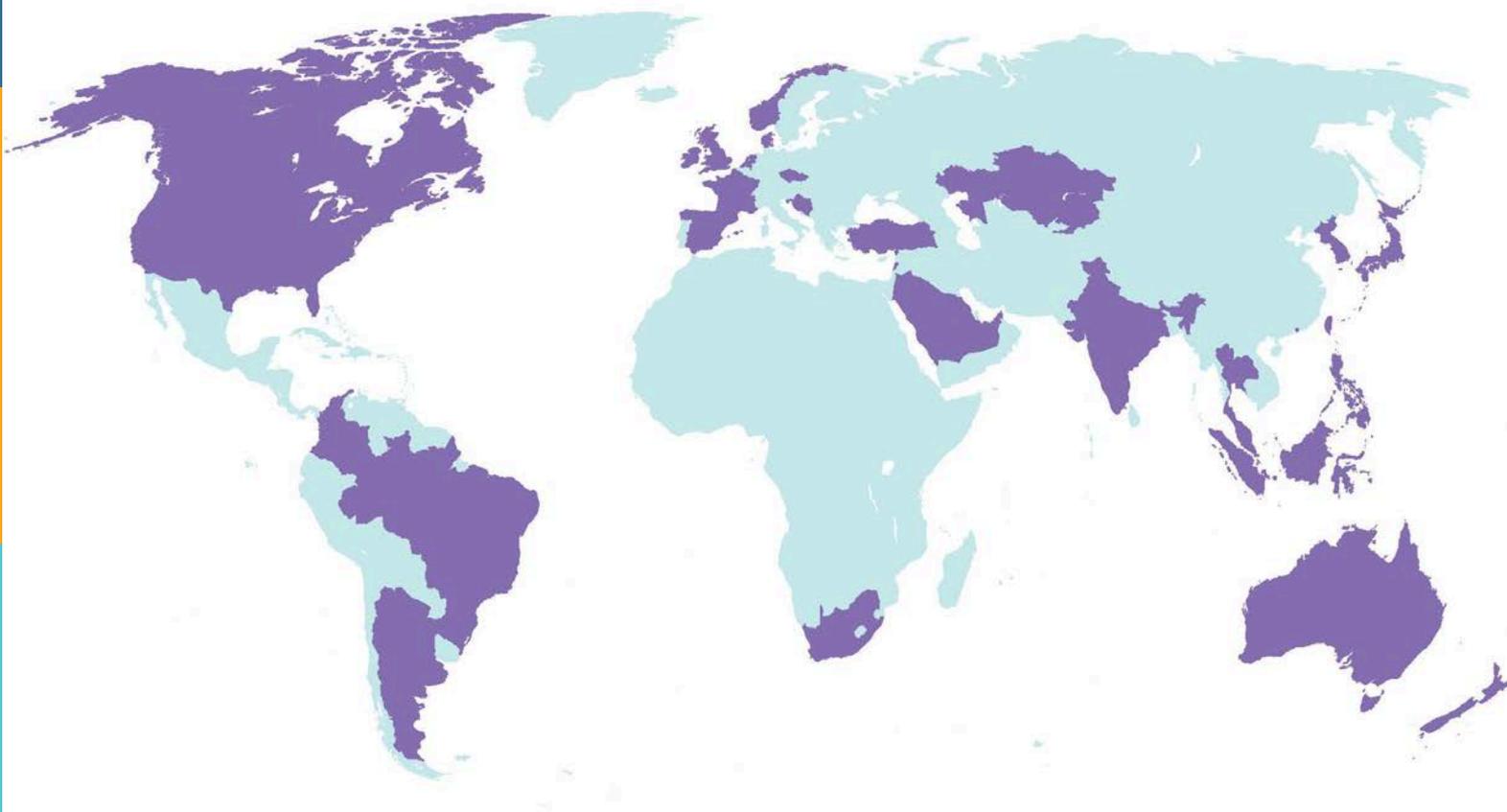
ISQua who we are ?

- **Not for Profit Membership Network Organisation**

- **ISQua Mission** “To inspire and drive improvement in the quality and safety of healthcare worldwide through education and knowledge sharing, external evaluation, supporting health systems and connecting people through global networks.

- **ISQua addresses its core business through a number of portfolios:**
 - External Evaluation
 - Events
 - Education and Knowledge Sharing
 - Advocate for Persons Centered Care
 - Foster Innovation
 - Regions and Low Middle Income Countries

International Accreditation Programme (IAP)



 - ISQua's Global Reach (Accredited Standards & Organisations)

Why attend an ISQua Conference ?

□ 4 Day Event

□ Be in the Know

- 6 Keynote Addresses
- 60 + Sessions and Workshops
- New perspectives from over 100 Expert Speakers
- 400 Posters

□ 25 hours of Networking

- with over 1,500 delegates
- from 70 Countries



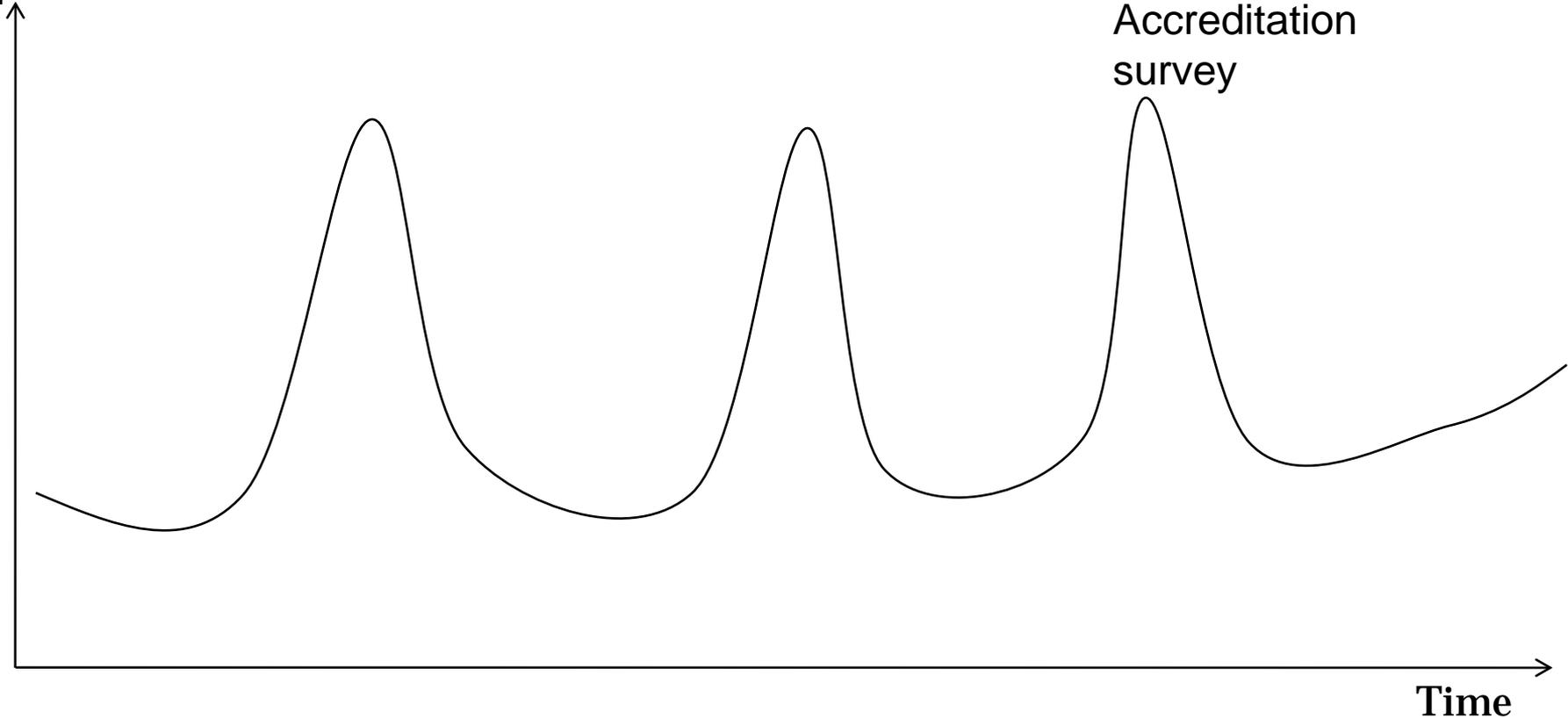
Be inspired to learn from each other and to make a real difference in the quality and provision of health care worldwide

Contribution of accreditation programs ...

What the critics say ...



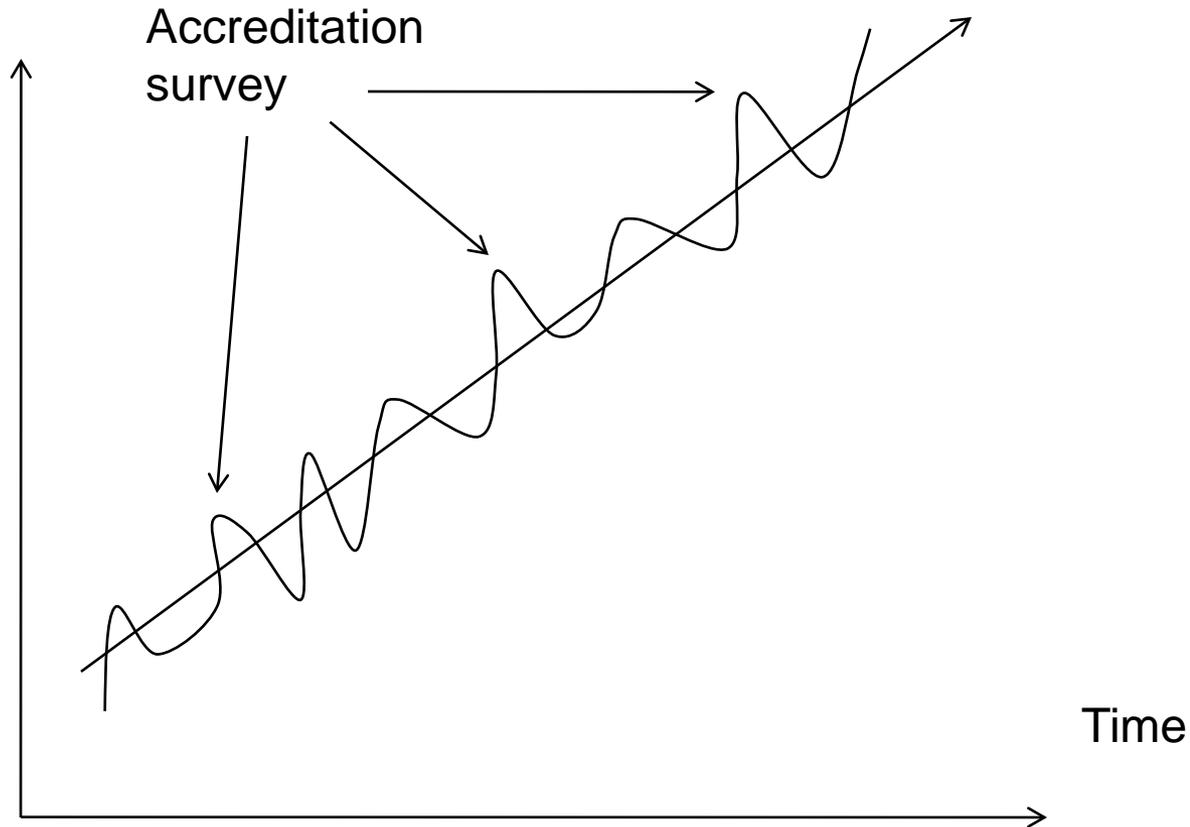
Healthcare clinical and
organisational
performance





What the advocates claim ...

Healthcare
clinical and
organisational
performance



Accreditation programs: shifting to a culture of patient safety

Frontline clinicians focus:

- Primary responsibility of individual
- Dependent on the individual's mastery of technical and interpersonal aspects of care
- Mistrust about disclosure policy
- Ability to negotiate a system of obstacles with insufficient resources
- Avoiding administrative and bureaucratic impositions

Organisational culture focus:

- Recognition of healthcare as a complex system
- Acknowledgment of the importance of coordination of healthcare processes
- Positive attitude to disclosure of error
- Adherence to the concept of continuous improvement
- Central preoccupation with patient-centred care

Contribution of accreditation: individual healthcare organisations

For an organisation accreditation:

- ❖ provides a framework for quality and safety
- ❖ access to knowledge and expertise
- ❖ creates a culture of quality and safety
- ❖ brings to the foreground quality and safety reviews
- ❖ improves organisation of quality and safety
- ❖ improves patient outcomes
- ❖ improves the management of staff and care processes

(Beatty et al. 2015; Hinchcliff et al. 2013b; Melo 2016; Verma and Moran 2014)

Contribution of accreditation: individual healthcare organisations

Health care organisations will be safer and less risky if they have:

- a positive culture and sub-cultures (Boan and Funderburk, 2003, Hindle, Braithwaite, Iedema and Travaglia, 2006);
- a generally inclusive organisational climate (Svyantek and Bott, 2004);
- effective leadership (Health Foundation, 2004); and,
- an approach which involves patients in care processes (Health Foundation, 2004).

Contribution of accreditation: state level

Framework for improvement that contributes to the development of a “multi-lingual understanding of quality and safety”:

Structure – process – outcomes

Donabedian, A. (1988). The quality of care: how can it be assessed?, *JAMA* **121** (11): 1145–50.

- ❖ Increased the quality literacy of health professionals;
- ❖ Consistency regarding standards of care across the sector/ state/ country; and,
- ❖ Contributed to shifting healthcare practice from individual perspective to collective expectations.

Contribution of accreditation: state level

- ✓ The ACHS accreditation program has had a positive longitudinal impact on the pilot hospitals in Hong Kong.
- ✓ While the minimum accreditation standards were assessed as having been met, the need for continuous quality improvement was also identified.
- ✓ The system wide approach to the analysis allowed identification of common challenges and system responses at specific periods and also across time.

Contribution of accreditation: state level

Creates a network of quality and safety champions-experts-ambassadors:

- within healthcare organisations: Q&S positions and surveyors;
- within accreditation agencies: surveyors;
- growing “community of practice” for quality and safety;
- creates links between organisations;
- reduces isolation;
- generates innovation and change;
- shares/ spreads knowledge and ideas; and,
- surveying: professional development program.

Ongoing key challenges ...

Ongoing key challenges

- Program sustainability
 - ❖ Role of government in accreditation schemes
 - ❖ Financial viability of schemes
 - ❖ Ongoing stakeholder acceptance and engagement
 - ❖ 'Peer-to-peer' or professional surveyors
 - ❖ Reliability of surveyors and surveys

Ongoing key challenges

- Costs associated with implementing safety and quality activities and participation in an accreditation program

Ongoing key challenges

- Understanding how an accreditation scheme fosters quality improvement and learning.

(Devkaran and O'Farrell 2015; Hinchcliff et al. 2013b; Jaafaripooyan 2014; Melo 2016; Riley et al. 2012b; Shaw 2015; Yan and Kung 2015).

Ongoing key challenges

- Place of process and quality indicators within an accreditation program

Questions



Acknowledgements

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- THE AUSTRALIAN COUNCIL ON HEALTHCARE STANDARDS
- AUSTRALIAN AGED CARE QUALITY AGENCY
- AUSTRALIAN GENERAL PRACTICE AGENCY
- AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE
- CENTRE FOR HEALTHCARE RESILIENCE AND IMPROVEMENT SCIENCE, MACQUARIE UNIVERSITY

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Contribution of accreditation programs ...

Contribution of accreditation: improved performance

Having a positive accreditation result is associated with good organisational and clinical performance.

References:

Braithwaite, J., Greenfield, D., Westbrook, J., Pawsey, M., Westbrook, M., Gibberd, R., Naylor, J., Nathan, S., Robinson, M., Runciman, B., Jackson, M., Travaglia, J., Johnston, B., Yen, D., McDonald, H., Low, L., Redman, S., Johnson, B., Corbett, A., Hennessy, D., Clark, J. and Lancaster, J. (2010) Health service accreditation as a predictor of clinical and organizational performance: a blinded, random, stratified study, *Quality and Safety in Health Care*, 19(1): 14-21.

Greenfield, D., Pawsey, M. and Braithwaite, J. (2012) The role and impact of accreditation on the healthcare revolution [O papel e o impacto da acreditação na revolução da atenção à saúde], *Acreditação*, 1(2): 64-77.

Greenfield D., Pawsey, M. and Braithwaite, J. (2013) Accreditation: a global regulatory mechanism to promote quality and safety, in Sollecito, W. and Johnson, J. (eds), *Continuous Quality Improvement in Health Care*, 4th edition, New York, Jones and Barlett Learning, pp. 513-531.

Greenfield, D., Kellner, A., Townsend, K., Wilkinson, A. and Lawrence, S.A. (2014) Health service accreditation reinforces a mindset of high performance human resource management: lessons from an Australian study, *International Journal for Quality in Health Care*, 26(4): 372-377.

Contribution of accreditation: improved clinical outcomes

Danish study: admissions at fully accredited hospitals were associated with a lower 30-day mortality risk than admissions at partially accredited hospitals (Falstie-Jensen et al. 2015).

In the United States – bariatric surgery accreditation – hospital or centre - is associated with:

- safer outcomes, shorter LOS, and lower total charges (Morton et al. 2014);
- a significant reduction in mortality, shorter LOS and lower cost (Nguyen et al. 2012);
- significant reductions in mortality, 90-day reoperations, complications and readmissions (Kwon et al. 2012);
- a significant decrease in surgical complications (Kohn et al. 2010).

Contribution of accreditation: opportunity to learn and improve

Participation in an accreditation program is a tool by which to reflect and obtain feedback on organisational performance so to maintain or improve their management of staff and delivery of care.



Reference:

Greenfield, D., Kellner, A., Townsend, K., Wilkinson, A. and Lawrence, S.A. (2014) Health service accreditation reinforces a mindset of high performance human resource management: lessons from an Australian study, *International Journal for Quality in Health Care*, 26(4): 372-377.

Contribution of accreditation: safety and quality culture

Accreditation promotes positive quality and safety cultures across organisational boundaries.

References:

Greenfield, D., Pawsey, M. and Braithwaite, J. (2011) What motivates health professionals to engage in the accreditation of healthcare organisations? *International Journal for Quality in Health Care*, 23(1):8-14.

Greenfield, D., Hinchcliff, R., Hogden, A., Mumford, V., Debono, D., Pawsey, M., Westbrook, J. and Braithwaite, J. (2015) A hybrid health service accreditation program model incorporating mandated standards and continuous improvement: interview study of multiple stakeholders in Australian health care, *International Journal of Health Planning and Management*, accepted 01/05/15.

Contribution of accreditation: drives improvements

Accreditation can be used to create and build quality and safety improvements.

References:

Greenfield D., Pawsey, M. and Braithwaite. J. (2013) Accreditation: a global regulatory mechanism to promote quality and safety, in Sollecito, W. and Johnson, J. (eds), *Continuous Quality Improvement in Health Care*, 4th edition, New York, Jones and Barlett Learning, pp. 513-531.

Greenfield, D., Pawsey, M. and Braithwaite. J. (2012) The role and impact of accreditation on the healthcare revolution [O papel e o impacto da acreditação na revolução da atenção à saúde], *Acreditação*, 1(2): 64-77.

Greenfield D., Pawsey, M. and Braithwaite. J. (2013) Accreditation: a global regulatory mechanism to promote quality and safety, in Sollecito, W. and Johnson, J. (eds), *Continuous Quality Improvement in Health Care*, 4th edition, New York, Jones and Barlett Learning, pp. 513-531.

Hinchcliff, R., Greenfield, D., Westbrook, J., Pawsey, M., Mumford, V. and Braithwaite, J. (2013) Stakeholder perspectives on implementing accreditation programs: a qualitative study of enabling factors, *BMC Health Services Research*, 13:437.

Greenfield, D., Hinchcliff, R., Banks, M., Mumford, V., Hogden, A., Debono, D., Pawsey, M., Westbrook, J. and Braithwaite, J. (2014) Analysing 'big picture' policy reform mechanisms: the Australian health service safety and quality accreditation scheme, *Health Expectations*, published online - doi: 10.1111/hex.12300.

Greenfield, D., Hinchcliff, R., Hogden, A., Mumford, V., Debono, D., Pawsey, M., Westbrook, J. and Braithwaite, J. (2015) A hybrid health service accreditation program model incorporating mandated standards and continuous improvement: interview study of multiple stakeholders in Australian health care, *International Journal of Health Planning and Management*, accepted 01/05/15.

Contribution of accreditation: drives improvements

A national accreditation program and standards can be effectively promoted and tracked through the use of icons and a database.

References:

Greenfield, D., Banks M., Hogden, A. and Braithwaite J. (2016). The ripple effect: diffusing a national health policy through the use of icons. Paper presented at the *Organisational Behaviour in Health Care Conference, OBHC2016*, Cardiff, Wales, April 5.

Contribution of accreditation: contributes to improvements

Accreditation assessments and quality and safety data or resident perspectives are measuring or focused on different but similar issues.

References:

Greenfield D., Pawsey, M. and Braithwaite, J. (2013) Accreditation: a global regulatory mechanism to promote quality and safety, in Sollecito, W. and Johnson, J. (eds), *Continuous Quality Improvement in Health Care*, 4th edition, New York, Jones and Barlett Learning, pp. 513-531.

Mumford, V., Greenfield, D., Hodgen, A., Debono, D., Gospodarevskaya, E., Forde, K., Westbrook, J. and Braithwaite, J. (2014) Disentangling quality and safety indicator data: a longitudinal, comparative study of hand hygiene compliance and accreditation outcomes in 96 Australian hospitals, *BMJ Open*, 4:e005284.

Mumford, V., Greenfield, D., Hodgen, A., Debono, D., Forde, K., Westbrook, J. and Braithwaite, J. (2015) Development and application of an indicator assessment tool for measuring health services accreditation programs, *BMC Research Notes*, 8 (363) doi: 10.1186/s13104-015-1330-6.

Hogden, A., Greenfield, D., Brandon, M., Debono, D., Mumford, V., Westbrook, J. and Braithwaite, J. (2016) Does an accreditation program in residential aged care attain, sustain and spread improvement relevant to residents and their families? *Conference Paper at the 10th International Organisational Behaviour in Healthcare Conference*, Cardiff, UK, 4th-6th April.

Contribution of accreditation: contributes to improvements

Accreditation programs continue to evolve, with increasing emphasis on promoting minimum standards *and* continuous quality improvement.

References:

Greenfield D., Pawsey, M. and Braithwaite. J. (2013) Accreditation: a global regulatory mechanism to promote quality and safety, in Sollecito, W. and Johnson, J. (eds), *Continuous Quality Improvement in Health Care*, 4th edition, New York, Jones and Barlett Learning, pp. 513-531.

Greenfield, D., Hinchcliff, R., Hogden, A., Mumford, V., Debono, D., Pawsey, M., Westbrook, J. and Braithwaite, J. (2015) A hybrid health service accreditation program model incorporating mandated standards and continuous improvement: interview study of multiple stakeholders in Australian health care, *International Journal of Health Planning and Management*, published online 5/6/15.

Hogden, A., Greenfield, D., Brandon, M., Debono, D., Mumford, V., Westbrook, J. and Braithwaite, J. (2016) Does an accreditation program in residential aged care attain, sustain and spread improvement relevant to residents and their families? *Conference Paper at the 10th International Organisational Behaviour in Healthcare Conference*, Cardiff, UK, 4th-6th April.

Contribution of accreditation: promotes a consumer focus

Consumer participation accreditation programs can bring different perspectives but are not without challenges.

References:

Nathan, S., Greenfield, D. Studying participation in action: researching accreditation. *Health Issues*. 2007; 91(Winter):8-9.

Nathan, S., Johnston, L., Braithwaite, J. (2011) The role of community representatives on health services committees: Staff expectations versus realities. *Health Expectations*, 14:272-84.

Nathan, S., Stephenson, N., Braithwaite, J. (2013) Sidestepping questions of legitimacy: How community representatives manoeuvre to effect change in a health service. *Health* (London), (Online First: doi: 10.1177/1363459312473617).

Nathan, SA., Braithwaite, J. and Stephenson, N. (2013) Facilitating the action of community representatives in a health service: the role of a community participation coordinator. *BMC Health Services Research*, 13(1):154.

Contribution of accreditation: generates new insights

Short notice surveys (SNS), or unannounced surveys, offer useful assessment options for accreditation schemes.

References:

Greenfield, D., Moldovan, M., Westbrook, M., Jones, D., Low, L., Johnston, B., Clark, S., Banks, M., Pawsey, M., Hinchcliff, R., Westbrook, J. and Braithwaite, J. (2012) An empirical test of short notice surveys in two accreditation programs, *International Journal for Quality in Health Care*, 24(1): 65-71.

Contribution of accreditation: generates new insights

The patient journey survey (PJS) method in the accreditation process is a valuable approach to identifying the strengths and areas for improvement in patient care.

References:

Greenfield, D., Hinchcliff, R., Westbrook, M., Jones, D., Low, L., Johnston, B., Banks, M., Pawsey, M., Moldovan, M., Westbrook, J. and Braithwaite, J. (2012) An empirical test of accreditation patient journey surveys: randomised trial, *International Journal for Quality in Health Care*, 24(5): 495-500.

Contribution of accreditation: contributes to improvements

Accreditation survey and surveyor reliability can be enhanced through a well facilitated program, collaborative stakeholder relationships and an experienced surveyor workforce.

References:

Greenfield, D., Braithwaite, J. and Pawsey, M. (2008) Health care accreditation surveyor style typology, *International Journal of Health Care Quality Assurance*, 21(5): 435-443.

Greenfield, D., Pawsey, M., Naylor, J. and Braithwaite, J. (2009) Are healthcare accreditation surveys reliable?, *International Journal of Health Care Quality Assurance*, 22(2): 105-116.

Greenfield, D., Pawsey, M., Naylor, J. and Braithwaite, J. (2013) Researching the reliability of accreditation survey teams: lessons learnt when things went awry, *Health Information Management Journal*, 42(1): 4-10.

Contribution of accreditation: contributes to improvements

Reliability of an accreditation scheme is an ongoing achievement, not a one-off attainment.

References:

Greenfield, D., Debono, D., Hogden, A., Hinchcliff, R., Mumford, V., Pawsey, M., Westbrook, J. and Braithwaite, J. (2015) Examining challenges to reliability of health service accreditation during a period of healthcare reform in Australia, *Journal of Health Organisation and Management*, 29(7): 912-924.

Greenfield, D., Hogden, A., Hinchcliff, R. Mumford, V., Pawsey, M., Debono, D., Westbrook, J. and Braithwaite, J. (2016) The impact of national accreditation reform on survey reliability: a two year investigation of survey coordinators' perspectives, *Journal of Evaluation in Clinical Practice*, accepted 24/12/15.

Contribution of accreditation: contributes to improvements

Economic evaluation of accreditation programs using cost-benefit analysis is at a rudimentary stage, but most quality and safety initiatives have not been rigorously subject to cost-benefit analyses.

References:

- Mumford, V., Forde, K., Greenfield, D., Hinchcliff, R. and Braithwaite, J. (2013) Health services accreditation: what is the evidence that the benefits justify the costs? *International Journal for Quality in Health Care*, 25(5): 606-620.
- Mumford, V., Greenfield, D., Hinchcliff, R., Moldovan, M., Forde, K., Westbrook, J. and Braithwaite, J. (2013) Economic evaluation of Australian acute care accreditation (ACCREDIT-CBA [Acute]): study protocol for a mixed-method research project, *BMJ Open*, 3(2) pii: e002381: 2.

Contribution of accreditation: improving knowledge base

The empirical evidence base for accreditation programs and the development of accreditation standards have not been compelling in the past but these are improving.

References:

- Greenfield, D. and Braithwaite, J. (2008) Health sector accreditation research: a systematic review, *International Journal for Quality in Health Care*, 20(3): 172-183.
- Hinchcliff, R., Greenfield, D., Moldovan, M., Pawsey, M., Mumford, V., Westbrook, J. and Braithwaite, J. (2012) Narrative synthesis of health service accreditation literature, *BMJ Quality and Safety*, 21(12): 979-991.
- Greenfield, D., Pawsey, M., Hinchcliff, R., Moldovan, M. and Braithwaite, J. (2012) The standard of healthcare accreditation standards: a review of empirical research underpinning their development and impact, *BMC Health Services Research*, 12(1):329.
- Greenfield, D., Pawsey, M. and Braithwaite, J. (2012) A peer-to-peer model to improve patient safety: harnessing accreditation programs, *American Journal of Medical Quality*, 27(4): 353-354.
- Greenfield, D. and Braithwaite, J. (2009) Developing the evidence base for accreditation of healthcare organisations: a call for transparency and innovation, *Quality and Safety in Health Care*, 18(3): 162-163.

Contribution of accreditation: increasing transparency

Public disclosure of accreditation information is supported by many stakeholders but more work needs to be undertaken to know how and what information should be made available.

References:

Greenfield, D., Hinchcliff, R., Pawsey, M., Westbrook, J. and Braithwaite, J. (2013) The public disclosure of accreditation information: practices and perceptions of opportunities and challenges, *Health Policy*, 113(1-2): 151-159.

Contribution of accreditation: research collaborations

The benefits of research collaborations investigating accreditation programs is that they generate independent but contextually appropriate evidence.

Accreditation programs the world over have similar characteristics and face common challenges.

References:

Braithwaite, J., Shaw, C., Moldovan, M., Greenfield, D., Hinchcliff, R., Mumford, V., Kristensen, M., Westbrook, J., Nicklin, W., Fortune, T. and Whittaker, S. (2012) Comparison of health service accreditation in low- and middle-income countries with those in higher income countries: a cross sectional study, *International Journal for Quality in Health Care*, 24(6): 568-77.

Selected references

Greenfield, D., Hinchcliff, R., Hogden, A., Mumford, V., Debono, D., Pawsey, M., Westbrook, J. And braithwaite, J. (2015) A hybrid health service accreditation program model incorporating mandated standards and continuous improvement: interview study of multiple stakeholders in Australian health care, *International Journal of Health Planning and Management*, accepted 01/05/15.

Greenfield, d., Hinchcliff, R., Banks, M., Mumford, V., Hogden, A., Debono, D., Pawsey, M., Westbrook, J. And braithwaite, J. (2014) analysing 'big picture' policy reform mechanisms: the Australian health service safety and quality accreditation scheme, *Health Expectations*, published online - doi: 10.1111/hex.12300.

Mumford, v., Greenfield, D., Hodgen, A., Debono, D., Gospodarevskaya, E., Forde, K., Westbrook, J. And braithwaite, J. (2014) disentangling quality and safety indicator data: a longitudinal, comparative study of hand hygiene compliance and accreditation outcomes in 96 Australian hospitals, *BMJ Open*, 4:e005284.

Clay-williams, r., Greenfield, D., Stone, J. And braithwaite, J. (2014) on a wing and a prayer: the benefits of modularized crew resource management (CRM) training, *Journal of Continuing Education in the Health Professions*, 34(1): 56-67.

Greenfield, d., Kellner, A., Townsend, K., Wilkinson, A. And Lawrence, S.A. (2014) health service accreditation reinforces a mindset of high performance human resource management: lessons from an Australian study, *International Journal for Quality in Health Care*, 26(4): 372-377.

Braithwaite, j., Westbrook, M., Nugus, P., Greenfield, D., Travaglia, J., Runciman, W., Foxwell, R., Boyce, R., Devinney, T. And westbrook, J. (2013) continuing differences between health professions' attitudes: the saga of accomplishing systems-wide interprofessionalism, *International Journal for Quality in Health Care*, 25 (1): 8-15.

Selected references

Greenfield, D., Kellner, A., Townsend, K., Wilkinson, A. And Lawrence, S.A. (2014) health service accreditation reinforces a mindset of high performance human resource management: lessons from an Australian study, *International Journal for Quality in Health Care*, 26(4): 372-377.

Greenfield, d., Hinchcliff, R., Pawsey, M., Westbrook, J. And Braithwaite, J. (2013) the public disclosure of accreditation information: practices and perceptions of opportunities and challenges, *Health Policy*, 113(1-2): 151-159.

Greenfield, d., Nugus, P., Travaglia, J. And Braithwaite, J. (2013) promoting patient-centred healthcare: an empirically derived organisational model of interprofessional collaboration, in Keating, M., Montgomery, K. And McDermott, A. (Eds) *Patient-centred Healthcare: Achieving Co-ordination, Communication and Innovation*, London, Palgrave Macmillan, pp. 90-102.

Greenfield d., Pawsey, M. And Braithwaite, J. (2013) accreditation: a global regulatory mechanism to promote quality and safety, in Sollecito, W. And Johnson, J. (Eds), *Continuous Quality Improvement in Health Care*, 4th edition, New York, Jones and Barlett Learning, pp. 513-531.

Greenfield, d., Pawsey, M. And Braithwaite, J. (2012) the role and impact of accreditation on the healthcare revolution [O papel e o impacto da acreditação na revolução da atenção à saúde], *Acreditação*, 1(2): 64-77.

Greenfield, d., Nugus, P., Fairbrother, G., Milne, J. And Debono, D. (2011) applying and developing health service theory: an empirical study into clinical governance, *Clinical Governance: An International Journal*, 16(1): 8-19.