**Supplement 1 –** Summary of Literature

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| **Author and Year of Publication** | **Title** | **Purpose of Study** | **Study Design/Methods** | **Main Outcome Measure(s)** | **Findings** | **Conclusion** | **Policy Recommendations** |
| **Structure**  | **Process**  | **Outcome** |
| Bukonda et al. (2002). | Implementing a national hospitalaccreditation program: The Zambianexperience. | Describe the development of the Zambia Hospital Accreditation Program from 1997 to 2000. | Data were collected by reviewing documents, interviews with major stakeholders, hospital visits, and discussions with implementers. | Achievement of hospitals standards.  | Not Reported. | Not Reported. | Not Reported. | Progress has been made over the years. Having a developing country maintain accreditation program requires dedicated funds, government and donor commitment, continual adaptation, ongoing technical assistance to hospitals, and a functioning accreditation body. | Zambian Health Accreditation Council (ZHAC) needs to be recognised as a legal entity with its own source of funding and become independent from the Central Board of Health (CBoH). |
| El-Jardali et al. (2008). | The impact of hospital accreditationon quality of care: perceptionof Lebanese nurses. | To assess the perceived impact of accreditation on quality of care through the lens of health care professionals,specifically nurses. | A cross-sectional survey design where all hospitals that successfully passed both national accreditation surveys(I and II) were included. 1,048 registered nurses from 59 hospitals were sampled. | Qualityof care and contributing factors, includes nine scales and subscales rated on five-point Likert scale. | Not Reported. | Not Reported. | Improved perceived quality of care across 11 domainsStaff Involvement was significantlyassociated with better quality results. | Hospital accreditation is a useful tool for improving quality of care. | There is a need to assess quality based on patient outcome indicators. |
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| Pomey et al. (2010). | Does accreditation stimulate change? A study of the impact of the accreditation process onCanadian healthcare organizations. | To evaluate how the accreditation process helps introduce organizational changes that enhance theQuality and safety of care. | Between 2003 and 2005, the authors conducted an in-depth retrospectivecase study of five HCOs with varied status. Authors chose to assess a small number of cases in detail, conducting a multi-case study with multiple levels of analysis. | Organization-al characteristics | Accreditation was used as a tool to adhere to new institutional identity and integrate clinical practicesDoctor participation was characterized as weak. | Not Reported. | Not Reported. | Accreditation should be seen as an approach for structural and clinical integration. Accreditation process is effective leitmotiv for introducing change but is subject to a learning cycle/curve. Institutions invest greatly to meet the 1st accreditation visit. The greatest benefits occur in the next three accreditation cycles. | HCOs and accrediting bodies should seek ways to take full advantage of each stageof the accreditation process over time. |
| Greenfield et al. (2010). | What motivates professionals to engage in the accreditation of healthcare organizations. | Explore the experiencesof hospital staff who participated in organizational accreditation processes: whatmotivated them to engage, and what benefits accrued. | Semi-structured interviews of 30 staff with variedorganizational roles, from different professions, to discuss their involvement in accreditation. Thematic analysis of the data was undertaken. | Staff Experiences. | Not Reported. | Not Reported. | Not Reported. | Participation promoted a quality and safety culture that crossed organizationalboundaries. The insights into worker motivation can be applied to engage staff to promote learning, overcome organizationalboundaries and improve services.  | Enhance involvement with accreditation and, more broadly, to other quality and safety activities. |
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| AlKhenizan Abdullah and Shaw Charles (2010). | Assessment of the accreditation standards of the CentralBoard for Accreditation of Healthcare Institutions in SaudiArabia against the principles of the International Society forQuality in Health Care (ISQua). | To assess CBAHI standards against (ISQua) principles and determine opportunities for improvement of the CBAHI standards. | Qualitative appraisal and assessment of CBAHI standards using ISQua principles foraccreditation standards | Compliance with International Society for Quality in Health Care (ISQua) | Achievement see in 7.1% for the Standards Development principle.40% for Organizational Planning and Performance principle50% for Standards MeasurementPrinciple, 11.1% for the Quality Improvement principle, and 22.2% for the Patient/Service User Focus principle with the majority (70%) of the criteria for the safety principle. | Not reported | Not reported | CBAHI standards lack measurable elements and require a lot of amendments to meet ISQua | Accreditation programsare encouraged to publish and share their experience in an effort to promote learning and improvement of local accreditationprograms worldwide. |
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| AlKhenizan Abdullah and Shaw Charles (2011). | Impact of Accreditation on the Quality of Healthcare Services:A Systematic Review of the Literature. | Evaluate the impact of accreditation on the quality of healthcare services. | Systematic review of the literature.  | Impact on quality of healthcare services. | Not reported. | Many studies showed AMI, trauma,ambulatory surgical care, infection control and pain management; and subspecialty accreditation programs to significantly improvethe process of care  | Severalstudies showed accreditation programs have a significant improvement on clinical outcomes and the quality of care of these clinicalconditions and showed a significant positive impact of subspecialty accreditation programs in improving clinical outcomes in differentsubspecialties, including AMI, HAI, trauma, colonoscopy and cataract surgery  | There is evidence to demonstrate accreditation programs improve the process of care provided by healthcare services. There is considerableevidence to show that accreditation programs improve clinical outcomes of a wide spectrum of clinical conditions. | Accreditationprograms should be supported as a tool to improve the quality of healthcare services. |
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| El-Jardali et al. (2012). | Integrating Patient Safety Standards Into the AccreditationProgram: A Qualitative Study to Assess the Readiness ofLebanese Hospitals to Implement Into Routine Practice. | To determine hospitals preparation to integrate patient safety standards into routine practice. | Cross-sectional study sampled 6807 respondents from68 hospitals in Lebanon. | Integrate patient safety standards. | Not reported. | Not reported. | Not reported. | Embedding patient safety initiatives into routine practices requires a cultural shift. Prior to hospital assessment, it is important to provide them with sufficient training andeducation on how to successfully implement standards. | To enablehealth-care organizations to integrate patient safety in routinepractice, careful consideration should be given to a finely balancedmix of incentives to change practice at the level of healthorganizations. Ministries should devise mechanisms tocreate necessary soft pressure on hospitals to implement patientsafety standards and goals without inducing adverse effects suchas adopting opportunistic behaviour solely with the aim of implementingthe standards before external accreditation surveyvisits. |
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| Saleh et al. (2013). | Accreditation of hospitals in Lebanon: Is it a worthy investment. | To explore the views of Lebanese hospitals on the worthiness of accreditation vis-à-vis its associatedexpenses in addition to examining the type and source of financial investments incurred during the accreditation process. | Observational cross-sectional design. | Hospital’s views on the worthiness of accreditation in lieu of its associated expenses. Other measuresexplored included areas of expenditure increase and sources of expenses coverage for accreditation. | All hospitals in the study reported incurringincreased expenses associated with accreditation. The areas where the investment was highest included training of current staff, consultants’ costs, infrastructure maintenance,buying new equipment and upgrading available property. | Not Reported. | Not Reported. | A majorityof hospitals views accreditation as a worthy investment. Hospitals admit that accreditation has benefits mostly in enhanced quality and patient satisfaction. Still,there was a decent proportion of hospitals that did not see anadded value that merits the level of increased expenses.  | The financial burden of accreditation on hospitals has to be factored in the decision of its adoption at a nationallevel, especially in developing countries.Thisimbalance has to be discussed on a national level so that hospitalsview accreditation as a beneficial tool for improvement,rather than a pure financial burden. |
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| Yildiz Ahmet and Kaya Sidika (2014). | Perceptions of nurses on theimpact of accreditation on qualityof careA survey in a hospital in Turkey. | To explore perceptions of Turkish nurses on the impact ofaccreditation on quality of care and the effect of accreditation on quality results. | Cross-sectional questionnaire-based survey on the pre-accreditation and post-accreditation periods. Descriptive statistical analyses to explore the views of the participants on “quality results,” “benefits of accreditation” and “participation of employeesPearson correlation and multiple regression analysis. | Quality results.Benefits of accreditation.Participation of employees. | Not Reported. | Not Reported. | Not Reported. | Providing support for nurses, nurseswith administrative responsibilities and incorporating employees into the process are important forexercising quality standards. | Hospital accreditation has a positive impact on Quality of care provided to patients and patient satisfaction.  |
| Brubakk et al. (2015). | A systematic review of hospitalaccreditation: the challenges of measuringcomplex intervention effects. | To systematically assess effectsof accreditation and/or certification of hospitals onprocesses and outcomes. | Systematic Review of studies that assessed theeffects of accreditation and/or certification of hospitals. | Patient mortality, morbidity,patient safety, and process outcomes. | Not Reported. | Not Reported. | Not Reported. | No evidence to support accreditation and certification ofhospitals being linked to measurable changes in quality of care.Many studies have not reported intervention context, implementation, or cost. | Accreditation programsrequire substantial financial and labor investments,and distracts staff from primary clinicalgoalsFurther research on impact is needed. |
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| Halasa et al. (2015). | Value and impact of international hospital accreditation:a case study from Jordan. | To assess the economic impact of Joint Commission International hospital accreditation on 5 structural and outcome hospital performance measures in Jordan. | 4-year retrospective studycomparing 2 private accredited acute general hospitals with matched 2 non-accredited hospitals, using difference in-differences and adjusted covariance analyses to test the impact and value of accreditation on hospitalperformance measures. | Impact and value of accreditation on hospitalperformance measures. | 12.8% reduction in staff turnover.20.0% improvement in the completeness of medical records. | Not Reported. | Total saving of 2 measures (reduction in return toICU within 24 hours of discharge andreduction in staff turnover) was US$296, 655 per hospital over the 3-yearperiod, with an aggregate saving ofUS$ 593,310 for the health system inJordan for the 2 accredited hospitals and statistically significant.Measures that did notimprove include return to surgery and readmissionwithin 30 days of discharge, return to surgery and or readmission within30 days of discharge. | The results showedthat accredited hospitals improved 2structural and 2 outcome measures compared with the control hospitalsThe quality improvement index, a compositeof all 5 indicators, 3 showed a significantlygreater improvement in the performance of accredited hospitalscompared with the control hospitals | Theirindirect relationship to the hospitaland possible crossover substantially reducesthe possibility that accreditationwould impact these measures. The significant improvements in 3 measures were associated with direct cost savings that would benefit both hospitals and the overall health-careSystem.  |
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| Shammari et al. (2015). | Impact of Hospital Accreditation on Patient Safety in Hail City Saudi Arabia: Nurse perspective. | To investigate the nurses' perception toward the impact of Hospital's Accreditation on patient safety related to nursing documentation, patient medication information, and healthcare associated infection. | A cross sectional descriptive study was conducted at the King Khalid Hospital (KKH) in Hail Region, Kingdom of Saudi Arabia to determine nursing perception about the impact of accreditation on patient's safety.Self-administered questionnaires (200 random sampled respondents) designed in manner to determine nursing perception. | Patient safety related to clinical nursing documentation, medication information and hospital infection. | Not Reported. | Accreditation has positive impact on patients' current medication processes and labelling,insight to implement infection control standards such as hand hygiene and improves culture of reporting incident such as needle stick injury. | Not Reported. | According to respondents, this study shows highly positive level of the impact of accreditation on patient safety related to nursing clinical documentation, medication information and healthcare association infection. | Establish specialized department to monitor and facilitate accreditation‘s processes in each regions of Saudi Arabia.Expand the research's geographic area, a future research should study the accreditation impact all over Saudi Arabia. |
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| Galukande et al. (2016). | Developing Hospital Accreditation Standards in Uganda | To describe refining use and outcomes of a self-assessment hospital accreditation tool developed for a resource-limited context | Stakeholder review a set of standards (from which a self-assessment tool was developed), and subsequently refined them to include 485 standards in7 domains.  | Ranking of 485 outcome measures. | Not Reported. | Not Reported. | Not Reported. | We have demonstrated the feasibility of a self-assessment approach to hospital standards in low-income country setting.  | This low-cost approach may be used as a goodprecursor to establishing a national accreditation body.  |
| Janati et al. (2016). | Hospital accreditation: What is its effect on qualityand safety indicators? experience of an IranianTeaching Hospital | To analyze the effect of accreditation on three indicators related to patient safety and hospital care quality in ICU wards of an Iranian teaching hospital | This interventional study was accomplished based onexecutive management and scientific methods such as plan-do-check-act (PDCA) cycle and audit to improve quality and safety. We useddata reported from ICU wards of the hospital to analyze the effect of accreditation on the three selected indicators. (SPSS) version 22.00 was used for the statistical analysis. | QualityIndicatorsShelf life in ICU*Bed sores/ Pressure ulcers*Nosocomial infectionsLength of stay | Not Reported. | Not Reported. | Effective at reducing pressure ulcer incidence average (from an average of 6.8 percent to 4.1 percent) (*p=*0.045)The average stays of the patients during the study also positively changed from an average of 1.58 days to 10.13 days (1.45 improvements*p*=0.0303).HIA rose from 1.5 percent to 8.1 percent (*p=*0.001). | Hospital accreditation has presented ample opportunity a significant positive effect on hospitals. | Program indicators related to patient safety and service quality improvement be defined in accreditation programs Hospitals should be notified and reminded that maintaining the hospital’s accreditation degree depends on preserving and promoting these services. |
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| Melo Sara (2016) | The impact of accreditation onhealthcare quality improvement:a qualitative case study | Explore the dynamics of accreditation in improving healthcare quality | Qualitative case study by 46 in-depth semi-structured interviews of 49 clinical and non-clinical staff. Analysis was done by a framework thematic analysis. | Historical context,key drivers,impact of organizational structure,internal processes and organizational culturepatient safetyprojects. | Not Reported. | Not Reported. | Not Reported. | Accreditation contributes to improvement of healthcarequality and patient safety The process has elements that may foster quality improvement, Improvements is strongly associated by the hospital’s baseline level of quality aswell as the quality management and patient safety activities before starting accreditation. | Research on implementation could investigate the impact ofaccreditation on hospital performance using quantitative methods alongsidequalitative methods.  |
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| Almasabi Mohammed and Thomas Shane (2017). | The impact of Saudi hospital accreditation onquality of care: a mixed methods study. | To examine the impact of CBAHI on quality of care. | In this study we used a mixed methods approach involving surveys, documentary analyses and semi-structure interviews. | Mortality, Infection andLength of stay. | Senior managers commended the improvement in the workplace environment as aresult of accreditation by the CBAHIA majority of respondents agreed that an improvement of document-ation was asignificant contribution of the CBAHI. | Many respondents believed that the CBAHI had contributed significantly to the improvementof communica-tionThe reporting and management of medical and non-medical errors had improvedunder the CBAHI standards, the majority of respondents reported. | 43.2% (n = 289) of staff agreed that the mortalityrate had decreased after gaining accreditation. Half of the staff (50.2%, n = 336)agreed that the infection rate had declined after gaining accreditation. Moreover,46% (n = 308) of the staff agreed that LOS had decreased after gaining accreditation.There was no significantchange between the mortality rates before and after CBAHI accreditation. There were statistically significant differences at all three hospitals for HAI | It is not clear whether the improvements in the processescan be attributed to the accreditation programme. Being accredited does not ensure this much desired result.CBAHI does not monitor the continuity of health care delivery and hadno effect on quality outcomes in our analysis.CBAHI accreditation might be more of an inspection than a continuous qualityimprovement process. | Focusing on continuous quality improvement will also provide greater interest andengagement, resulting in more sustainable outcomes. measuring patient satisfaction regularly is another important issue.There is a need for the CBAHI to devise a strategy that involves physicians in theaccreditation process, in keeping with those accreditation programmes worldwidethat already do this |
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| Lam et al. (2018).  | Association between patient outcomes and accreditation in US hospitals: observational study | Determine whether patients admitted to US (accredited) have better outcomesthan those admitted to hospitals reviewed throughstate surveys, and whether The Joint Commission adds benefits for patientscompared with other independent accreditingorganizations. | Observational study of Accredited hospitals vs. independent state survey hospitals. Hospital admissions were identified from the 100%Medicare inpatient files for 2014. Primary outcomes was death at 30 days fromthe admission and readmission 30 days fromdischarge. Fifteen regular medical causes ofhospital admissions and six common costly surgical procedures acrossa variety of surgical specialties were selected.Hospital level HCAHPS data was examine from11 months.HCAHPS data was linked to the annual survey of the American Hospital Association. | 30 day risk adjusted mortality and readmission rates HCAHPS patient experience scores. Admissions were identified by Medicare 2014, and accreditation information wasobtained from the CMS and JCI | Not Reported  | Not Reported  | In comparison with state surveys, accrediting hospitals had lower30 day mortality rates but nearly identical rates of mortalityfor the six surgical conditions. Readmissions for the15 medical conditions at 30 days were significantlyLower. Nostatistically significant differences in 30 daymortality or readmission among state survey hospitals. Scores for patient experiencewere better for hospital state survey. | Independentorganizations accreditation is not associated with lower mortality, Only minor association was observed withreduced readmission rates (15 commonmedical conditions). | No evidence in thatpatients choosing a hospital accredited by TheJoint Commission benefitover choosing a hospital accredited by anotherindependent accrediting organization. |
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| Bogh et al. (2018). | Hospital accreditation: staff experiences and perceptions. | The gain a deeper understanding how staff at various levels perceive and understand hospital accreditation in general and in relation to quality improvement. | Semi-structure interviews with diverse interviewees to capture broad ranging experiences. The study included Medicaldoctors, nurses, a quality coordinator and a quality department employee. | Staff Experiences and Perceptions. | The program affected managementpriorities: office time, and working on guiding documentation at the expense of time with patients and improvement activities. Organizational structures were improved duringpreparation for accreditation.  | Not Reported. | Not Reported. | Our findings enrich the understanding of accreditation from previous studies, in a Danish setting, did not contribute to improved processes of Care. Accreditation is a critical and complete hospital review, including areas that often are neglected. Accreditation dominates hospital agendas during preparation andsurveyor visits, potentially at the expense of patient care and other improvement schemes.  | Accreditation creates organizational foundations for future QI initiatives. |