**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** |
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| Bukonda et al. (2002). | Implementing a national hospital  accreditation program: The Zambian  experience. | 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 accreditation  on quality of care: perception  of 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. | Quality  of 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 domains  Staff Involvement was significantly  associated 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 on  Canadian healthcare organizations. | To evaluate how the accreditation process helps introduce organizational changes that enhance the  Quality and safety of care. | Between 2003 and 2005, the authors conducted an in-depth retrospective  case 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 practices  Doctor 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 stage  of the accreditation process over time. |
| Greenfield et al. (2010). | What motivates professionals to engage in the accreditation of healthcare organizations. | Explore the experiences  of hospital staff who participated in organizational accreditation processes: what  motivated them to engage, and what benefits accrued. | Semi-structured interviews of 30 staff with varied  organizational 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 organizational  boundaries. The insights into worker motivation can be applied to engage staff to promote learning, overcome organizational  boundaries 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 Central  Board for Accreditation of Healthcare Institutions in Saudi  Arabia against the principles of the International Society for  Quality 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 for  accreditation 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 principle  50% for Standards Measurement  Principle, 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 programs  are encouraged to publish and share their experience in an effort to promote learning and improvement of local accreditation  programs 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 improve  the process of care | Several  studies showed accreditation programs have a significant improvement on clinical outcomes and the quality of care of these clinical  conditions and showed a significant positive impact of subspecialty accreditation programs in improving clinical outcomes in different  subspecialties, 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 considerable  evidence to show that accreditation programs improve clinical outcomes of a wide spectrum of clinical conditions. | Accreditation  programs 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 Accreditation  Program: A Qualitative Study to Assess the Readiness of  Lebanese Hospitals to Implement Into Routine Practice. | To determine hospitals preparation to integrate patient safety standards into routine practice. | Cross-sectional study sampled 6807 respondents from  68 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 and  education on how to successfully implement standards. | To enable  health-care organizations to integrate patient safety in routine  practice, careful consideration should be given to a finely balanced  mix of incentives to change practice at the level of health  organizations. Ministries should devise mechanisms to  create necessary soft pressure on hospitals to implement patient  safety standards and goals without inducing adverse effects such  as adopting opportunistic behaviour solely with the aim of implementing  the standards before external accreditation survey  visits. |
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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 associated  expenses 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 measures  explored included areas of expenditure increase and sources of expenses coverage for accreditation. | All hospitals in the study reported incurring  increased 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 majority  of 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 an  added 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 national  level, especially in developing countries.  This  imbalance has to be discussed on a national level so that hospitals  view 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 the  impact of accreditation on quality  of care  A survey in a hospital in Turkey. | To explore perceptions of Turkish nurses on the impact of  accreditation 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 employees  Pearson correlation and multiple regression analysis. | Quality results.  Benefits of accreditation.  Participation of employees. | Not Reported. | Not Reported. | Not Reported. | Providing support for nurses, nurses  with administrative responsibilities and incorporating employees into the process are important for  exercising 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 hospital  accreditation: the challenges of measuring  complex intervention effects. | To systematically assess effects  of accreditation and/or certification of hospitals on  processes and outcomes. | Systematic Review of studies that assessed the  effects 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 of  hospitals being linked to measurable changes in quality of care.  Many studies have not reported intervention context, implementation, or cost. | Accreditation programs  require substantial financial and labor investments,  and distracts staff from primary clinical  goals  Further 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 study  comparing 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 hospital  performance measures. | Impact and value of accreditation on hospital  performance 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 to  ICU within 24 hours of discharge and  reduction in staff turnover) was US$  296, 655 per hospital over the 3-year  period, with an aggregate saving of  US$ 593,310 for the health system in  Jordan for the 2 accredited hospitals and statistically significant.  Measures that did not  improve include return to surgery and readmission  within 30 days of discharge, return to surgery and or readmission within  30 days of discharge. | The results showed  that accredited hospitals improved 2  structural and 2 outcome measures compared with the control hospitals  The quality improvement index, a composite  of all 5 indicators, 3 showed a significantly  greater improvement in the performance of accredited hospitals  compared with the control hospitals | Their  indirect relationship to the hospital  and possible crossover substantially reduces  the possibility that accreditation  would impact these measures.  The significant improvements in 3 measures were associated with direct cost savings that would benefit both hospitals and the overall health-care  System. |
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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 in  7 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 good  precursor to establishing a national accreditation body. |
| Janati et al. (2016). | Hospital accreditation: What is its effect on quality  and safety indicators? experience of an Iranian  Teaching 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 on  executive management and scientific methods such as plan-do-check-act (PDCA) cycle and audit to improve quality and safety. We used  data 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. | Quality  Indicators  Shelf life in ICU  *Bed sores/ Pressure ulcers*  Nosocomial infections  Length 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 on  healthcare 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 culture  patient safety  projects. | Not Reported. | Not Reported. | Not Reported. | Accreditation contributes to improvement of healthcare  quality and patient safety The process has elements that may foster quality improvement,  Improvements is strongly associated by the hospital’s baseline level of quality as  well as the quality management and patient safety activities before starting accreditation. | Research on implementation could investigate the impact of  accreditation on hospital performance using quantitative methods alongside  qualitative methods. |
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| Almasabi Mohammed and Thomas Shane (2017). | The impact of Saudi hospital accreditation on  quality 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 and  Length of stay. | Senior managers commended the improvement in the workplace environment as a  result of accreditation by the CBAHI  A majority of respondents agreed that an improvement of document-  ation was a  significant contribution of the CBAHI. | Many respondents believed that the CBAHI had contributed significantly to the improvement  of communica-tion  The reporting and management of medical and non-medical errors had improved  under the CBAHI standards, the majority of respondents reported. | 43.2% (n = 289) of staff agreed that the mortality  rate 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 significant  change 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 processes  can 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 had  no effect on quality outcomes in our analysis.  CBAHI accreditation might be more of an inspection than a continuous quality  improvement process. | Focusing on continuous quality improvement will also provide greater interest and  engagement, 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 the  accreditation process, in keeping with those accreditation programmes worldwide  that 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 outcomes  than those admitted to hospitals reviewed through  state surveys, and whether The Joint Commission  adds benefits for patients  compared with other independent accrediting  organizations. | 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 from  the admission and readmission 30 days from  discharge. Fifteen regular medical causes of  hospital admissions  and six common costly surgical procedures across  a variety of surgical specialties were selected.  Hospital level HCAHPS data was examine from  11 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 was  obtained from the CMS and JCI | Not Reported | Not Reported | In comparison with state surveys, accrediting hospitals had lower  30 day mortality rates but nearly identical rates of mortality  for the six surgical conditions.  Readmissions for the  15 medical conditions at 30 days were significantly  Lower.  No  statistically significant differences in 30 day  mortality or readmission among state survey hospitals.  Scores for patient experience  were better for hospital state survey. | Independent  organizations accreditation is not associated with lower mortality,  Only minor association was observed with  reduced readmission rates (15 common  medical conditions). | No evidence in that  patients choosing a hospital accredited by The  Joint Commission benefit  over choosing a hospital accredited by another  independent 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 Medical  doctors, nurses, a quality coordinator and a quality department employee. | Staff Experiences and Perceptions. | The program affected management  priorities: office time, and working on guiding documentation at the expense of time with patients and improvement activities. Organizational structures were improved during  preparation 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 and  surveyor visits, potentially at the expense of patient care and other improvement schemes. | Accreditation creates organizational foundations for future QI initiatives. |