

## ACCREDITATION OF DENTAL CARE SERVICES – A PROPOSAL FOR A LOGICAL MODEL

## ACREDITAÇÃO DOS SERVIÇOS DE ASSISTÊNCIA ODONTOLÓGICA - PROPOSTA DE UM MODELO LÓGICO

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### ABSTRACT

The National Accreditation Organization has published the Brazilian Manual of Accreditation for Healthcare Service Providers in 2010 and this manual provides the guidelines for the development of an accreditation process for healthcare providers; however, it does not provide standards for a dental accreditation process. The aim of this study was to conceptualize the accreditation of dental care services and present a logical model that can anchor the development of a tool for accreditation of dental care services in Brazil. The Brazilian Manual of Accreditation supported by the health care services of the National Accreditation Organization (ONA) provides guidelines for the development of the accreditation process in health care institutions; however, it does not provide standards for the dental accreditation process. The model proposed has three foci of analysis, six described sections and thirteen described subsections, all considering relevant aspects concerning high quality providers of dental care services. It was possible to conceptualize the accreditation and present a logical model that was designed for the accreditation of Units Providing Dental Care Services (UPDCS) - (UPSAO in Portuguese) and Complexes Providing Dental Care Services (CPDCS) - (CPSAO in Portuguese).

Keywords: Accreditation. Health Management. Dentistry. Occupational health. Disinfection.

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## RESUMO

A Organização Nacional de Acreditação publicou, em 2010, o Manual Brasileiro de Acreditação dos Prestadores de Serviços de Saúde, no qual apresenta as diretrizes para o desenvolvimento do processo de acreditação para instituições prestadoras de assistência à saúde. Porém, não prevê normas para o processo de acreditação odontológica. O objetivo deste estudo foi conceituar a acreditação dos serviços de assistência odontológica e apresentar um modelo lógico que subsidie o desenvolvimento de um instrumento para a acreditação odontológica brasileira. Utilizou-se o Manual Brasileiro de Acreditação das Instituições Prestadoras de Serviços de Saúde para desenvolver o modelo lógico para acreditação em Odontologia e realizou-se uma busca ativa em bases de dados nacionais e internacionais para exemplificar a utilização de seções e subseções da acreditação nas práticas de saúde. O modelo proposto possui três focos de análise, seis seções e 13 subseções descritas. Foi possível conceituar acreditação e apresentar um modelo lógico voltado para a acreditação de unidades prestadoras de serviços de assistência odontológica (UPSAO) e complexos prestadores de serviços de assistência odontológica (CPSAO).

Palavras-chave: Acreditação. Gestão em Saúde. Odontologia. Saúde do Trabalhador. Desinfecção.

## INTRODUCTION

In 2010, Braithwaite et al.<sup>1</sup> defined accreditation as an evaluation of organizational and clinical performance that uses predetermined standards and various means of assessment such as peer review, document analysis, equipment checks, clinical and organizational data and self assessment.

According to the The National Accreditation Organization (ONA)<sup>2</sup> accreditation is defined as “a method for assessing institutional resources. It is voluntary, periodical and confidential, seeking to ensure the assistance’s quality through pre-defined standards”.

This concept highlights the assessment as an instrument utilized to obtain results that will lead to or withhold accreditation. In this case, assessment is understood as a process that enables one to apply “value judgment” through analysis of valid information<sup>3</sup>, and characterize aspects of the process described below:

1- The voluntary nature of accreditation demonstrates the commitment of the institution to elevate and maintain the quality of its services, assuming the risks and benefits of the process while exposed to critical points and given actions to undertake for the reversal of the non-conformities in the provision of health care.<sup>4</sup>

2 – The periodicity represents the warranty to ensure a continuous commitment of the institution to the standards proposed by the ONA. This period is established according to the level of certification issued by ONA to the healthcare institution, being it of two years for institutions accredited at levels I or II and of three years for those accredited at level III, whereupon they should undergo further evaluation.<sup>2</sup>

3 - Data confidentiality is a norm, unless the accredited institution allows publication of the information.<sup>4</sup>

Considering the Brazilian model of accreditation, the voluntary nature, the periodicity and the confidentiality are inseparable aspects and characterize the concept of accreditation of the ONA.

In Brazil, the institutions involved in the process of accreditation are: the ONA, the Accrediting Credentialed Institutions (IAC) and the healthcare service providers. The ONA is the coordinator of the Brazilian Accreditation System (SBA) and regulates the entire process, the IAC conduct organizational diagnostics, trainings and assessments for accreditation of requesting institutions.<sup>5</sup> The institutions that provide healthcare service need to be eligible for the accreditation process request. The eligibility criteria are described as follow: Possessor of a business license, a health license and a registration of a technical manager.

In 2010, the ONA launched the Brazilian Manual of Accreditation for Healthcare Service Providers, which presents guidelines for the development of the accreditation process aimed at healthcare service providers.<sup>2</sup> Although this manual regulates the process of accreditation for various services, the dental care provided by institutions for individuals or companies was not addressed in this publication. Even though that there is not a specific manual for dental care, it is well known that dental care is one of health care services provided. In Brazil, this may be specialized when the professional concentrates his/her activities in only one dentistry area<sup>6</sup> or general, when the professional's work routine involves activities related to general knowledge acquired at university. In the latter case, the dentist is called "general practitioner".<sup>7</sup>

These activities are provided in groups or individually. In the Federal Council of Dentistry (CFO)<sup>6</sup>, a “Entity providing dental care” is considered a Legal Entity. However, when dental care is provided by a single dentist, the institution’s nature may be that of an individual.

Sometimes the dental office is not seen as a business or, when it is, the dentist lacks the knowledge of how to plan and implement actions in order to ensure and/or maintain the quality of the dental care services provided. Thus, the accreditation process must play a fundamental role in the dental care services. In this context, the importance of the accreditation process for the quality of the provided services; the framing of the dental care services as eligible for the accreditation process of the providers of health care institutions; and the benefits for providers and clients, are three points justifying the development of the present study. Therefore, the objective of this study is to select in the literature studies that prove the importance of the sections and subsections defined in the Brazilian Manual of Accreditation for Healthcare Providers, conceptualizing the accreditation of dental care services and to present a logical model which will anchor the development of an accreditation tool for Brazilian dental care services, more specifically, two types of dental institutions, namely: Units Providing Dental Care Services (UPDCS) - (UPSAO in Portuguese) and Complexes Providing Dental Care Services (CPDCS) - (CPSAO in Portuguese).

## **METHODOLOGY**

The methodology involves a literature review and search within two databases – Pubmed and Scielo related to the topics discussed. For this purpose, the following keywords: accreditation, health management, dentistry, occupational health, Leadership, and Disinfection were used.

## **DEVELOPMENT OF THE LOGICAL MODEL**

The logical model was developed by the authors of this study and evaluated by a technical committee composed of two nurses and a dental surgeon specialist in accreditation. Therefore, the ONA’s Brazilian Manual of Accreditation for Healthcare Providers was chosen for the development of the logical model to suit the Brazilian reality and to represent the expansion of accreditation to other institutions, other than hospitals. This manual consists of six sections and 39 subsections, of these, six sections and 13 subsections were utilized, with 12 being mandatory and one for institutions that provide specialized services. For this selection, each section and subsection of this manual were read and a subsequent analysis was performed for the adequacy of the concept to the dental practice.

## STANDARDIZATION OF INSTITUTIONS

In this study, is referred Units Providing Dental Care Services (UPDCS) – as the smallest physical structure that provides dental care services, technically represented by a dentist registered as an individual. On the other hand, it refers to Complexes Providing Dental Care Services (CPDCS) - as a provider of dental care services registered as a legal entity or composed of more than one dental team (chair).

## RESULTS

In Brazil, the institutions that provide dental care services are still not eligible for the accreditation process through ONA/SBA. Internationally, some studies are found which support the utilization of accreditation in dentistry.<sup>9-10</sup> Although these studies relate to medium sized institutions that adapt to the process available to large institutions, they do not establish an exclusive modality of accreditation for dental institutions. These reports demonstrate the necessity for the creation of a process aimed to the specificity of dental practices.

The illustration of our proposed logical model developed to provide accreditation of dental care services is shown in Figure 1. This proposal enables the development of a tool that can be used in an official accreditation process of institutions which provide dental care services.

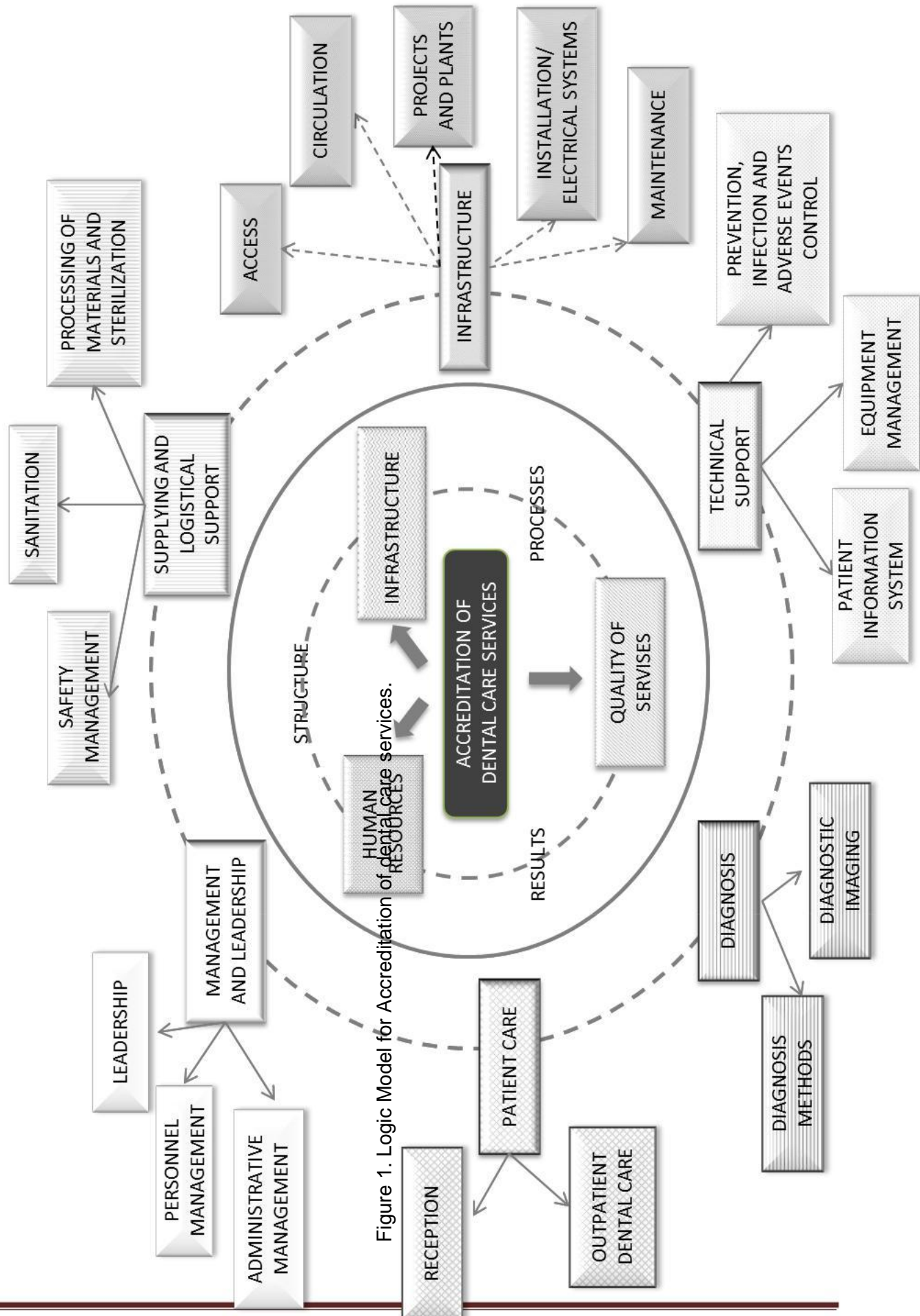


Figure 1. Logic Model for Accreditation of dental care services.

For this purpose, accreditation of dental care services will be defined as: “[...] the process of assessment and certification of dental care services, with the following guidelines: human resources, the infrastructure and the quality of the services provided, as well as the structure, the processes and the permeating results”.

The logical model proposed (Figure 1) demonstrates the above definition. The continuous circle contains three *foci* of analysis for the assessment of dental care services: human resources, infrastructure and quality of services provided. These *foci* are assessed by considering the sections and subsections of the Brazilian Manual of Accreditation for Healthcare Providers<sup>2</sup>, which present clear standards through requirements. The assessment for accreditation involves the structure, the process and the results, considering the principles of the Brazilian System of Accreditation, respectively: the principle of security, the integrated management and the management excellence.

Within the outlined circle, there is a dotted line, representing the entirety of the assessment. It highlights the principle of “all or nothing” considered by the SBA that represents a process in which the entire institution should be evaluated in a comprehensive way and never by fixed means.<sup>2</sup>

Outside of the outlined circle are six sections (management and leadership, attention to patient, diagnosis, technical support, supplying and logistical support / infrastructure) and their respective 13 subsections (Figure 1). They provide a focused analysis of the accreditation process for dental care providers.

The concepts of the sections and subsections are shown based on several studies that demonstrate their importance in health practices. It is noteworthy that the sections and their respective subsections relate directly or indirectly to all the *foci* of analysis.

The first section is composed of three subsections: Leadership, Personnel Management and Administrative Management. Leadership refers to the model of management and conduct of activities by the dentist within a team. For this, it is necessary to have skills of persuasion and a notion of leadership, as well as in other areas of health. External experiences<sup>11</sup> institutional routines and mechanisms such as communication<sup>12</sup> must be considered in practices related to leadership. In terms of Personnel management, it should be emphasized the way the work team is lead by the administrator (dentist) and also the idea that the peculiarities concerning dental care activities will influence the final product of the dental care assistance. Assessment proposals for the public sector<sup>13</sup> address criteria such as labor management, employee’s development and health, and social control of human resource management. These concepts must be verified in assessed institutions for



the accreditation. Furthermore, occupational health is studied in different countries and with different perspectives. Two of these studies are emphasized with the intent to demonstrate the importance of this analysis during the process of quality work. One of these studies discuss about the hazardous materials used in dental clinics<sup>14</sup>, specifically considering the dental class developed by Universities in Jordan and Japan; the other study addresses The Burnout Syndrome as a threat to dentists' health in Northern Ireland.<sup>15</sup> In terms of Administrative management, according to ONA, the Administrative management activities are defined, for accreditation purposes, as “[...] activities related to the coordination of resources that promote the organization’s sustainability”.<sup>2</sup>

The second section, patient care, refers to two subsections, one focused on the service of initial contact, reception, admission, client orientation and dental care in general, and the second, entitled dental care relating to the activities provided by specialized professionals.

The third section, diagnostic, with its two subsections represents a proposed adequacy of the specific area of dentistry. The first subsection, entitled ‘diagnostic methods’ evaluate the processes that surround the production ‘outsourced’ of diagnostic tests such as histology and second, known as diagnostic imaging, aims to analyze quality standards and the production of these tests carried out by the UPSSB and CPSSB.

The Technical Support section is grouped into three subsections that assist in the functioning of institutions<sup>2</sup>: customer information systems, equipment management and prevention and control of infections and adverse events. In the subsection of the customer information system, the security and integrity of data of clients/patients, the generation of secure information and the continuity of care and quality in clinical practice.<sup>2</sup> Such aspects consider the security of data, their correct utilization, analysis of the process involved and the consequent results of their use. Swinglehurst et al.<sup>16</sup> analyzed a process which involves the utilization of a computerized system in health. This study shows that computerized tools should be used and managed in order to avoid damages to patient’s safety and the quality of the health services offered. Equipment management takes planning, specification, selection, receiving, acceptance tests, training, installation, operation, maintenance and deactivation of equipment involved in the services offered.<sup>2</sup> Prevention, infection control and adverse events control subsections consider the prevention, control, reduction or elimination of risks, in order to minimize as much as possible, the incidence and severity of infections and adverse events.<sup>2</sup>



In the section physical infrastructure it is proposed to use the following aspects: access to the institution; circulation in the building; projects and plants of the structure; together with installations/electrical systems of the dental care institution and the building structure to which it belongs. In Figure 1, the dashed arrows do not indicate subsections like the normal arrows, but aspects of importance in the proposal of verifying building-functional structure for the assessment process and further accreditation of the dental care services.

The final section, called Supplying and Logistical support, is subdivided into Safety management, Sanitation and Processing of materials and Sterilization. The concept of Safety management in the accreditation process involves "[...] protection from occurrences of loss or injury to the physical integrity and Property."<sup>2</sup> Sanitation deals with aspects related to cleaning and disinfection practices in the health care provider institution. Methods and types of products<sup>17</sup> suitable for disinfecting each surface, the response from the microbial agents to the surfaces<sup>18</sup> and the standardization of tests<sup>19</sup> are examples of studies that underline the importance of simple and

basic routines such as washing hands. Moreover, some studies can be highlighted

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which

demonstrate the importance of the processes, leading work teams, patients and users of the health care services to decision making. The subsection Processing of Materials and Sterilization, exemplifies the relationship of the subsections with more of a focus on analysis. This subsection is related to the Human Resources focus, when it is analyzed the utilization of equipment for personal protection and the staff number necessary to the development of the sterilizing activities<sup>8</sup>; it is related to the Infrastructure focus, when placement and division of the physical ambient are assessed according to receiving, preparation, packaging, sterilization, and stocking of instruments and other materials used in the dental office practices. It is related to the quality of services provided when considering protocols, work processes, monitoring of these processes and quality tests. This is relevant since, in practice, during the assessment process for accreditation, there are no subdivisions, because all the aspects are seen in an integrated way.

## CONCLUSION

The logical model developed in this study, nonexistent yet, is proposed as a dental accreditation tool of two types of dental care institutions: the UPDCS and CPDCS. The proposed model of dental care accreditation is conceptualized as “the process of assessment and certification of dental care services, with the following guidelines: human resources, the infrastructure and the quality of the services provided, as well as the structure, the processes and the permeating results.”

We suggest the development of studies which address the theme of dental accreditation, using the proposed logical model in order to test its feasibility and possible accreditation for institutions providing dental care services not covered in the Brazilian Manual of Accreditation for Healthcare Providers.

It is notable that the concepts addressed in this study represent the importance of some aspects related to the proposed model and therefore is not intended to exhaust them, yet to encourage professional dental care to meet the accreditation, its concepts, possibilities, and application in dental practice.

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