

Impact and results of health care quality improvement and patient safety programmes in hospitals

## What is the impact of hospital accreditation? International literature review

### Summary

#### → Summary of results

- A majority of studies on the impact of certification of hospitals in France and abroad suggest that **certification procedures in hospitals have a positive impact on improving organisation, management and professional practice** in hospitals.
- **Few studies try to demonstrate a relationship between accreditation/certification and improvement in health outcomes (including patient satisfaction).** This type of relationship seems to be more difficult to identify. More research is needed in this area.
- In the main studies show that **health professionals have a positive perception** of accreditation and its impact.
- However professionals also highlight **some negative effects** (e.g. increased workload).
- The literature review identifies a **wide variety of methodologies** used to assess the impact of accreditation.

# What is the impact of hospital accreditation?

## International literature review

### → Background

- The aim of 'certification', introduced into the French health system in 1996, is to provide an independent assessment of the quality of hospital services, to improve the quality of care and to make information available to users and the public authorities about the quality of services provided.
- This initiative is similar to the accreditation programme for hospitals that was introduced in a number of countries, particularly in the English-speaking world.

- Hospital certification is now expected to:
  - provide answers to questions from public authorities, users and health professionals about its value and relevance;
  - develop according to the results of impact studies and the expectations of stakeholders in the health system and technological, regulatory and social changes.
- In order to respond to this requirement, the *Haute Autorité de Santé* needed a review of existing impact assessment studies to identify:
  - What can be learnt from the scientific literature and from empirical studies about the effects of hospital accreditation/certification, its benefits and its limitations?
  - What methodologies are appropriate for assessing the impact of hospital accreditation/certification on improving quality of care?

### → Aims

- The literature review carried out by Matrix Insight® studied the French and international literature on assessment of the impact of certification/accreditation of hospitals. It had two aims:
  1. To produce an overview of the results and methodologies of studies assessing the impact of certification of hospitals;
  2. assess the methodological quality of the studies reviewed.

### → Methodology

- The literature search was carried out for the period 01 January 2000 to 31 August 2010. The following sources were searched:
  - Databases: Medline, Embase, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Health Management Information Consortium (HMIC), British Nursing Index (BNI); Pascal and *Banque de Données en Santé Publique* [French public health database];
  - websites of national and international accreditation/certification agencies (16 countries).
- The search was completed by a review of the contents pages of specialist professional journals and analysis of existing literature reviews<sup>1</sup>.  
864 references were identified and analysed, and 56 of these were selected.

1. Greenfield D, Braithwaite J. Health sector accreditation research: a systematic review. *Int J Qual Health Care*. 2008 Jun; 20(3):172-183; Nicklin W, Dickson S. The Value and Impact of Accreditation in Health Care: *A Review of the Literature*. Canada: Accreditation Canada; June 2009.

## ➔ Impact study results

### What types of impact were identified?

The literature review found three different types of impact:

➔ Changes in **professional practice** (46/56 studies).

For example:

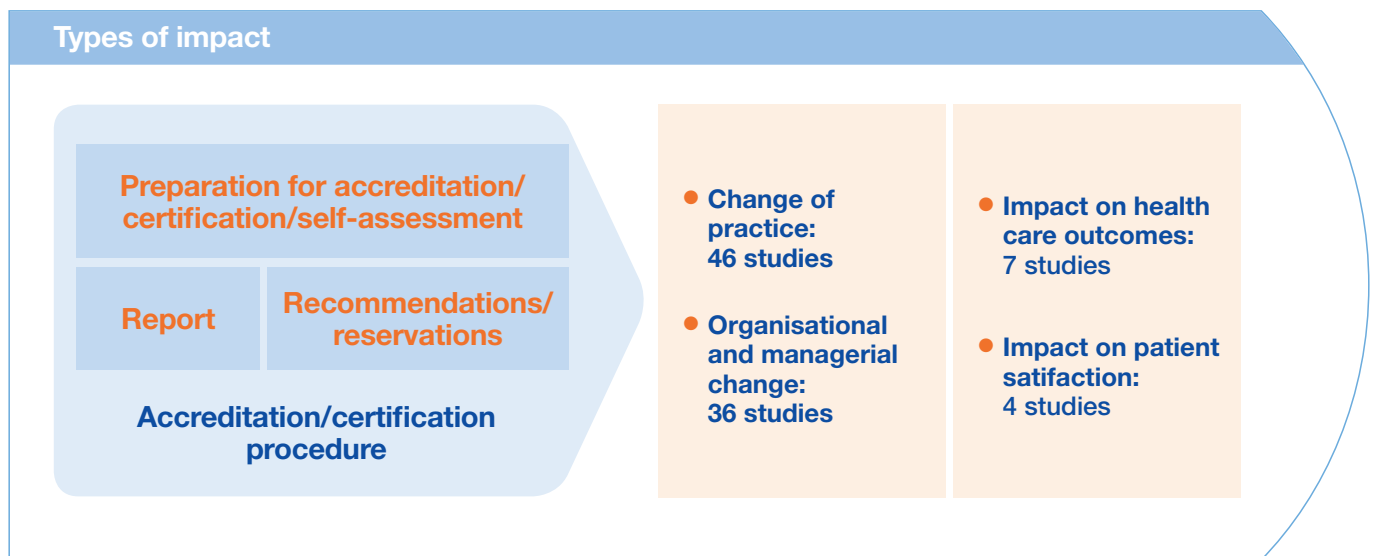
*The study by Sekimoto et al. (2008)<sup>2</sup> which suggests that accreditation has an impact on the introduction of infection control programmes and development of infection control practice in Japanese hospitals.*  
*The study by D'Aunno et al. (2002)<sup>3</sup> which suggests a relationship between accreditation by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and compliance with methadone doses prescribed in methadone maintenance programmes in the United States.*

➔ **Managerial changes** (organisational and cultural changes) (36/56 studies). For example:

*The study by Pomey et al. (2010) on organisational and cultural changes (strengthening of the working team, teamworking, place of service users, etc) related to the introduction of a hospital accreditation programme in Canada<sup>4</sup>.*

➔ Impact on **health care outcomes**: clinical results (7 studies) and/or patient and user satisfaction (4 studies). For example:

*The study by Menachemi et al. (2008)<sup>5</sup> on the association between JCAHO accreditation and health care outcomes (hospital readmissions) of patients treated in ambulatory surgical centres in the United States.*



2. Sekimoto M, Imanaka Y, Kobayashi H, Okubo T, Kizu J, Kobuse H. Impact of hospital accreditation on infection control programs in teaching hospitals in Japan. *Am J Infect Control.* 2008 Apr; 36(3): 212-219.

3. D'Aunno T, Pollack HA. Changes in methadone treatment practices: results from a national panel study, 1988-2000. *JAMA.* 2002 Aug 21; 288(7): 850-856; see also Chandra A, Glickman SW, Ou F, Peacock WF, McCord JK, Cairns CB, et al. An analysis of the association of society of chest pain centers accreditation to American College of Cardiology/American Heart Association non-ST-segment elevation myocardial infarction guideline adherence. *Ann Emerg Med.* 2009 Jul; 54(1): 17-25. The study by Chandra et al. found a positive association between accreditation and implementation of good practice in managing myocardial infarction.

4. M, Lemieux-Charles L, Champagne F, Angus D, Shabah A, Contandriopoulos A. Does accreditation stimulate change? A study of the context and the impact of the accreditation process on Canadian healthcare organizations. *Implement Sci.* 2010 Apr 26;5(1):31.

5. Menachemi N, Chukmaitov A, Brown L, Saunders C, Brooks R. Quality of care in accredited and nonaccredited ambulatory surgical centers. *The Joint Commission Journal on Quality and Patient Safety.* 2008; see also Weeks W, Schmidek M, Wallace A, Dimick J. Do JCAHO accredited hospitals perform better on quality measures? An analysis of process-of-care measures and surgical indicators [Communication]. Nov 2007 (positive association between JCAHO accreditation and indicators of surgical mortality).

### What caused the impact?

- The great majority of studies selected deal with the impact of the accreditation procedure as a whole (52 studies out of 56).
- Four studies examine the effect of a specific stage of the accreditation procedure; for instance:
  - The study by Lancaster et al. (2010) on the role of surveyors in disseminating a culture of assessment within their professional networks<sup>6</sup>.*
- Five studies deal simultaneously with the effect of accreditation and the impact of one or more aspects of the procedure. For instance:
  - The UK study by Benson et al. (2005)<sup>7</sup> : assessment of the impact of Commission for Health Improvement guidelines showing that most of the Commission's guidelines were followed following the quality audit. Health professionals thought the procedure could highlight organisational deficiencies and to introduce new levers for change, but also a tendency to encourage superficial compliance.*

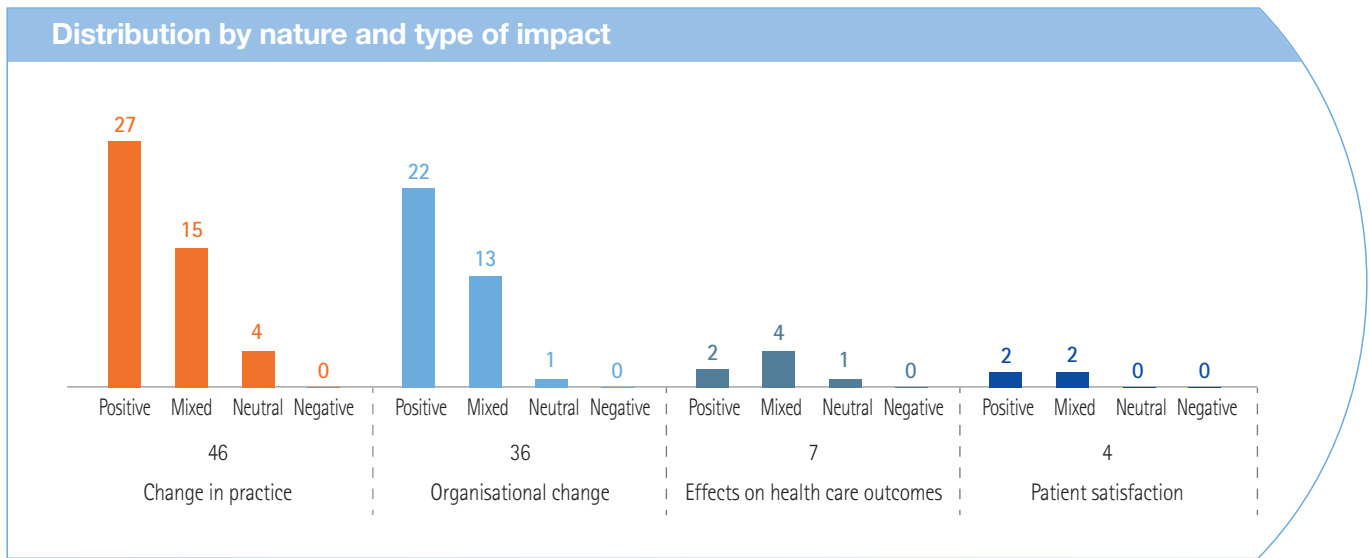
### Is the impact positive or negative?

A majority of studies reviewed suggest that accreditation has a positive effect on the organisation and on the management of hospitals, as well as on the implementation of good practice.

However, the review identified few studies suggesting or demonstrating a positive correlation between accreditation and improvement in the outcomes of care.

Some studies highlight that some professionals have a mixed or negative perception of certification. For instance:

- some of the professionals questioned for the study by Douguet et al. (2005)<sup>8</sup> felt that the accreditation procedure led to overwork and deterioration in working conditions.*



6. Lancaster J, Braithwaite J, Greenfield D. Benefits of participating in accreditation surveying. *International Journal of Health Care Quality Assurance*. 2010; 23(2): 141-152.  
 7. Benson L, Boyd A, Walshe K. Learning from CHI: the impact of healthcare regulation [Internet]. March 2004

8. Douguet F, Muñoz J. Les effets de l'accréditation et des mesures d'amélioration sur la qualité des soins sur l'activité des personnels soignants : Post-enquête conditions et organisation du travail dans les établissements de santé (2/5). Paris: Direction de la recherche, des études, de l'évaluation et des statistiques (DREES); 2005.

## → Methodologies used in the impact studies

The review identified **three types of methodological approach**:

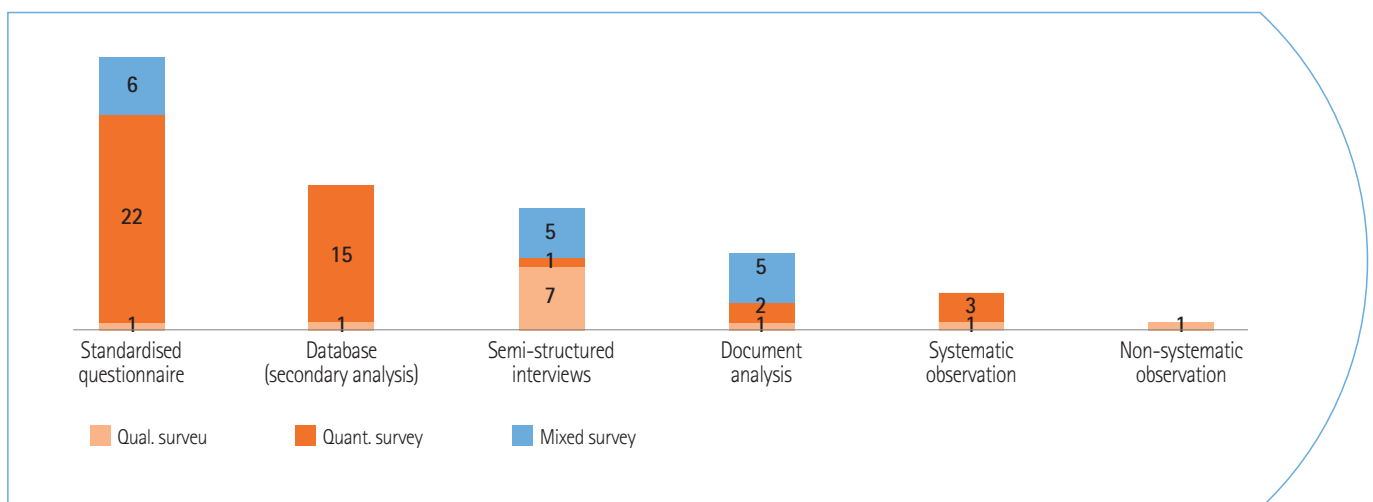
- qualitative methodologies (9/56 studies)
- quantitative methodologies (40/56 studies)
- mixed qualitative and quantitative methodologies (5/56 studies). For instance.

*A study by Doyle and Grampp (2008)<sup>9</sup> to measure the impact of accreditation in three Irish hospitals and to assess its costs; the researchers carried out individual interviews, focus groups, relevant document reviews and site visits. A questionnaire was also used.*

Most of the studies were based on **factual data** (30/56). Seventeen studies based their results on **data on perceptions/opinions**, and nine combined empirical data with perceptions of the impact of accreditation.

**Data collection methods** varied according to the study:

- standard questionnaires (29 studies) and use of pre-existing databases (16 studies)
- individual or collective semi-structured interviews (seven studies)
- document review, including certification reports (eight studies) generally used in addition to other methods (methodological triangulation)
- observation methods (five studies).



9. Doyle G., Grampp C. The cost of implementing accreditation: what are the benefits? Final report of the retrospective study. Health Information and Quality Authority; Irish Health Services Accreditation Board; 2008.

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## → Conclusion

The literature review carried out by Matrix Insight® highlights effects and trends that **concern accreditation schemes as a whole**. Its role as a lever for improving organisations and practice is emphasised; professionals' perceptions of the scope and limitations of the procedure is also explored in the literature.

Examination of the existing literature confirmed the feasibility of impact assessment studies despite methodological problems. The methodological strengths and weaknesses of the studies examined suggest directions for future work in impact assessment:

- mixed **qualitative and quantitative approaches** appear to be the most appropriate for studying this type of complex intervention;
- **inclusion of multiple factors into the analytical model**, in particular, other health care quality improvement programmes, would provide better explanations for the changes induced;
- **development of prospective studies** would make it possible to incorporate more reliable analysis and attribute changes more reliably to the interventions studied;
- **a more critical and rigorous approach** to the nature (perceptions/empirical) and the quality of data used;
- exploration of the **relationship between accreditation and improvement in health care outcomes**.

## → For more information

- This document describes the main points of the report "Literature analysis on impact assessment of hospital certification schemes", November 2010.

All documents and videos (in French and in English) on the subject of **"Impact and results of health care quality improvement and patient safety programmes"** can be found on the HAS website, [www.has-sante.fr](http://www.has-sante.fr)

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