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Original Research Article

International approaches for implementing accreditation programmes in different healthcare facilities: a comparative case study in Australia, Botswana, Denmark, and Jordan

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Abstract

Healthcare accreditation programmes have been adopted internationally to maintain the quality and safety of services. Accreditation assesses the compliance of organizations to a series of standards. The evidence base supporting the benefits of accreditation is mixed, potentially influenced by differences in local implementation and operationalization of standards. Successful implementation is associated with optimizing regulation, funding, and government commitment. Implementation of accreditation is a complex intervention that needs to be tailored to meet contextual differences across settings. Comparing why and how accreditation is implemented across countries supports the effective implementation of new programmes and refinements to existing systems. This article presents four case studies from Australia, Botswana, Denmark, and Jordan to consider a geographic spread and mix of high- and upper-middle-income countries. The data were derived from a review of accreditation programme documents and follow-up discussions with directors of the accrediting bodies in the countries of interest. Each case study was summarized according to a standardized framework for comparison: (i) goals (why), (ii) programme implementation (how), (iii) outcomes based on pre-post measures (what), and (iv) lessons learned (enablers and barriers). The accreditation programmes were all introduced in the 2000s to improve quality and safety. Documents from each country outlined motivations for introducing an accreditation programme, which was predominantly initiated by the government. The programmes were adopted in demarcated healthcare sectors (e.g. primary care and hospital settings), with a mix of mandatory and voluntary approaches. Implementation support centred on the interpretation and operationalization of standards and follow-up on variation in compliance with standards, after announced surveys. Most standards focused on patient safety, patient centredness, and governance but differed between using standard sets on quality management or supportive processes for patient care. Methods for evaluation of programme success and outcomes measured varied. Frequently reported enablers of successful implementation included strong leadership and ownership of the process. A lack of awareness of quality and safety, insufficient training in quality improvement methods, and transfer of staff represented the most common challenges. This case analysis of accreditation programmes in a variety of countries highlights consistent strategies utilized, key enabling factors, barriers, and the influence of contextual differences. Our framework for describing why, how, what, and lessons learned demonstrates innovation and experimentation in approaches used across high- and upper-middle-income countries, hospital and primary care, and specialist clinics.

Keywords: accreditation, standards of care, quality assurance, surveys and questionnaires, quality of healthcare, hospitals

Introduction

Accreditation of healthcare organizations has emerged as an important means of promoting safety and quality improvement internationally. Comprehensive external evaluation programmes have been adopted in ∼39 countries ranging across healthcare sectors [1]. External assessment against predefined standards is a common practice across high-, middle-, and low-income countries although evidence supporting clinical and organizational benefits remains inconsistent [2, 3]. Variability in the evidence base for healthcare accreditation programmes is thought to be influenced, in part, by the differences in how programmes have been operationalized, perceived by those required to enact them, and implemented [4]. The adoption of any programme, including accreditation, can be influenced by the prevailing organizational climate [5], environment or context [6], culture [7], and leadership [8]. Accounting for different contextual circumstances can inform how and why benefits

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are achieved when examining how accreditation has been implemented.

The most recent international survey profiling healthcare accreditation organizations was conducted between 2009 and 2011 with 44 accreditation organizations [1]. The survey indicated that the successful implementation usually involved a complement of regulation, funding, and government commitment mechanisms to introduce accreditation as part of broader goals to improve healthcare quality and safety. Political instability and market failures were identified as primary challenges to sustained implementation. More recent publications on the concept of external evaluation [9] provide an opportunity to compare approaches to implementation across different countries, using in-depth case studies.

We aimed to examine how accreditation programmes have been implemented and operationalized in a range of countries. We compared goals, programme implementation, reported outcomes, and identified enablers and barriers to derive common key learnings.

Methods

Design and case selection

A multiple case study of accreditation programmes across four countries was undertaken. Each case was defined as the accreditation programme at the country level and the implementation approach taken. The scope of case studies was limited to healthcare facilities included in the accreditation programmes. Four accreditation organizations that are members of the International Society for Quality in Health Care Accreditation Council who had implemented accreditation programmes running between 2009 and 2020 were used as cases, i.e. (i) Australian Council on Healthcare Standards International in Australia, (ii) Council for Health Services Accreditation of Southern Africa (COHSASA) in Botswana, (iii) Danish Institute for Quality and Accreditation in Healthcare in Denmark, and (iv) Health Care Accreditation Council in Jordan (Table 1). Australia's accreditation programme was initially implemented in the hospital setting. Botswana's accreditation programme was implemented in hospitals and clinics. Denmark implemented its accreditation programme in the primary care setting [10]; Jordan started with accreditation in hospitals and later included primary care, specialist physician clinics, laboratories, and ambulatory care. These countries were purposively selected because they provided information-rich cases and cover various income settings and diverse geographical locations.

Healthcare accreditation programmes are complex interventions introduced within complex adaptive systems [11]. Theoretically, we proposed that studying the properties of large system change can provide insights to generate universal and generalizable knowledge [12]. Comparing multiple case studies enables a wide range of information to be considered [13] to uncover similarities, differences, and patterns of behaviours that could support, refute, or build upon theoretical propositions for healthcare accreditation programmes [14]. Healthcare accreditation programmes vary widely in their structure and function between health systems. The variation in countries sampled was adopted to provide a holistic view of accreditation, demonstrating elements of uniqueness and the shared patterns that influence its implementation [15].

Data collection and analysis

An iterative process of data collection and analysis was harnessed to develop and test our theoretical proposition. A data collection template was developed for our research question to capture the nuanced differences between cases (Fig. 1). This template was based upon the realist evaluation principles, which focus on understanding how and why interventions work [16]. It covered (i) goals (why), (ii) programme implementation (how), and (iii) outcomes based on pre-post measures and experiences (what). The directors from each of the four accrediting organizations completed these data collection templates using data from extant academic literature where available, as well as internal and publicly available programme documents. Documents included grey literature, reports, policies, and website descriptions of projects conducted by healthcare regulatory bodies. These data were further contextualized through key informant discussions between E.J.v.V. and J.S. and representatives from the accrediting organizations, which led to the identification of further data and documents to input into the data collection templates. The authors E.J.v.V. and J.S. aimed to enrich the data collection template that was completed in Round 1 by the directors. In Round 2, during the key information discussion, E.J.v.V. and J.S. asked the representatives to further explain the initial data generated by the directors. Based on the topics discussed, the representatives identified additional data and documents that were input into the data collection template. The completed data collection templates were submitted to E.J.v.V. and J.S. who conducted a cross-country synthesis [17], enabling the identification of implementation approaches, similarities and differences, and groupings of implementation activities and outcomes.

Results

Goals (why)

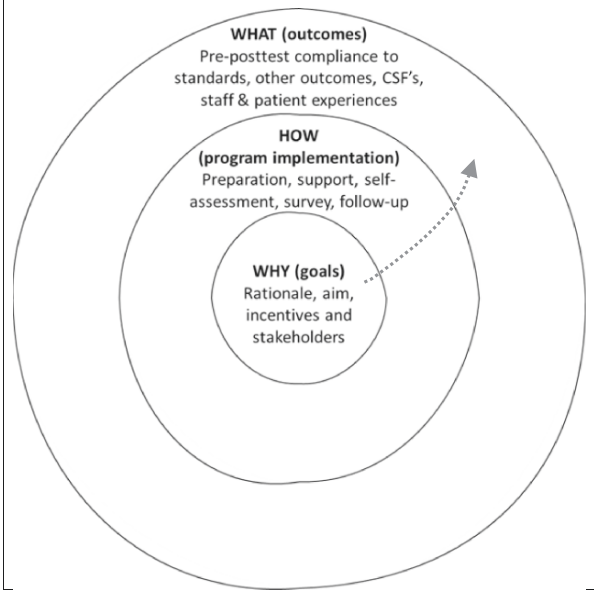
The initiation of accreditation programmes was intended to achieve similar goals across the four countries (Table 2). Primarily, implementation was aimed at improving healthcare quality and safety through increased adherence to standards. The Australian accreditation programme was driven by a series of landmark safety and quality studies and reviews that identified that patients did not always receive evidence-based hospital care [18–20]. Complaints about the public health services offered in Botswana triggered the Ministry of Health and Wellness to explore different options for external assessment of public hospitals and clinics. In Denmark, concerns about transparency and potential unwarranted variation in clinical care were declared as the rationale for introducing accreditation of primary care and specialist practitioner clinics. The accreditation programme in Jordan was initiated by a US Agency for International Development project rather than by the government.

Australia and Denmark established a new government agency to develop accreditation standards: the Australian Commission on Safety and Quality in Health Care and the National Safety and Quality Health Service standards. In Botswana, the Ministry of Health and Wellness contracted the COHSASA not-for-profit company to implement an accreditation and quality improvement programme. The COHSASA piloted in two stages their quality improvement and accreditation programme at 10 of 30 Botswana's hospitals and 8

Table 1. Overview per case of country characteristics, the healthcare system, and the scope of the accreditation programmes.

	Australia	Botswana	Denmark	Jordan
Country[a]				
Population, million people	25.4	2.3	5.8	10.5
Gross domestic product per capita, US$	54.875	7.247	59.776	4.405
Health expenditure, % of GDP	9.91	6.05	9.96	8.10
Life expectancy at birth, years	83	70	81	73.5
Infant mortality rate, per 1000 live births	3	37	3	17
Healthcare system				
Funding	Healthcare in Australia is primarily funded through the public Medicare programme.	Botswana provides universal healthcare to all citizens through a public healthcare system. Privately run healthcare is also available.	Healthcare is financed mainly through income taxes. Service delivery and payment are regulated in agreements between the regions and the relevant professional associations.	Jordan has an advanced health system that is divided between public and private institutions. Jordan was ranked by the World Bank to be the number one medical tourism provider in the Arab region.
Regulation	State and territory governments regulate and administer the major elements of healthcare such as doctors, public hospitals, and ambulance services. The Federal Minister for Health sets the national health policy.	The government operates nearly all medical facilities.	The central government regulates and coordinates healthcare. The local governments of the five regions are responsible for the hospitals and general practitioners.	The Ministry of Health operates nearly all medical facilities.
Delivery	Healthcare is delivered by highly regulated public and private healthcare providers.	Healthcare is delivered through a decentralized model with primary healthcare being the pillar of the health system. The Ministry operates 311 primary healthcare centres and 30 hospitals.	Healthcare in Denmark is provided by the local governments of the five regions.	The Ministry of Health is the largest provider of healthcare services in Jordan. The Ministry operates 1611 primary healthcare centres and 32 hospitals.
Scope				
Accreditation body	Australian Council on Healthcare Standards International (ACHSI)	COHSASA	Danish Institute for Quality and Accreditation in Healthcare (IKAS)	Health Care Accreditation Council (HCAC)
Accreditation programme	Accreditation against the first edition of National Safety and Quality Health Service (NSQHS) Standards.	COHSASA's quality improvement and accreditation programme for Healthcare facilities (ambulatory and inpatient care).	Accreditation against 16 quality standards, adapted to the context of general practice, and based on the Danish Healthcare Quality Programme (DDKM).	HCAC accreditation programme with standards set for each type of healthcare facility.
Healthcare facilities included in the accreditation programmes	Public and private hospitals, day procedure centres, and public dental practices.	Public hospitals and primary healthcare clinics.	Primary healthcare clinics: general practitioners, specialist physician practices, chiropractors, chiropodists, physiotherapists, and clinically practicing psychologists.	Initially hospitals, later also primary healthcare clinics, ambulatory clinics, medical laboratories, and breast imaging units.

[a] https://data.worldbank.org/ (accessed 9 August 2022).



1. Goal (why and who)

- What was the rationale to introduce accreditation.
- Was the aim to be achieved in the accreditation program.
- Who introduced the accreditation program.
- What was the incentive to apply for accreditation.

2. Program implementation (how)

- What was the implementation strategy:
  - How were organisations supported to implement the accreditation program.
  - How could client organisations prepare themselves for accreditation.
- How was the accreditation survey process organised.
- How was follow-up after the survey organised.

3. Outcomes and experiences (what)

- How was the pre- and posttest compliance to:
  - Patient safety standards;
  - Quality management standards;
  - Governance related standards;
  - Organisational standards;
  - Care related standards;
  - Patient centeredness standards.
- Were there any other outcomes reported.
- What staff experiences were reported with the accreditation program.
- What patient experiences were reported with the accreditation program.
- What critical success factors (CSF) were reported for the accreditation program.

Figure 1 Data collection template.

of 311 clinics prior to national-wide implementation. Denmark established Danish Institute for Quality and Accreditation in Healthcare to develop and implement accreditation programmes, based on the Danish Healthcare Quality Programme. The introduction of accreditation of general practitioners (GPs) and specialist physicians in Denmark was facilitated by the involvement of, and acceptance by, the primary care professional associations. Jordan remained a relatively unique case in that the US Agency for International Development as a non-governmental organization conducted much of the early work [21]. In a participatory approach of engaging all stakeholders in the different sectors, combined with a series of national advocacy activities, the Health Care Accreditation Council was established as an independent organization to develop and implement the programme. Accreditation was later supported by the government of Jordan as a national strategy and priority [21–23].

Whether or not accreditation programmes were mandated did not seem to cluster across the cases by hospital, non-hospital, or high- or upper-middle-income settings. Australia (high-income country, hospital) and Botswana (upper-middle-income country, hospitals and clinics) mandated participation in their accreditation programmes, whereas Denmark (high-income country, primary care and specialist clinics) and Jordan (upper-middle-income country, hospital and non-hospital) introduced accreditation on a participatory voluntary approach.

Programme implementation (how)

The implementation of accreditation programmes in all cases included a preparation phase before conducting surveys (Table 3). In Australia, where the hospitals focused on in the early days were larger organizations, broader communication plans were used for preparation, as well as the dissemination of self-assessment tools for hospitals to undertake in the lead-up to their surveys. Preparing organizations in Botswana for accreditation generally involved training personnel to understand the standards, carrying out regular self-evaluations, and capturing standards compliance data into the online monitoring system. COHSASA advisers also coached the ministry team to analyse self-evaluation data and assist hospital personnel to put in place necessary improvements.

Leading up to the accreditation of small organizations in Denmark, internal organizational meetings were arranged to explain expectations for the upcoming surveys—in terms of both preparation and requirements for the actual standards—and clinics were encouraged to use quality management tools. Cooperation between Danish Institute for Quality and Accreditation in Healthcare and the local regions for the general practitioners and professional associations for specialist practitioners provided early support for implementation [16]. Jordan's programme provided a standard template to self-assess performance and instructions to bridge identified gaps with a Plan-Do-Study-Act approach. Educational activities and manuals were also available to help users interpret and implement the standards.

The surveys themselves involved pre-announced visits, followed by the provision of feedback and re-evaluation to provide the opportunity to show a cycle of improvement. Jordan was the only country that made use of unannounced visits. Denmark discontinued accreditation after the first cycle was completed.

Outcomes (what)

Improved adherence to the standards was reported after accreditation in all four countries (Table 4). A 2018 Australian Commission on Safety and Quality in Health Care report was published, indicating that patient safety and the quality of healthcare had improved, in addition to enhanced compliance [24]. Supportive examples were decreased rates of healthcare-associated infections [25, 26], decreased in-hospital cardiac arrests, better documentation of adverse drug reactions and medication histories, and decreased prescribing of antibiotics due to improvements in antibiotic stewardship.

Table 2. Goal (WHY) of accreditation: overview per country of the rationale, aim, stakeholders, and incentive.

	Australia	Botswana	Denmark	Jordan
1. WHY				
Rationale	Empirical research indicating that patients did not always receive care according to guidelines [18–20].	Complaints about the standard of public health services.	Concerns about transparency and potential unwarranted clinical variation.	Started as a US Agency for International Development (USAID) project to organize regular inspection mechanisms in hospitals [21].
Aim	To protect the public from harm and improve the quality of health service provision.	To improve the quality of services and develop a national quality programme.	To increase adherence to patient safety critical procedures and improve quality culture.	To improve compliance of healthcare services with quality and safety requirements.
Stakeholders who introduced the accreditation programme	The Australian government established in 2011 a federal agency to develop national safety and quality (NSQHS) standards: the Australian Commission on Safety and Quality in Health Care (ACSQHC). The first edition of these standards was released in 2012. The ACSQHC developed the standards in collaboration with jurisdictions, technical experts, and a wide range of stakeholders, including health professionals and patients. The ACSQHC approved six accreditation bodies, among which ACHSI assesses health services against the NSQHS standards through theAustralian Health Service Safety and Quality Accreditation Scheme (AHSSQA).	The Ministry of Health and Wellness contracted COHSASA to implement a programme for external evaluation. In 2009, the pilot COHSASA quality improvement and accreditation programme involved two district hospitals and four primary healthcare clinics. In 2013, a further eight hospitals and four primary healthcare clinics were enrolled in the programme. In 2014, the Ministry commissioned COHSASA to develop standards for all types of healthcare facilities in the country and roll out these standards across the country.	In 2002, it was decided to establish a Danish accreditation programme as a component of a National Strategy for Quality Development in Health Care and based upon the Danish Healthcare Quality Programme. IKAS was established in 2004 to develop standards. In 2010, the first programme was introduced in the hospital sector. Later, accreditation was also offered to community pharmacies, ambulance services, and primary healthcare. In 2014, the local governments of the regions and the professional associations agreed that all primary clinics should have an accreditation survey within a given time frame [36]. IKAS developed the standards in cooperation with the regions and professionals.	In 2004, a national committee from all healthcare stakeholders in Jordan was established as part of the USAID project to look at the best means and ways that Jordanian hospitals could be nudged to comply with quality and patient safety requirements and be measured for their compliance. In 2007, HCAC was established as an independent organization to set standards and measure against them and to provide consultation, training, and advocacy [21]. In 2016, the government approved the Mandatory Accreditation regulation, making it possible to mandate accreditation. However, this regulation has not been enforced to date.
Incentive to apply for accreditation	The AHSSQA Accreditation Scheme is mandatory for public hospitals, private hospitals, day procedure centres, and public dental practices.	The Ministry of Health and Wellness urged all providers to adopt the standards before the legislation was put in place.	Accreditation was voluntary, but to receive remuneration, clinics needed to participate in the programme.	Accreditation was enrolled in a collaborative and participatory manner, allowing stakeholders to learn more about quality and patient safety.

Table 3. Implementation (HOW) of accreditation: overview per country of the implementation strategy (support and preparation) and accreditation process (survey and follow-up).

	Australia	Botswana	Denmark	Jordan
Support to implement the accreditation programme	The standards were released before the accreditation assessment process commenced to provide the opportunity for health services to prepare for external evaluation against the new standards. A broad communication plan was rolled out to ensure health services were informed about the new standards. Educational events were conducted to discuss the new standards.	Workshops were held with ministry senior management and facility managers to introduce the programme. Thereafter, workshops were held with a cross section of personnel in each facility to introduce the programme and the standards. This included training the participants to understand the standards and to evaluate services against the standards. Training on quality improvement methods was also given.	Tailored support was provided for clinics. In some cases, IKAS was responsible, whereas in others support was provided by the regions or wholly or partially by the professional association. A communication campaign was launched with key information about the survey and standards. Clinics were encouraged to participate in meetings to discuss the standards and what needed to be done in order to achieve compliance and to use simple quality planning tools.	Educational activities are provided to standards users including standard communication activities, standard's scoring and assessment tools, and standard interpretation. Also, manuals were provided that explain the standards and survey activities.
Self-assessment to prepare for accreditation	Health services could conduct periodic self-assessments throughout their accreditation cycle to track their progress in implementing the standards and to ensure quality improvement activities are targeted in the required areas.	To prepare for and follow up after the survey, hospitals and clinics captured standards compliance data and quality improvement activities into an online reporting system. Reports were generated to be shared across all departments. COHSASA advisors periodically reviewed self-evaluation data on standards compliance and quality improvement activities.	A documented self-assessment was neither required nor encouraged. Clinics were informed that in order to prepare for accreditation they could compare themselves to the standards and act upon what they find.	Organizations undergoing the accreditation process are provided with a standard template to help them self-assess their performance. A mock survey is offered as part of the accreditation services, after which organizations are instructed to bridge identified gaps, utilizing a plan-do-study-act (PDSA) approach.
Survey process	During announced surveys, surveyors review the service areas to be assessed and patient groups provided with care and key safety and quality systems using Process; Improvement; Consumer participation; Monitoring; Reporting and Systems (PICMoRs) method and patient journeys. An accreditation assessment report is issued to the health service, identifying areas requiring improvement. All actions awarded as 'Criterion met with recommendations' are to be reviewed by surveyors at the next onsite assessment.	The Ministry identified when it believed facilities were ready to undergo an external evaluation survey. A survey schedule was then agreed with the facility team. A team of surveyors carried out an onsite evaluation of all departments at the selected facilities over a week during an announced survey. Surveyors reviewed documentation and medical records, observed practice, and interviewed personnel and patients. The medical records were reviewed against care protocols and guidelines. All information was triangulated for consistency.	Time for accreditation was determined in a randomized lots drawing conducted in 2014 by IKAS [36]. The survey was conducted with participation of peer surveyors. Focus was on staff interviews and demonstration of actual patient records. Review of policies and procedures was also included. Clinics received oral feedback as part of the survey and a written report. The report and the status awarded were published on the website of IKAS. Clinics that were not in compliance with standards were subject to a focused follow-up assessment 3–6 months later.	The accreditation programme starts by receiving an application from organizations indicating their willingness to undergo accreditation. A survey agenda, plan, and tools are then shared with the organization. Surveyors reviewed documentation and medical records, observed practice, and interviewed personnel. A Technical Committee reviewed the survey report and recommends the accreditation decision for 2 or 3 years to the full board.
Follow-up	Health services must show in a 3-year accreditation cycle that they comply with standards.	Organizations were accredited for 2 or 3 years, depending on their overall survey score. The Ministry rolled out a national programme, enclosing follow-up in re-accreditation cycles.	The accreditation programme was implemented with the perspective to complete one cycle and then decide if another cycle was warranted; only the specialist physicians agreed to complete two cycles. Today, all accreditation programmes are discontinued because the objective that all healthcare sectors should undergo at least one cycle of accreditation was achieved.	Upon accreditation, organizations are informed of the need to do a midpoint self-assessment at the halfway mark of their accreditation period. During an unannounced survey, surveyors will then review the action plan that was developed to comply with the unmet or partially met standards. During re-accreditation surveys, surveyors assess all standards and the results of the previous survey.

Table 4. Outcomes (WHAT) of accreditation: overview per country of the accreditation standards and self-reported pre-post outcomes and experiences.

Australia	Standards	Reported outcomes			
	Patient safety standards				
	Preventing and controlling healthcare-associated infections	– Decline in the *Staphylococcus aureus* bacteraemia rate per 10 000 patient days under surveillance between 2010 and 2014, from 1.10 to 0.87 cases. – Drop in the yearly number of methicillin-resistant *S. aureus* bacteraemia cases between 2010 and 2014, from 505 to 389.			
	Medication safety	– Number of hospitals with antimicrobial stewardship increased from 36% (2010) to 98% (2015). – Formularies restricting the use of broad-spectrum antimicrobials increased from 41% (2010) to 86% (2015).			
	Patient identification and procedure matching	Data not available			
	Recognizing and responding to acute deterioration	Data not available			
	Preventing and managing pressure injuries	Data not available			
	Preventing falls and harm from fall	Data not available			
	Blood management	– Decline of almost one-half in the national rate of central line–associated bloodstream infections between 2012–13 and 2013–14, from 1.02 to 0.60 per 1000 line days.			
	Governance-related standards				
	Governance for safety and quality	Data not available			
	Care-related standards				
	Clinical handover	Data not available			
	Patient centredness standards				
	Partnering with consumers	Data not available			
	Staff experiences – Better understanding of board responsibilities concerning patient safety and quality. – 'Ticking box' exercise: producing documentation to satisfy accreditation requirements. – Concerns that assessors misinterpreted the standards.				
	Patient experiences – Consumers had little understanding of accreditation. Results were not made publicly available.				
Botswana	Standards	Reported outcomes: compliance			
		Baseline 2009, %	External 2013, %	Baseline 2014, %	External 2016, %
	Patient safety standards				
	Prevention and control of infection	14	71	74	95
	Resuscitation service	15	94	74	98
	Quality management standards				
	Information management and quality improvement	24	90	74	99
	Risk management	27	56	58	100
	Governance-related standards				
	Management and leadership	34	93	77	98
	Human resource management	49	92	67	97
	Organizational standards				
	Administrative support	54	93	71	93
	Sterilizing and disinfecting unit	69	100	77	91
	Maintenance service	17	59	39	85
	Food service	53	80	74	97
	Linen service	37	100	40	98
	Housekeeping service	16	71	33	96
	Care-related standards				
	Clinical services (medical care, surgical care, maternity care, paediatric care, psychiatric care, emergency care, and outpatient care)	39	66	79	95
	Clinical support services (radiology, laboratory, pharmaceutical service, and physiotherapy service)	47	72	74	95
	Patient centredness standards				
	Access to care	44	89	79	99
	Patient rights	45	80	61	100
	Staff experiences – Improvement in staff empowerment and teamwork. – Time-consuming 'Ministry programme, not ours'. – Transfer of personnel led to discontinuity of knowledge.				

(continued)

Table 4. (Continued)

Australia	Standards	Reported outcomes	
	Patient experiences Data not available		
Denmark	Standards	Reported outcomes % Assessments resulting in follow-up	% Follow-up assessments not satisfactory
	Patient safety standards		
	Prevention of nosocomial infections	2.9	5.6
	Drug prescription and renewal of prescriptions	1.4	20.0
	Patient identification	5.4	8.1
	Management of cardiac arrest and other emergencies	2.8	9.2
	Diagnostic investigation—focus on identification of test materials and timely follow-up on results	2.1	8.8
	Quality management standards		
	Monitoring of quality	1.9	20.0
	Reporting of and learning from adverse events	1.0	17.4
	Governance-related standards		
	Clinic management	1.5	18.2
	Employment, induction, and competence development of staff	0.4	6.7
	Organizational standards		
	Patient records and protection of sensitive information	2.6	10.3
	Procurement, storage, and disposal of drugs and utensils	2.4	6.6
	Care-related standards		
	Referrals	0.6	20.0
	Evidence-based practice and monitoring of adherence to guidelines	3.0	12.9
	Patient centredness standards		
	Patients' evaluation of experience	3.0	25.3
	Accessibility	1.2	28.8
	Coordination of the patient journey and communication among different actors	0.3	66.7
	Primary care sectors	Follow-up required	Full compliance achieved
	General practice, all	534/1607 (33%)	1551/1603 (97%)
	Specialist physicians, all, first cycle	196/885 (22%)	868/882 (98%)
	Specialist physicians, second cycle	151/546 (28%)	511/515 (99%)
	Chiropractors, all	153/219 (70%)	207/219 (95%)
	Physiotherapist	140/247 (57%)	208/214 (97%)
	Chiropodists	204/387 (53%)	332/347 (96%)
	Psychologists	153/304 (50%)	262/269 (97%)
	Staff experiences – Half of the GPs believed that accreditation had improved the quality of patient care. – GPs appreciated the use of peer surveyors, discussions with peers, and tailored support. – GPs found the sense-making work of the standards frustrating. – GPs who perceived accreditation as a tool for external control reported lower job satisfaction.		
	Patient experiences – Most patients had not heard about accreditation.		
Jordan	Standards	Reported outcomes Initial assessment, %	Final assessment, %
	Patient safety standards		
	Infection prevention and control	15	97
	Medication management	3	94
	Quality improvement and patient safety	12	94
	– Areas that are reported to be most influenced and improved by accreditation: * Patient identification at critical care procedures. * Medication ordering, administration, preparation, and rationalized use of antibiotics. * Hand hygiene, safe injection practices, cleaning, and sterilization.		
	Quality management standards		
	Information management	2%	84%
	– Areas that are reported to be most influenced and improved by accreditation: * Incident and adverse events reporting.		
	Governance-related standards		
	Management and leadership	18%	93%

(continued)

Table 4. (Continued)

Australia	Standards	Reported outcomes	
	Human resource management	5%	93%
	Education and training	4%	96%
	– Areas that are reported to be most influenced and improved by accreditation:		
	* Credentialing and privilege for clinical providers.		
	* Staff satisfaction and staff skill mix and number.		
	* Continuous professional development for staff providing direct patient care.		
	Organizational standards		
	Medical records	16%	96%
	Support services	18%	97%
	Environmental safety	5%	94%
	– Areas that are reported to be most influenced and improved by accreditation:		
	* Securing patient and administrative data and avoiding their loss.		
	* Critical equipment maintenance: emergency room (ER), anaesthesia, and QC laboratory and radiology.		
	* Utility and waste management.		
	Care-related standards		
	Patient care	15%	92%
	Diagnostic services	32%	94%
	– Areas that are reported to be most influenced and improved by accreditation:		
	* Triage process for patients visiting the emergency.		
	* Implementing surgical protocols (site procedure verification, site marking, and time-out).		
	* Patient assessment for anaesthesia-related risks.		
	Patient centredness standards		
	Access and continuity of care	14%	92%
	Ethics and patients' rights	14%	93%
	– Areas that are reported to be most influenced and improved by accreditation:		
	* Value patient voice and patient engagement in care provision through building of complaints and suggestions and patient experience systems.		
	* Improved coordination of care between hospital units and departments and outside the hospitals through referral systems to external healthcare practitioners or facilities.		
	* Improved collaboration between the healthcare team, patient, and family (e.g. care plans that actively engage the healthcare team, the patient, and his/her relatives).		
	Staff experiences		
	– Leader quote: 'Having our institution accredited has improved our workflow and accuracy.'		
	– Staff felt better equipped to perform their job although some feared an increase in workload.		
	– Resistance to change due to a lack of awareness of quality and safety of care and a lack of incentives to comply with the standards.		
	Patient experiences		
	– Consumer quote: 'I could easily tell the difference between walking into an accredited hospital and a non-accredited hospital.'		

The Botswana programme reported increases in adherence to standards during the first cycle, after which there was a decrease in adherence, followed by another increase to a higher level after the next assessment round.

Denmark initially reported that between 22% and 33% of the assessed general and specialist practitioners did not adhere to one or more standards. However, after follow-up assessments were conducted, the overall compliance was ∼100%. Nevertheless, a small number of clinics did not achieve accreditation. Compliance varied considerably between standards. Adherence to the standards reportedly increased in the Jordan accreditation programme including in patient safety, medical record-keeping, human resource management, and oversight of equipment.

Other outcomes have been evaluated beyond adherence to the standards in each country. Australian hospital boards (84%) reported that as a result of the programme, they understood and enacted their roles and responsibilities concerning patient safety and quality [24]. However, in some facilities, the workforce felt that the organization was more concerned with 'ticking boxes' than with the facility's performance due to the amount of resources spent on producing documentation to satisfy accreditation requirements. Concerns were raised that several assessors lacked proper training or misinterpreted the intent of the standards. External evaluation results have not been made publicly available, and it was found that consumers had little understanding of accreditation.

One reported positive impact of the programme in Botswana was that staff felt empowered, having a sense of ownership and noticing an improvement in the way people worked, particularly in terms of teamwork. Some staff members perceived that the programme was time-consuming and externally imposed: 'Ministry programme, not ours'. A centralized procurement system added to a lack of ownership and prevented facilities in addressing shortcomings. Transfer

of personnel between facilities also led to discontinuity of knowledge and feelings of a constant 'restart'.

Roughly half of the Danish GPs partially or largely agreed that preparing for accreditation had improved the quality for their patients. No evidence was found that accreditation promoted patient satisfaction [27]. Over 90% of the Danish patients ($n = 3609$) stated that they had not heard about accreditation or did not know it [27]. Some studies indicated a negative association between accreditation and GP job satisfaction [28, 29]. One study found an indication that being accredited correlates with intrinsic motivation, especially if GPs perceived accreditation as a tool for quality improvement [30]. Many GPs found the sense-making work frustrating and emphasized the importance of standards that clearly stated expectations and stimulated reflection to improve [31]. Appreciation of the use of peer surveyors was frequently noted, and GPs reported the highest appreciation of the support that was tailored to the individual clinic and discussions with their peers [32]. Questions arose on the extent to which assessors could still identify improvement potential after one cycle that showed a significant increase in compliance. In the sector where two cycles were completed (specialist physicians), this view was not supported.

In Jordan, hospital administrators were sceptical towards accreditation and in disbelief that the hospitals they ran did not comply with quality and patient safety requirements. But after the process began, leaders used the assessment reports as means to manage their hospitals. The frontline staff mentioned that they were better prepared, trained, and equipped to perform their job. Identified barriers were resistance to change, increased staff workload, lack of awareness of quality and safety of care, insufficient staff training and support, budget limitations and a lack of incentives to comply, or repercussions for not being compliant, with quality and patient safety requirements. However, intrinsic motivation may not shield staff from burnout when external regulation is imposed [33].

Discussion

Statement of principal findings

Our findings (summarized in Supplementary Appendix 1) highlight that accreditation programmes can be implemented across a range of diverse countries whether made mandatory or voluntary. In all programmes, professionals' perceptions of accreditation were linked to workload and administration burden rather than to quality assurance and improvement. Support provided by the accreditation agencies appeared more successful when focused on tailored, on-the-ground support, facilitating knowledge exchange and discussions with peers, and clear interpretation of how the standards impact quality and quality improvement. Related to this, clearly stated expectations assisted in the preparation and response to accreditation. This undermined the importance of establishing ownership of the programme at the facility level from the outset.

Our findings highlight that accreditation programmes can be implemented across a range of diverse countries whether made mandatory or voluntary. Having a well-resourced stakeholder at the national level providing a continuous commitment to implement the programme was seen as crucial to success. Related to this, clearly stated expectations assisted in the preparation and response to accreditation. In all programmes, professionals' perceptions of accreditation were linked to workload and administration burden rather than to quality assurance and improvement. Lack of awareness and knowledge of quality and safety in implementing organizations seemed to relate to poor programme perceptions. Staff attitude towards accreditation also influenced perception. Those who associate accreditation with quality improvement believed that accreditation can improve quality. Those who associate accreditation with control are less convinced that accreditation would improve quality [34]. Support provided by the accreditation agencies appeared more successful when focused on tailored, on-the-ground support, facilitating knowledge exchange and discussions with peers, and clear interpretation of how the standards impact quality and quality improvement.

Interpretation within the context of the wider literature

In line with Shaw *et al.* [1], having a well-resourced stakeholder at the national level providing a continuous commitment to implement the programme was seen as crucial to success in Australia, Botswana, and Denmark. Hussein *et al.* found that introducing hospital accreditation stimulated performance improvement and patient safety[35]. The COHSASA Quality Advisers also coached particular pre-accreditation, job stress. We found the same results, where poor programme perceptions were related to a lack of awareness and knowledge of quality and safety. In both Australia and Denmark, there was some scepticism towards some of the standards [32]. In response, the federal agency in Australia conducted a review in 2018, which proposed six strategies to improve the reliability of the accreditation process [24]. Another barrier in Australia was the limited scope of healthcare organizations assessed (hospitals only). The focus on selected sole institutions does not readily support evolving 'joined-up' care delivery models and care integration across sectors with separate funding sources.

Implications for policy, practice, and research

One take-home message is that despite a plethora of research on the impact of external accreditation programmes, there remains little public reporting of compliance with the standards and evaluation of programme implementation against original aims. Interventions of this nature are difficult to evaluate due to their complexity and introduction within complex adaptive healthcare systems. There is no blueprint for successful programme implementation. However, by aggregating knowledge from different countries, successful approaches can be matched to other local contextual circumstances and assist those initiating accreditation programmes or reforming those in existence. If improvements to the health system are to be achieved, international case narratives such as those presented in this paper must be shared and translated to other settings.

Strengths and limitations

Our purposeful selection of countries and accreditation programmes provide insights into implementation. This breadth of inquiry was further strengthened by an in-depth examination of naturalistic case data. However, the variation of data

sources and level of detail provided, as well as heterogeneous methods for evaluating outcomes from each country, precluded meaningful quantitative comparisons between the cases. With modest sample sizes, we are unable to confirm whether the clusters and patterns of diversity identified relate to country characteristics or implementation approaches used. Further studies could continue this line of enquiry to determine the context contingency of different implementation approaches—e.g. how can we best integrate accreditation as a quality improvement tool into the organization's daily practice and avoid the risk of activities being perceived as 'box-ticking' exercises?

Conclusion

The different approaches presented in our cross-country case comparison can serve as potential roadmaps for other jurisdictions to consider when implementing their own accreditation programmes. Key enablers were highlighted, such as having governmental support, clear leadership and ownership of the programmes, and staff familiarity with quality and safety, which represent areas for enhancing accreditation programme implementation in other settings. Achieving successful implementation in different settings and contextual circumstances requires bespoke tailoring of core elements of accreditation programmes as well as the supports provided to healthcare organizations. The challenge of healthcare accreditation is on the agenda of many health systems and underscores the importance of sharing experiences and stimulating new collaborations to facilitate improved quality and safety of patient care.

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Supplementary data

Supplementary data are available at *INTQHC* online.

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Data availability statement

Data can be provided upon reasonable request to the corresponding author.

Author contributions

E.J.v.V., J.B., K.L., J.S., S.J., and C.E. initiated the project partnership. K.L., J.S., S.J., and C.E. provided key information about each case study to E.J.v.V. and J.S. for initial analysis. E.J.v.V. and J.S. completed the first draft. M.N.S., K.C., and J.B. provided feedback on the design and draft. All authors read and approved the final manuscript.

Ethics and other permissions

Not applicable.

References

1. Shaw CD, Braithwaite J, Moldovan M *et al.* Profiling healthcare accreditation organizations: an international survey. *Int J Qual Health Care* 2013;**25**:222–31. https://doi.org/10.1093/intqhc/mzt011.
2. Brubakk K, Vist GE, Bukholm G *et al.* A systematic review of hospital accreditation: the challenges of measuring complex intervention effects. *BMC Health Serv Res* 2015;**15**:280. https://doi.org/10.1186/s12913-015-0933-x.
3. Araujo CAS, Siqueira MM, Malik AM. Hospital accreditation impact on healthcare quality dimensions: a systematic review. *Int J Qual Health Care* 2020;**32**:531–44. https://doi.org/10.1093/intqhc/mzaa090.
4. Ellis LA, Nicolaisen A, Bie Bogh S *et al.* Accreditation as a management tool: a national survey of hospital managers' perceptions and use of a mandatory accreditation program in Denmark. *BMC Health Serv Res* 2020;**20**:306. https://doi.org/10.1186/s12913-020-05177-7.
5. Weiner BJ. A theory of organizational readiness for change. *Implement Sci* 2009;**4**:67. https://doi.org/10.1186/1748-5908-4-67.
6. Sarkies MN, Jones LK, Gidding SS *et al.* Improving clinical practice guidelines with implementation science. *Nat Rev Cardiol* 2022;**19**:3–4. https://doi.org/10.1038/s41569-021-00645-x.
7. Meyerson D, Martin J. Cultural change: an integration of three different views[1]. *J Manag Stud* 1987;**24**:623–47. https://doi.org/10.1111/j.1467-6486.1987.tb00466.x.
8. Sarkies M, Long JC, Pomare C *et al.* Avoiding unnecessary hospitalisation for patients with chronic conditions: a systematic review of implementation determinants for hospital avoidance programmes. *Implement Sci* 2020;**15**:91. https://doi.org/10.1186/s13012-020-01049-0.
9. van Vliet EJ, Stewart J, Engel C (eds). Clarifying the concept of external evaluation. International Society for Quality in Healthcare, 2021.
10. Overgaard Jensen ML, Bro F, Mygind A. Implementation of healthcare accreditation in Danish general practice: a questionnaire study exploring general practitioners' perspectives on external support. *Scand J Prim Health Care* 2021;**39**:85–91. https://doi.org/10.1080/02813432.2021.1882084.
11. Sarkies M, Robinson S, Ludwick T *et al.* Understanding implementation science from the standpoint of health organisation and management: an interdisciplinary exploration of selected theories, models and frameworks. *J Health Organ Manag* 2021;**35**:782–801. https://doi.org/10.1108/JHOM-02-2021-0056.
12. George AL, Bennett A *Case Studies and Theory Development in the Social Sciences*. Cambridge: MIT Press, 2005.
13. Yin RK. *Case Study Research Design and Methods*. Thousand Oaks, CA: Sage, 2014, 282. Can J Program Eval 2014;**30**:1–5.
14. Stewart J. Multiple-case study methods in governance-related research. *Public Manag Rev* 2012;**14**:67–82. https://doi.org/10.1080/14719037.2011.589618.
15. Suri H. Purposeful sampling in qualitative research synthesis. *Qual Res J* 2011;**11**:63–75. https://doi.org/10.3316/QRJ1102063.
16. Sarkies MN, Francis-Auton E, Long JC *et al.* Making implementation science more real. *BMC Med Res Methodol* 2022;**22**:178. https://doi.org/10.1186/s12874-022-01661-2.
17. Kok J, Leistikow I, Bal R. Patient and family engagement in incident investigations: exploring hospital manager and incident

investigators' experiences and challenges. *J Health Serv Res Policy* 2018;**23**:252–61. https://doi.org/10.1177/1355819618788586.
18. Wilson RM, Runciman WB, Gibberd RW *et al.* The quality in Australian health care study. *Med J Aust* 1995;**163**:458–71. https://doi.org/10.5694/j.1326-5377.1995.tb124691.x.
19. Safety Australian Commission on Safety and Quality in Health Care. Windows into safety and quality in health care 2010: Australian Commission on Safety and Quality in Health Care. 2010.
20. National Institute of Clinical Studies (Australia) and National Health and Medical Research Council. *Evidence-Practice Gaps Report Volume 1: A Review of Developments: 2004–2007*. 2008. https://www.thefreelibrary.com/Evidence-Practice+Gaps+Report+Volume+1%3a+A+Review+of+Developments%3a..-a0180907143 (7 February 2023, date last accessed).
21. University Research Co. LLC. Jordan Healthcare Accreditation Project 2013. https://pdf.usaid.gov/pdf_docs/pdacy095.pdf (7 February 2023, date last accessed).
22. The United States Agency for International Development (USAID). *Jordan Healthcare Accreditation Project-Final Report 2007-2013 2013*. https://pdf.usaid.gov/pdf_docs/pdacy095.pdf (7 February 2023, date last accessed).
23. *Jordan's Economic Modernization Vision 2022–2030*. 2022. https://www.jordanvision.jo/en (7 February 2023, date last accessed).
24. Australian Commission on Safety and Quality in Health Care. *Creating Safer, Better Health Care – The Impact of the National Safety and Quality Health Service Standards*. Sydney: ACSQHC, 2018.
25. Australian Institute of Health and Welfare. Australian hospital statistics 2010–11: *Staphylococcus aureus* bacteraemia (SAB) in Australian public hospitals. Australia: AIHW, 2012.
26. Australian Institute of Health and Welfare. *Staphylococcus aureus* bacteraemia in Australian public hospitals 2016–17. Canberra: AIHW, 2017.
27. Riisgaard H, Waldorff FB, Kirstine Andersen M *et al.* Does accreditation of general practice promote patient-reported quality of care? A natural cluster randomised experiment. *BMJ Open* 2020;**10**:e034465. https://doi.org/10.1136/bmjopen-2019-034465.
28. Kirstine Andersen M, Pedersen LB, Waldorff FB. Retirement, job satisfaction and attitudes towards mandatory accreditation: a Danish survey study in general practice. *BMJ Open* 2018;**8**:e020419. https://doi.org/10.1136/bmjopen-2017-020419.
29. Pedersen LB, Allen T, Waldorff FB *et al.* Does accreditation affect the job satisfaction of general practitioners? A combined panel data survey and cluster randomised field experiment. *Health Policy (New York)* 2020;**124**:849–55. https://doi.org/10.1016/j.healthpol.2020.04.002.
30. Pedersen LB, Andersen MKK, Jensen UT *et al.* Can external interventions crowd in intrinsic motivation? A cluster randomised field experiment on mandatory accreditation of general practice in Denmark. *Soc Sci Med* 2018;**211**:224–33. https://doi.org/10.1016/j.socscimed.2018.06.023.
31. Due TD, Thorsen T, Kousgaard MB. Understanding accreditation standards in general practice – a qualitative study. *BMC Fam Pract* 2019;**20**:23. https://doi.org/10.1186/s12875-019-0910-2.
32. Kousgaard MB, Thorsen T, Due TD. Experiences of accreditation impact in general practice – a qualitative study among general practitioners and their staff. *BMC Fam Pract* 2019;**20**:146. https://doi.org/10.1186/s12875-019-103.
33. Pedersen LB, Hvidt EA, Waldorff FB *et al.* Burnout of intrinsically motivated GPs when exposed to external regulation: a combined panel data survey and cluster randomized field experiment. *Health Policy (New York)* 2021;**125**:459–66. https://doi.org/10.1016/j.healthpol.2021.01.004.
34. Ehlers LH, Jensen MB, Simonsen KB *et al.* Attitudes towards accreditation among hospital employees in Denmark: a cross-sectional survey. *Int J Qual Health Care* 2017;**29**:693–8. https://doi.org/10.1093/intqhc/mzx090.
35. Hussein M, Pavlova M, Ghalwash M *et al.* The impact of hospital accreditation on the quality of healthcare: a systematic literature review. *BMC Health Serv Res* 2021;**21**:1057. https://doi.org/10.1186/s12913-021-07097-6.
36. Andersen MK, Pedersen LB, Siersma V *et al.* Accreditation in general practice in Denmark: study protocol for a cluster-randomized controlled trial. *Trials* 2017;**18**:69. https://doi.org/10.1186/s13063-017-1818-6.