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Short-Notice and Unannounced Survey Methods: Literature review

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Preface

This preface was written by the Australian Commission on Safety and Quality in Health Care (the Commission) to provide context and background to the report which follows, *Short-Notice and Unannounced Survey Methods: Literature review*. The Commission contracted the University of Technology Sydney (UTS) to prepare the literature review, as part of the review of the Australian Health Service Safety and Quality Accreditation (AHSSQA) Scheme.

Background

The Commission's role is to lead and coordinate national improvements in the safety and quality of health care. The Commission works in partnership with the Australian Government, state and territory governments and the private sector to achieve a safe and high-quality, sustainable health system. In doing so, the Commission also works closely with patients, carers, clinicians, managers, policymakers and healthcare organisations.

The Commission is responsible under the *National Health Reform Act 2011* for the formulation of standards relating to health care safety and quality matters and for formulating and coordinating national models of accreditation for health service organisations.

The Commission developed the National Safety and Quality Health Service (NSQHS) Standards in consultation with the Australian Government, state and territory governments, technical experts and other stakeholders. They aim to protect the public from harm and to improve the quality of health service provision.

To become accredited, health service organisations must pass assessments to show they have implemented the NSQHS Standards. The assessments are conducted by independent accrediting agencies, approved by the Commission, as part of the AHSSQA Scheme. However, state and territory regulators and chief executives of health service organisations have raised concerns about several aspects of the accreditation process.

The Commission is undertaking a review to update and improve the accreditation process. In May 2017, the Commission contracted four literature reviews to provide an evidence base to inform the Commission's review of the AHSSQA Scheme. The reviews explored the potential use of the following methods to improve the veracity of health service organisations:

- Attestation by a governing body
- Short-notice and unannounced surveys
- Patient journey and tracer methodologies
- Safety culture assessment.

The report that follows this preface presents the findings of a literature review that explored the potential use of short-notice or unannounced surveys as part of accreditation of health service organisations.

Key findings

The key findings of the report on short-notice and unannounced surveys are discussed according to the evidence for their effectiveness and considerations for their use in the AHSSQA Scheme.

Evidence of effectiveness

The authors found limited research evaluating the effectiveness of short-notice or unannounced surveys as part of accreditation of health service organisations in the peer-reviewed literature. The evidence available was insufficient to allow clear conclusions on whether short-notice or unannounced surveys were more effective than advance-notice surveys in assessing health service organisations for accreditation.

Despite this, the authors did report on a number of potential benefits of using short-notice and unannounced surveys during the accreditation of health service organisations, as well as a number of issues that would need to be considered prior to inclusion in the AHSSQA Scheme.

Considerations for use

Compared to conventional advance-notice survey methods, short-notice or unannounced surveys may have the following benefits:

- Greater efficiency in assessing clinical standards, whereas advance-notice surveys may be more efficient for assessing organisationally focused standards
- The capacity to reduce organisational 'gaming' of external assessments by health service organisations
- Encouraging longer-term improvements rather than preparation for the purpose of planned accreditation visits
- The potential to make assessment processes more efficient by removing the demands for advance preparation of documentation
- Stakeholder support for short-notice surveys due to perceived enhanced efficiency.

The authors of the report also identified a number of issues that would need to be resolved before including short-notice or unannounced surveys in the AHSSQA Scheme, including:

- Some stakeholders may feel that moving to short-notice or unannounced surveys is a move to a compliance model, rather than a quality-improvement model, which may lessen their support for the AHSSQA Scheme
- There would be significant resourcing requirements to support health service organisations, accrediting agencies and assessors to adequately prepare for short-notice surveys
- There is some commentary that unannounced surveys may be susceptible to corruption, including unreliable or unethical surveying practices, and therefore mechanisms may be required to prevent this.

Conclusion

It would be important to address these issues before determining whether there is a role for short-notice and unannounced surveys as part of the AHSSQA Scheme, and what this role might be.

There is enough empirical evidence available of the effectiveness of short-notice and unannounced surveys in health care to suggest that further consideration is warranted of how these types of surveys could be included in accreditation processes, and the ideal design for such surveys.

The evidence available was insufficient to allow clear conclusions on whether short-notice or unannounced surveys had the potential to enhance the effectiveness of the AHSSQA Scheme.

The Commission agrees with the authors' conclusions. Specifically, there is limited empirical evidence on the effectiveness of short-notice or unannounced surveys compared to conventional advance-notice surveys in assessing health service organisations against a set of health service standards. However, there are indications that short-notice or unannounced surveys have the potential to be usefully applied to the AHSSQA Scheme and to obtain stakeholder support.

Further research is needed to confirm whether short-notice or unannounced surveys should be included in the AHSSQA Scheme, including:

- Whether short-notice surveys would replace advance-notice surveys, or merely supplement them
- In what situations short-notice surveys would apply
- What standards short-notice surveys would assess
- How health service organisations and other stakeholders would be consulted and engaged to ensure ongoing support for the AHSSQA Scheme
- What training and resources would need to be developed to support the change in survey methodology
- What mechanisms would be put in place to prevent any unethical practice.

Next steps

The Commission will progress to consulting with stakeholders including regulators, health service organisations and accrediting agencies on the potential to include short-notice or unannounced surveys as part of the AHSSQA Scheme. The consultation will also consider the ideal design for inclusion of this survey method.

Updates to the AHSSQA Scheme are planned to be put into practice for the commencement of accreditation of health service organisations to the second edition of the NSQHS Standards in January 2019.

D17-37270

SHORT-NOTICE AND UNANNOUNCED SURVEY METHODS: LITERATURE REVIEW

THE AUSTRALIAN COMMISSION ON SAFETY AND QUALITY
IN HEALTH CARE

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EXECUTIVE SUMMARY

This report presents the findings of a systematic literature review on short-notice and unannounced survey methodologies in healthcare accreditation. The study was conducted by the Centre for Health Services Management, Faculty of Health, University of Technology Sydney (UTS) for the Australian Commission on Safety and Quality in Health Care (the Commission). The review sought to collate and review evidence on the potential for these methods to enhance the effectiveness and efficiency of healthcare accreditation in Australia.

The literature search was conducted in two phases. Phase 1 identified empirical, peer-reviewed studies on short-notice and unannounced survey methodologies in healthcare accreditation in Medline, CINAHL, Embase and Scopus. The search yielded 54 unique results, of which only four were eligible for inclusion in the systematic review. Phase 2 identified grey literature and studies on short-notice and unannounced survey methodologies beyond the accreditation context. In addition to the databases utilised in Phase 1, the Phase 2 search reviewed TRIP Pro, Netting the Evidence and Google Scholar for grey literature. The Phase 2 search yielded an additional 15 resources, including peer-reviewed studies comparing announced (advance-notification) surveys with unannounced surveys outside health care.

The review found evidence of the use of unannounced surveys to audit quality and safety standards. However, there are few peer-reviewed studies that empirically evaluate the effectiveness or efficiency of the method, when applied within the context of accreditation. The limited empirical studies available were concerned primarily with comparison of advance-notification and unannounced or short-notice survey results against accreditation standards, as a proxy indicator for the safety and quality of services provided by healthcare organisations. The studies did not incorporate clinical indicators or other outcome measures into their analyses.

The empirical studies identified found that unannounced, short-notice and conventional survey methods have similar capabilities in identifying organisational non-compliance with accreditation standards. However, the results were not directly comparable to conventional accreditation survey methods, as the unannounced or short-notice survey methods trialled were only used to evaluate organisational performance against abridged sets of accreditation standards, as opposed to the complete sets of standards of programs involved in the trials.

The efficiency of unannounced surveys and their capacity to assess facilities in their natural course of operations was supported in original research studies (i.e. not commentaries or opinion pieces) that examined the method outside the accreditation context. Both survey formats, however, are open to accusations of 'gaming', as representations of quality and safety standards can be artificially increased in preparation for advance-notification surveys, and unannounced surveys can be subject to unsanctioned disclosure or tip-off.

The studies included in the systematic review indicate that unannounced and short-notice surveys may be, in particular, more effective and efficient than advance-notification surveys in detecting deficiencies regarding clinical care standards and criteria, but produce similar results regarding organisationally focused standards and criteria, such as those regarding the management of consumer complaints. This may be because unannounced surveys are subject to unique implementation challenges, particularly around facility access and staff availability. These challenges may serve as barriers to survey effectiveness, or impediments to survey accuracy. Consideration must also be given to the symbolism of the method, as it may be viewed as an auditing rather than engagement exercise, and negatively impact the relationship between healthcare organisations and accreditation bodies.

The review concluded that advance-notification surveys remain indispensable to accreditation programs due to their capacity to assess standards that require health

services to prepare relevant organisationally focused evidence for surveyors. However, short-notice or unannounced survey methods may offer complimentary benefits, such as implementation efficiency and more accurate insights into standards of clinical care.

Although rigorous conclusions cannot be drawn from the limited available evidence, short-notice or unannounced survey methods may be able to enhance Australian accreditation programs through use as compliments to regular, advance-notification surveys. In particular, they could be used for follow-up inspections against standards that organisations have performed poorly against during advance-notification surveys.

1. INTRODUCTION

In May 2017, the Australian Commission on Safety and Quality in Health Care (the Commission) requested the Centre for Health Services Management (CHSM), Faculty of Health, University of Technology Sydney (UTS) to complete three literature reviews on the following issues to assess their potential to enhance the effectiveness and efficiency of healthcare accreditation in Australia:

- Attestation of a governing body
- Short-notice and unannounced survey methods
- Patient journey and tracer survey methods.

The UTS review team included; Dr Reece Hinchcliff (CHSM), Dr Miriam Glennie (CHSM), Professor Joanne Travaglia (CHSM), Mr David Carter (CHSM and Faculty of Law, UTS), Ms Lisa Billington (CHSM and Faculty of Law, UTS) and Dr Deborah Debono (CHSM).

The project findings are presented in three separate reports. This is the second report of the three-part compendium, which addresses the use of short-notice and unannounced survey methods in accreditation processes in health. The report commences with a background section that contextualises unannounced and short-notice survey methods. These methods contrast with the advance-notification survey methods predominantly used in Australian healthcare accreditation programs. The report then summarises the search method, synthesises the key empirical and thematic findings identified, and highlights the policy-relevant implications in the discussion.

At a macro-level, this report makes clear three main points: 1) the peer-reviewed evidence regarding these two survey methods is limited, which impedes robust conclusions regarding their effectiveness and efficiency; 2) the peer-reviewed and grey literature outside of the healthcare accreditation sphere, including in non-healthcare sectors, provide useful insights into how these survey methods could be applied within Australian accreditation programs; and 3) when the directly and indirectly relevant

literature is synthesised holistically, it is possible to elucidate practical and theoretical issues that can enable evidence-informed considerations regarding the potential design and implementation of unannounced and short-notice survey approaches in the Australian accreditation context.

2. BACKGROUND

The use of accreditation programs to monitor and improve the performance of healthcare organisations' performance against quality and safety standards is an influential part of the Australian health system (Greenfield et al., 2015a). The Australian Health Service Safety and Quality Accreditation (AHSSQA) Scheme, managed by the Commission, is the most influential mechanism through which the benefits of accreditation programs can be diffused throughout the Australian acute care sector.

Evidence supporting the effectiveness of accreditation programs has increased over the past decade, due in part to several large research projects conducted in Australia (Hinchcliff et al., 2012a). However, most accreditation research has employed observational and cross-sectional study designs, with few interventional studies undertaken (Brubakk et al., 2015). This reflects the challenge of identifying suitable control sites in healthcare sectors where accreditation is mandated for the majority of health services. This limits the strength of evidence supporting accreditation, and supports third-party quality assessments in healthcare more broadly (Flodgren et al., 2016).

Due to the relatively short period of time that has elapsed since the AHSSQA Scheme was introduced in 2013 (Australian Commission on Safety and Quality in Health Care, 2016), there has been insufficient opportunity to publish peer-reviewed evidence regarding its impacts. Nonetheless, there is anecdotal information and clinical data that validates the Scheme's role (Greenfield et al., 2015a). The frequent evaluations, consultative processes and revisions of the AHSSQA Scheme undertaken by the Commission are representative of the broader desire of Australian healthcare stakeholders to maximise the Scheme's effectiveness and efficiency as a quality and safety tool.

All regulatory regimes pose challenging practical and philosophical questions, and this is true for the AHSSQA Scheme. Qualitative research regarding healthcare accreditation, in

general, has shown that some Australian healthcare stakeholders have concerns that the potential benefits of accreditation programs may be outweighed by the direct costs and unintended consequences felt by healthcare professionals, organisations and the health sector more broadly (Debono et al., 2017).

The persistence of such views has resulted in the effectiveness and efficiency of accreditation becoming a prominent topic in the Australian quality and safety field (Mumford et al., 2013). These concerns have manifested in the conduct of multi-stakeholder evaluations of accreditation programs and their individual components (Braithwaite et al., 2011). Due to the fundamental, highly visible nature of surveying processes within accreditation programs, the question of how accreditation surveys could best be designed and implemented is of considerable interest to healthcare policymakers, professionals and researchers (Hinchcliff et al., 2012b).

Most examinations of accreditation surveys have assessed how to best implement the most commonly employed survey method, which is advance-notification surveys (Greenfield et al., 2008; Greenfield et al., 2009; Greenfield et al., 2013a; Greenfield et al., 2015b; Greenfield et al., 2016a). The standard way of operationalising this method is by providing healthcare organisations with the dates of their external accreditation surveys up to 12 months in advance, to allow adequate time for organisational preparation. However, different types of accreditation survey approaches have also been examined over the past decade, including short-notice and unannounced methods.

Short-notice survey methods generally involve accreditation agencies informing healthcare organisations that they will be assessed for compliance with an abridged portion of the full set of standards within an accreditation program within a given period, but not a specific date, with limited notice given prior to the actual survey. For example, an organisation may be notified that they will be assessed between July and September inclusive, and be notified two days before the survey actually occurs.

Unannounced survey methods preclude even this limited degree of prior notice from being provided to organisations, so that a survey can occur at any time within a designated period (e.g. within one year).

The Joint Commission in the United States is the most prominent accreditation agency to have incorporated unannounced surveys within their program (The Joint Commission, 2017); however, there are some exceptions to the method's use (e.g. an organisation's first ever accreditation survey) (Siewert, 2017). Alternatively, Accreditation Canada provides organisations with a three-month window within which a survey may occur without any notice (Accreditation Canada, 2010). Research into the use of short-notice survey methods in Australia is currently limited to the work undertaken by the first author of this review and colleagues (Greenfield et al., 2007).

Despite their slight differences, the main principle underlying both short-notice and unannounced survey methods is that organisations must authentically align their organisational practices with quality and safety standards, thus fulfilling the overarching intention of accreditation or other external inspection regimes (Klerks et al., 2013). Limits on notification may prevent healthcare organisations from having the opportunity to prepare for external inspections by cynically constructing an artificial representation of their actual practices (Greenfield et al., 2007).

There is some anecdotal information and commentary on accreditation issues that lends support to the utility of these approaches (Comeau and Lowry, 2005; Mumford et al., 2015). However, more rigorous assessment of the available literature is required to develop an evidence-informed position on whether they could be used to enhance healthcare accreditation programs in Australia.

3. METHODS

The literature search for this project was conducted in two phases. Phase 1 employed a conventional systematic search strategy that was purely designed to identify relevant peer-reviewed journal papers that would contain the most reliable evidence on the topics of interest. The Phase 1 search parameters were selected based on a scoping review of key documents, discussions with the Commission, the pre-existing subject-matter expertise of the project investigators, and database search trials with the Medical Librarian at UTS. The search terms were:

- short notice survey*
- unannounced survey*
- no notice survey*

Each of these subject-matter terms were searched in combination with the following context-specific terms:

- Accreditation OR
- 'Joint Commission on Accreditation of Healthcare Organizations' OR
- 'Joint Commission'

Searches of the bibliographic research databases most commonly used in health-related systematic literature reviews (i.e. Medline, CINAHL, Embase, and Scopus) were conducted using the above terms. Search results were reviewed for eligibility using the following inclusion criteria, agreed upon by the Commission:

- English language
- Published 2000–2017, inclusive
- Focused on accreditation, as applied to healthcare organisations (i.e. not professional credentialing)
- Empirical research (i.e. studies involving literature reviews or primary data).

Phase 2 of the search strategy consisted of an environmental scan of grey literature (e.g. government and accreditation agency reports), and other resources relating to the two survey methods, both within and beyond the domain of accreditation. In addition to the survey method terms defined in the project protocol, the Phase 2 search included 'unannounced inspection' and 'unannounced audit'. This decision was made due to the limited amount of directly relevant literature that was initially identified, and the need to maximise capture of all broadly relevant literature that could uncover information of practical relevance to the Commission.

The Phase 2 search was conducted in three stages; stage one involved reviewing the reference lists of articles identified in Phase 1. Stage two consisted of a manual search of the websites of prominent Australian and international organisations associated with healthcare accreditation: the Australian Commission on Safety and Quality in Health Care; the Australian Council on Healthcare Standards; the International Standards Organisation; the Joint Commission; the Joint Commission International; Accreditation Canada; and the European Co-operation for Accreditation. Stage three involved database searches on survey method terms only (i.e. without reference to accreditation) in Medline, CINAHL, Google Scholar, TRIP Pro, Netting the Evidence and Google.

Both the peer-reviewed and grey literature identified was screened by one of the project investigators, with follow-up discussions amongst the project team to collaboratively define final inclusions for the review. Once detailed summaries of the relevant peer-reviewed journal papers identified through the Phase 1 search were completed, the decision was made to conduct a narrative synthesis of key themes raised in the broader body of literature obtained through the Phase 2 search. This method has been employed previously in accreditation-related literature reviews to elucidate findings of potential relevance to policy and other healthcare stakeholders (Hinchcliff et al., 2012a). The narrative synthesis was conducted by two project investigators independently, then collaboratively via ongoing discussions and reflections

on the collected literature. This approach reduced the risk of individual bias confounding the findings, which strengthened the validity of the study.

4. RESULTS

4.1 OVERVIEW

Of the 54 unique records identified and screened through database searching in Phase 1 (i.e. focused solely on identifying the most relevant peer-reviewed literature), only four (Barnett et al., 2017; Ehlers et al., 2017; Greenfield et al., 2012; Simonsen et al., 2015) met the inclusion criteria (see Figure 1). The exclusions were largely due to articles not concerning empirical data (n=47), and not being situated specifically within the context of healthcare accreditation (n=3).

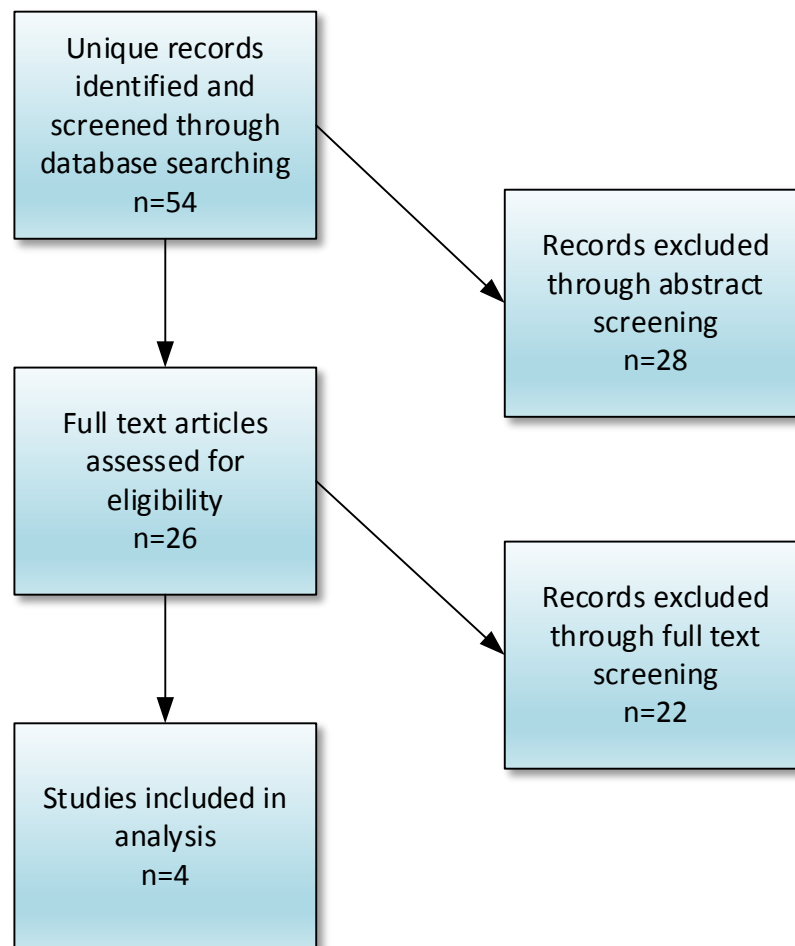


Figure 1: Screening process for phase one search results

All key details of the four peer-reviewed papers that met the Phase 1 inclusion criteria are summarised in Table 1. Critical analysis of the policy-relevant findings reported by the two most robust interventional studies identified are presented in section 4.2 of the

results (Ehlers et al., 2017; Greenfield et al., 2012). These were the only two studies that sought to specifically evaluate the utility of unannounced or short-notice accreditation survey methods, using trial designs capable of producing compelling, empirically-derived evidence. Of the remaining two studies, one predominantly focused on the research protocol underlying the most recent publication that met the inclusion criteria (Simonsen et al., 2015). The other examined patient safety outcomes occurring in hospitals during unannounced accreditation surveys, without assessing whether such outcomes were due to accreditation surveys in general, or the nuances of unannounced surveys (Barnett et al., 2017). Therefore, these results were not discussed in detail in Section 4.2 of the results.

The Phase 2 search yielded the following results: one report detailing the results of a trial that was subsequently reported in a peer-reviewed journal paper captured in the Phase 1 results (Greenfield et al., 2012); three resources generally discussing the role of short-notice and unannounced methods within the context of accreditation; 11 relevant resources concerning unannounced inspections in healthcare and other contexts; and four implementation guides regarding unannounced inspection methods, whether in respect to healthcare accreditation or other contexts.

While the narrative synthesis of items collated in the Phase 2 search highlighted important themes and issues for consideration by the Commission, it did not identify any empirical evidence regarding the effectiveness of short-notice or advance-notification accreditation survey methods. For this reason, these resources have been cited throughout the narrative synthesis presented in section 4.3 below, but were not tabulated in the same fashion as the Phase 1 results.

Table 1: Peer-reviewed journal articles regarding short-notice and unannounced accreditation survey methods (n=4 Phase 1 search results)

Author, Year/ Country	Aim	Accreditation Program	Accreditation Survey Details	Study Design/Method	Sample	Summary of Key Findings	Practical Implications
Simonsen, 2015 Denmark	To outline a study protocol to evaluate the effect of unannounced hospital surveys compared to conventional advance-notification hospital surveys.	Danish Healthcare Quality Program (DDKM).	At the time of publication, DDKM surveys were announced, and conducted every three years. The trial was intended to solely involve unannounced surveys.	Nationwide, cluster-randomized controlled trial.	23 hospitals (3 university hospitals, 5 psychiatric hospitals and 15 general hospitals): 11 control; 12 intervention.	<p>Unannounced hospital surveys were expected to reveal less compliance with performance indicators compared to the advance-notification hospital surveys.</p> <p>An additional hypothesis was that unannounced surveys could be more efficient, as less organisational investment into accreditation preparation, rather than patient care, may occur.</p>	<p>The DDKM program has now been rolled out to nursing homes and GPs, so the trial results may influence system-wide accreditation practices.</p> <p>The protocol provides an excellent template for potential AUS trials of different accreditation survey methods.</p>
Elhers, 2017 Denmark	Findings of the above-mentioned study protocol.	Danish Healthcare Quality Program (DDKM).	Detailed information is provided regarding the unannounced survey method employed (see paper for more details).	Nationwide, cluster-randomized controlled trial powered to detect a significant difference in effect.	23 hospitals (3 university hospitals, 5 psychiatric hospitals and 15 general hospitals): 11 control; 12 intervention.	<p>Unannounced hospital surveys were no more effective than advance-notification surveys in detecting quality problems. Surveyors reported positive feedback from hospital managers and staff in the intervention group, indicating a positive attitude among hospital employees toward the implementation of</p>	<p>This was the first nationwide and cluster-randomized controlled trial of unannounced versus advance-notification hospital surveys.</p> <p>The study clarifies the complexity and challenges of applying traditional clinical research methods in evaluating complex</p>

SHORT-NOTICE AND UNANNOUNCED SURVEY METHODS: LITERATURE REVIEW

Author, Year/ Country	Aim	Accreditation Program	Accreditation Survey Details	Study Design/Method	Sample	Summary of Key Findings	Practical Implications
						unannounced surveys.	<p>interventions.</p> <p>While no significant differences between the intervention and control groups were identified, unannounced surveys were perceived positively by healthcare professionals, and may also provide increased efficiency for both accreditation agencies and hospitals.</p> <p>One comment in the background mentioned 'studies of trends in hospital performance have for example failed to offer a clear picture of any effect of the Joint Commission's move toward unannounced site visits in 2006.'</p>

SHORT-NOTICE AND UNANNOUNCED SURVEY METHODS: LITERATURE REVIEW

Author, Year/ Country	Aim	Accreditation Program	Accreditation Survey Details	Study Design/Method	Sample	Summary of Key Findings	Practical Implications
Barnett, 2007 USA	To assess whether heightened vigilance during (unannounced) survey weeks is associated with improved patient outcomes compared with non-survey weeks.	The Joint Commission	Unannounced surveys are undertaken at US hospitals every 18 to 36 months as an integral part of their accreditation process.	Quasi-randomized analysis of Medicare admissions at 1984 surveyed hospitals over 4 years, 3 weeks +/- surveys. Outcomes adjusted for socio-demographic and clinical characteristics.	244,787 and 1,462,339 admissions during survey and non-survey weeks.	Patients admitted to hospitals during survey weeks had significantly (though not markedly) lower mortality than during non-survey weeks.	The act of accreditation surveying (in this case, via unannounced surveys) may have a positive influence on patient outcomes due to the Hawthorne effect.
Greenfield, 2012 Australia	To evaluate short-notice surveys in accreditation programs.	Australian Council on Healthcare Standards, and Australian General Practice Accreditation Limited	As opposed to the normal advanced notification surveys, organisations were given two days to prepare for short-notice surveys, which assessed a small proportion of the overall standards in each accreditation program.	Trial of short-notice surveys, with the results compared to participating organisations' most recent advance-notification survey results.	20 healthcare organisations and 7 general practices.	Short-notice surveys are more critical in their assessment of clinical than administrative or corporate items. Short-notice surveys, while broadly comparable with existing advance-notification survey practice, produced different accreditation outcomes for a significant proportion of the study organisations.	While it is important to deduce the relative validity of short-notice surveys compared to advance-notice surveys overall, it is equally important to identify which types of standards are assessed more effectively by which survey methods (i.e. mixed-survey models may be most effective). This means that novel survey methodologies

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Author, Year/ Country	Aim	Accreditation Program	Accreditation Survey Details	Study Design/Method	Sample	Summary of Key Findings	Practical Implications
							<p>may provide an enhancement to, rather than replacement of, conventional survey methods.</p> <p>The trial design was questionable, and lacked sufficient statistical power to generate particularly reliable conclusions.</p>

4.2 ANALYSIS OF PEER-REVIEWED LITERATURE

Of the four peer-reviewed papers that met the Phase 1 inclusion criteria, the most recently published reported the results of an interventional study with the strongest design (Ehlers et al., 2017). The study evaluated the potential effectiveness of unannounced, as opposed to advance-notification, accreditation surveys in Denmark (Ehlers et al., 2017). A published research protocol concerning this study was also identified in the Phase 1 search (Simonsen et al., 2015).

The only other comparable source of evidence was produced in Australia through a trial investigating the relative effectiveness of the short-notice survey method in comparison to the usual announced survey method (Greenfield et al., 2012). As these two sources provide the most reliable evidence regarding the topics of interest in this report, the methods, findings and implications of these studies are analysed in detail below.

All hospitals in Denmark are accredited by the Danish Institute for Quality and Accreditation in Healthcare. The Danish Healthcare Quality Program (DDKM) contains both quality improvement and minimum compliance elements, with limited formal financial and organisational consequences resulting from survey outcomes, besides potential loss of public and professional reputation (Simonsen et al., 2015). Advance-notification surveys are conducted every three years, with mid-term visits halfway through the period (Ehlers et al., 2017).

In response to healthcare stakeholder concerns regarding inefficiencies associated with the advance-notification accreditation survey method (e.g. the time required for organisations to prepare documentation required for external assessment), a national cluster-randomized controlled trial of unannounced versus advance-notification surveys was undertaken during 2014 and 2015 to determine whether to alter the survey process applied within the DDKM program (Ehlers et al., 2017). Organisations were assessed against an abbreviated suite of the full set of DDKM accreditation standards, which nonetheless covered organisational standards, continuity of care standards, and patient

safety standards. The explicit hypothesis underlying the study was that unannounced surveys should uncover greater non-compliance with accreditation standards, compared with advanced notification surveys (Simonsen et al., 2015).

The published study protocol (Simonsen et al., 2015), which was also identified in the Phase 1 search, provides the best available template to guide the design and implementation of robust, comparable trials in Australia. This is because the Danish trial selected a strong study design, employed implementation procedures that facilitated stakeholder engagement and reduced confounding of results, and then evaluated the outcomes using best-practice analytical methods. Whilst providing guidance on appropriate methods for future trials, this study also highlights the complexity and challenges of applying traditional clinical research methods to evaluate complex, systems-level interventions like accreditation programs and the survey methods incorporated within them. This is an issue that has been discussed, in detail, regarding the evaluation of accreditation programs and processes (Brubakk et al., 2015).

Based on the findings obtained in the Danish trial, it was concluded that the main hypothesis was invalid, irrespective of the category of standards assessed and the characteristics of hospitals surveyed. The unannounced method did not identify more organisational violations against accreditation standards than the advance-notification method (Ehlers et al., 2017). The decision was made to retain advance-notification surveys as the method used within the DDKM program. Nonetheless, unannounced surveys were perceived positively by healthcare professionals involved in the trial, and the study authors proposed that the method may generate increased efficiency for both accreditation agencies and hospitals, although no attempt was made to precisely define or quantify what these efficiencies might constitute (Ehlers et al., 2017).

As previously noted, the only comparable trial was undertaken in Australia, supported by the Commission. The findings were outlined in a report (The Australian Council on Healthcare Standards, 2009) identified in the Phase 2 search results, and a more

refined, peer-reviewed journal paper (Greenfield et al., 2012) that was developed using the same findings. The trial involved prominent accreditation programs in the Australian hospital (i.e. Australian Council on Healthcare Standards) and general practice (i.e. Australian General Practice Accreditation Limited) sectors. It was implemented across these two healthcare contexts during 2009.

As with the Danish trial, the Australian trial involved assessment against an abbreviated version of the full sets of standards in the two accreditation programs (Greenfield et al., 2012). The standards selected were chosen due to their alignment with the areas of the health system identified by the Commission as priorities for national consideration, including: open disclosure; healthcare-associated infection; patient identification; clinical handover; medication safety; information strategy; patients at risk of acute deterioration; and falls prevention (The Australian Council on Healthcare Standards, 2009).

Participating organisations were given two days' notice prior to the short-notice surveys, as opposed to the normal four months for the Australian Council on Healthcare Standards program, and one year for the Australian General Practice Accreditation Limited program. Assessment ratings from the short-notice surveys were compared to participating healthcare organisations' most recent advance-notification survey assessments (Greenfield et al., 2012). Due to the lack of randomisation, potential for self-selection bias, and several other factors, the findings of this trial are weaker than those produced in the Danish study. However, the contrasting rigour of the two trials may be partially due to the different regulatory environments in which they were undertaken. The Danish trial was government-led, based on the government-administered accreditation program, while the Australian trial was largely administered by accreditation agencies, based on their own accreditation standards and programs that existed at the time of the trial.

While the short-notice survey method was found to produce similar ratings to the advance-notification survey method overall, a higher proportion of organisations were assessed as not meeting the accreditation threshold with short-notice surveys. This was largely due to lower levels of performance identified by short-notice surveys in relation to clinical standards (Greenfield et al., 2012). As occurred with the Danish trial (Ehlers et al., 2017), healthcare stakeholders involved in the Australian trial were found to generally view the innovative survey method positively (Greenfield et al., 2012).

As mentioned previously, the two large trials of unannounced and short-notice accreditation survey methods in Denmark and Australia provide the most robust empirical evidence concerning the potential effectiveness of these methods, as opposed to the more common advance-notification survey method. The evidence indicates that short-notice and unannounced survey methods are relatively similar to advance-notification surveys in identifying organisational performance against abbreviated versions of the normal sets of hospital accreditation standards used in the two countries (Ehlers et al., 2017; Greenfield et al., 2012).

However, a critical implication of the Australian trial is that while it is important to deduce the relative validity of short-notice surveys compared to advance-notification surveys overall, it is equally important to systematically determine the types of standards that are assessed more effectively by the two survey methods. From evidence derived from the Australian trial discussed above, it would appear that short-notice survey methods are most capable of identifying problems regarding clinical care standards, but produce similar results regarding organisationally focused standards (Greenfield et al., 2012). In line with this position, it has been noted that innovative survey methods could be used to provide an enhancement to, rather than replacement of, conventional methods used within Australian accreditation programs (Hinchcliff et al., 2012a).

Furthermore, both trials reported qualitative evidence of potential efficiencies associated with short notice and unannounced survey methods, as well as general support for them amongst healthcare stakeholders (Ehlers et al., 2017; Greenfield et al., 2012). These advantages warrant more detailed consideration of their applicability within Australian accreditation programs.

4.3 THEMATIC SYNTHESIS OF RELATED AND GREY LITERATURE

When the broader literature regarding short-notice and unannounced surveys is considered, it appears that these approaches can be implemented effectively in certain contexts to produce positive impacts. Support for these methods in accreditation is demonstrated most obviously by the use of unannounced surveys by the Joint Commission in the USA, which is combined with tracer methodologies (Murphy-Knoll, 2006). Unannounced inspections are also used to assess organisational compliance with quality standards in a variety of healthcare environments beyond the acute care sector (Lake Waters et al., 2013; NSF International, 2013; Victorian Department of Health and Human Services, 2013) and in non-healthcare settings (Crowley et al., 2013; Fiene, 1996; Kim, 2015).

A range of advantages and disadvantages to these assessment methods is reported in the broader literature identified in the Phase 2 search. The narrative synthesis of this literature identified the four main themes listed below, which are outlined in the remainder of the results section, along with their implications for healthcare accreditation in Australia:

1. Capacity to reduce organisational 'gaming' of external assessments
2. Potential to increase the efficiency of assessment processes
3. Impacts on stakeholder perceptions
4. Practical issues associated with implementation.

4.3.1 Capacity to reduce organisational 'gaming' of external assessments

One of the main reasons for considering the incorporation of unannounced and short-notice survey methods into healthcare accreditation programs is their potential to enable external observation of authentic, everyday organisational and clinical practices (Toffolutti et al., 2017). Some of the reports identified in this review support this proposition.

In one USA study, a random sample of childcare centres were selected to be assessed through an unannounced inspection, with the results compared to those of an advance-notification inspection conducted within the previous six months (Fiene, 1996). The findings showed that centres demonstrating good or elite performance during conventional inspections obtained similar results in unannounced inspections. Those assessed as performing poorly in conventional inspections displayed even lower performance during unannounced inspections. This indicates that lower-performing organisations may be more likely than their high-performing counterparts to engage in gaming behaviour during advanced notification accreditation surveys, in order to conceal their shortcomings. For this reason, the authors concluded that unannounced inspections are a valuable tool for assessing lower-performing centres, but may be inefficient as a general measure for all centres (Fiene, 1996).

Despite the contrast between the Australian healthcare system and American childcare, these results raise some important questions. In the childcare context, announced inspections struggled to evaluate the ongoing quality and safety of lower-performing organisations (Fiene, 1996). They may therefore be insufficiently reliable to serve as the sole evaluation method within accreditation programs that aim to ensure a consistent, minimum level of compliance with accreditation standards. If these conditions were applicable to Australian healthcare, then unannounced or short-notice accreditation surveys could be used as a follow-up quality assurance mechanism for organisations that perform poorly in advance-notification surveys.

Other studies have shown that there are significant short-term benefits associated with the presence of an external assessor, in relation to either announced or unannounced inspections. The most prominent of these studies analysed whether unannounced surveys by the Joint Commission in the USA influenced patient outcomes (i.e. 30-day mortality) (Barnett et al., 2017). This well-designed study found that patients admitted to hospitals during survey weeks had significantly lower mortality than those admitted during non-survey weeks, indicating that changes in organisational practices occurring during periods of assessment by accreditation surveyors have a meaningful effect on patient mortality (Barnett et al., 2017). Whilst not specifically mentioned, the Hawthorne Effect (McCambridge et al., 2014) provides a theoretical foundation that could help to explain these findings. It remains unclear whether the improved patient outcomes uncovered in these studies was produced by the specific characteristics of unannounced surveys, or was a product of the conduct of surveys in general.

4.3.2 Potential to increase the efficiency of assessment processes

A second key theme in the literature is whether unannounced or short-notice surveys can enhance the efficiency of regulatory regimes by reducing the investments required by organisations to prepare for surveys. This is critical because qualitative studies around the world have repeatedly shown that many healthcare professionals believe the burden of preparing for advance-notification accreditation surveys reduces the time awarded to patient care (Debono et al., 2017; Hinchcliff et al., 2013a). Indeed, such beliefs have been proposed as a major impediment to healthcare professionals' engagement with, and support for, accreditation programs in Australia and internationally. As one editorial in the United States noted, "*... nurses and other caregivers have been clear in their desire to eliminate unnecessary 'ramp up' activities prior to a Joint Commission survey so that the attention rightfully remains on safe, quality patient care that is guided by continuous standards compliance*" (Murphy-Knoll, 2006: 203).

As previously mentioned, the two main trials of unannounced and short-notice accreditation survey methods (Ehlers et al., 2017; Greenfield et al., 2012) noted that these methods may promote greater efficiency, but neither study quantified the actual scope of such impacts. This is unsurprising, when considering the limited cost-benefit analyses that have been conducted in relation to accreditation programs in general (Mumford et al., 2013; Mumford et al., 2015). Nonetheless, the available information does imply that unannounced and short-notice survey methods may be less resource-intensive for healthcare organisations than advance-notification survey methods, because they prevent organisations from having the opportunity to prepare excessive documentation for months prior to surveys (Comeau and Lowry, 2005).

Conversely, one of the main sources of support for the continued role of advance-notification assessments is that much of the documentation (e.g. organisational protocols) and staffing required for assessment processes require time to be adequately prepared in advance of assessors arriving (Klerks et al., 2013). This finding indicates that the adoption of short-notice or unannounced survey methods within Australian accreditation programs could necessitate a review of the type and amount of evidence collected by accrediting agencies during surveys.

The literature generally considers efficiency in relation to the reduced preparation required by healthcare organisations during unannounced or short-notice assessments (Dechenaux and Samuel, 2014). It should be noted that Kim et al. (2015) conclude through the use of economic modelling that there is potential for unannounced assessment methods to reduce the efficiency of the agencies responsible for conducting and analysing assessments if they are implemented too frequently (Kim, 2015). That is to say, the potential identification of additional areas of deficient performance amongst assessed organisations may not justify the increased resources required by assessment bodies to conduct more frequent assessments. This argument also supported by other researchers (Dechenaux and Samuel, 2014), but is similarly based on the untested presumption that unannounced assessments will necessarily be conducted more

frequently than announced inspections. Despite this questionable assumption, these issues highlight the importance of considering the frequency that unannounced and short-notice accreditation survey methods should be implemented to maximise the cost-benefit ratio of accreditation programs at a system level.

4.3.3 Impacts on stakeholder perceptions

It is widely accepted that accreditation programs are implemented most effectively when healthcare professionals and organisations are fully engaged in, and supportive of, the processes involved (Hinchcliff et al., 2013b). The literature described earlier indicates some support for unannounced or short-notice surveys. However, other studies highlight the potential damage that a perceived movement towards a more quality assurance/compliance auditing approach could do to the relationships between accrediting agencies and the organisations they assess (Klerks et al., 2013). Indeed, some studies indicate that unannounced inspections can create considerable anxiety amongst healthcare professionals, who feel tested rather than engaged (Murphy-Knoll, 2006).

The introduction of unannounced surveys may be viewed as a symbolic movement towards a quality assurance/compliance auditing model of accreditation. This could influence how effectively this method is engaged with and ultimately implemented by healthcare stakeholders, as well as broader perceptions of the process of accreditation in Australia.

4.3.4 Practical issues associated with implementation

A number of commentaries and narratives have been published in professional journals detailing case studies on how individual organisations have prepared for their first unannounced survey or assessment from an accreditation agency or other type of external assessment regime (Murphy-Knoll, 2006; NSF International, 2013). The extensive effort required by organisations to train their staff adequately in preparation

for their initial unannounced survey is commonly emphasised. This indicates that the implementation of unannounced or short-notice survey methods as part of Australian accreditation programs would necessitate the development and use of resources to assist healthcare organisations, accreditation agencies, and accreditation surveyors to prepare adequately.

A final practical issue related to the implementation of unannounced and short-notice assessment methods is that some commentary in the literature suggests that unannounced inspections are susceptible to corruption (Dechenaux and Samuel, 2014). This is especially relevant in cases when the outcomes of inspections can result in the closure of organisations, or other significant impacts. For this reason, regulatory agencies that use unannounced assessments need to carefully consider what training and quality-control methods could be employed to impede the potential for unreliable or unethical surveying practices.

5. DISCUSSION

Healthcare accreditation is an integral feature of the quality and safety framework of Australia and over 70 other countries (Braithwaite et al., 2012). There are considerable methodological challenges in rigorously evaluating the impacts of accreditation programs. However, their broad implementation and support received from government, industry and research stakeholders suggests that their current prominence in the Australian healthcare system is unlikely to diminish anytime soon (Greenfield and Braithwaite, 2008; Greenfield and Braithwaite, 2009).

Rather than questioning the role of accreditation, regulatory bodies worldwide are increasingly aiming to develop evidence-informed methods to enhance the effectiveness and efficiency of existing programs, including via innovative survey methods (Hinchcliff et al., 2013b). There is little doubt that healthcare accreditation depends upon reliable, external inspections of organisational performance against evidence-based quality and safety standards. Broad acceptance of this fact is exemplified by the increasing focus on surveying issues within the accreditation literature (Saut and Berssaneti, 2017). This includes research showing that surveying processes are integral to the reliability, effectiveness and sustainability of programs (Greenfield et al., 2010; Greenfield et al., 2013a; Hinchcliff et al., 2013a).

The key question being asked by healthcare stakeholders is ‘what is the optimal choice of surveying methods to be employed within healthcare accreditation programs?’ This report demonstrates that there is currently insufficient evidence to answer this question confidently, but key principles of practical relevance can be deduced from the literature to inform policy and program decisions.

The two large trials of unannounced and short-notice survey methods detailed in this review concluded that these methods were not significantly more capable of identifying organisational non-compliance with a subset of accreditation standards than advance-notification survey methods (Ehlers et al., 2017; Greenfield et al., 2012). However,

robust regulatory approaches need to consider two key issues in addition to the effectiveness of approaches in identifying non-compliant organisational behaviour; those being the efficiency of implementation, and the extent of support and engagement amongst key stakeholders that different approaches can achieve. When viewed through this lens, the two sets of trial results do not indicate that short-notice and unannounced accreditation survey methods should be discarded as potential options to enhance healthcare accreditation in Australia. The potential efficiencies and stakeholder support generated by these two survey methods, as opposed to advanced notification surveys, requires further research to inform policy decisions.

Beyond the trial results, the literature review found that short-notice and unannounced survey methods have the *potential* to help reduce cyclical fluctuations in organisational performance against quality and safety standards (Toffolutti et al., 2017). This seems particularly true for lower-performing organisations that may engage in gaming behaviour during advance-notification assessments to conceal their inadequacies (Fiene, 1996). From this perspective, unannounced and short-notice survey methods may promote a more consistent application of healthcare organisational performance through accreditation. While this outcome is undoubtedly attractive to most healthcare stakeholders, questions remain regarding the precise form these survey methods should take to maximise their benefits.

Based on the available evidence, it can be concluded that the advance-notification survey method remains indispensable to accreditation programs due to its capacity to assess standards that require organisations to prepare relevant evidence for surveyors to review during inspections (Greenfield et al., 2012). However, short-notice and unannounced survey methods may provide greater opportunities for effective and efficient assessment of standards focused on the quality of consumers' direct processes of clinical care, rather than organisational-focused standards, such as complaints and other consumer feedback mechanisms (Greenfield et al., 2012). They may be used for follow-up inspections focused on standards that organisations performed poorly against

during advance-notification surveys (Ehlers et al., 2017). Employment of a mixture of advance-notification and unannounced or short-notice survey methods may enhance accreditation programs.

Consideration would need to be given to determine the standards against which short-notice or unannounced surveys assess, and the frequency with which they are undertaken. These issues could be determined collaboratively by Australian healthcare stakeholders representing policy, industry and research groups, and by incorporating input from accreditation experts in countries that have implemented different accreditation survey methods. Multi-stakeholder consultation and collaboration increases the likelihood of generating well-designed and mutually acceptable approaches to accreditation programs (Hinchcliff et al., 2014).

An inclusive approach is particularly necessary when debating the value of new survey approaches. This is particularly relevant for the potential inclusion of unannounced surveys within Australian accreditation programs. These could be viewed by some healthcare stakeholders as signalling a shift from the collaborative ethos that has traditionally underscored accreditation in many countries (Greenfield et al., 2016b). While it is possible that many stakeholders are likely to support changes to current practice, there is a risk that this would also create some negative perceptions of accreditation in Australia. Regulatory bodies could employ effective consultative approaches to develop marketing and communication strategies to help mitigate this risk associated with accreditation survey method reform.

Such efforts are vital for accreditation programs with limited financial and legal levers available to enforce changes in practice amongst non-compliant organisations. Such programs are largely reliant on healthcare organisations and professionals embracing accreditation as a worthwhile activity to promote quality and safety improvements (Hinchcliff et al., 2013a). It would be essential to prevent the representation of new survey methods as regulatory surveillance devices that restrict healthcare professionals'

clinical autonomy and enable overly-simplistic or indiscriminate punishment of organisational violations.

Finally, it is vital to note that the issue of the reliability of accreditation survey assessments is unexamined in the literature on unannounced and short-notice survey methods. Whichever model of survey is employed, it is similarly vital that healthcare organisations and professionals perceive survey results as being derived purely from their organisation's performance against accreditation standards, rather than being influenced by the experience and style of accreditation surveyors and survey teams, leading to inconsistent decisions (Greenfield et al., 2009).

Research on advance-notification survey methods has identified several important themes that can influence survey reliability: the management of the accreditation process, including standards and health care organisational issues; surveyor workforce management; survey coordinator role; survey team; and individual surveyors (Greenfield et al., 2009). Additional studies have shown that the influence of these issues persists during periods of accreditation reform (Greenfield et al., 2015b; Greenfield et al., 2016a). Each of these issues would need to be considered if new survey methods were to be introduced within Australia. This is especially important due to the role that perceptions of survey reliability play on healthcare stakeholders' engagement in accreditation programs (Greenfield et al., 2013b).

6. CONCLUSION

Despite using a systematic and thorough search strategy, this literature review identified a limited amount of directly-relevant evidence regarding short-notice and unannounced accreditation surveys. This impedes strong conclusions from being reached about their potential to enhance the effectiveness and efficiency of the Australian healthcare accreditation programs. Nonetheless, key issues regarding the design, implementation and impacts of these methods were identified and synthesised in this report.

The AHSSQA Scheme represents a break from the voluntary, industry-led models of accreditation that were previously used in the Australian acute care sector. Yet this shift in the meaning and operationalisation of accreditation has not involved significant changes in the way healthcare organisations are assessed against accreditation standards. While there are indications that unannounced or short-notice survey methods may be usefully applied within Australian accreditation programs, including the AHSSQA Scheme, further research is first required to determine their ideal design, implementation and likely impact.

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