

# Methodology for implementation of quality care in a dialysis center

Metodologia para implantação de um sistema de gestão da qualidade em um centro de diálise

Metodología para la implantación de un sistema de gestión de la calidad en un centro de diálisis

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#### **ABSTRACT**

This study describes the methodology used to implement quality care in a dialysis center in São Luís, MA. A questionnaire, based on current legislation that regulates nursing, medicine, pharmacy, nutrition, water treatment station, storage and supply room, and occupational health and safety services, was used to collect the data. Findings were used to develop an action plan to address no compliance with legislation and to propose preventive measures of non-compliance according to quality review committee guidelines. The experience of the implementation of this methodology led to the development of the discipline "Organization Service" to facilitate the identification and management of service processes, planning and procedures standardization, documentation and records control, and to motivate critical analysis of outcomes for improvements in the quality of care.

Keywords: System of quality management; Dialysis service; Quality control

#### **RESUMO**

O estudo apresenta a metodologia utilizada para implantar um Sistema de Gestão da Qualidade em um Centro de Diálise em São Luís-MA. Houve aplicação de um questionário fundamentado na legislação vigente nos Serviços de Enfermagem, Médico, Farmácia, Nutrição, Estação de tratamento d'água, Almoxarifado, Higienização, Manutenção e Segurança do Trabalho, resultando em um diagnóstico situacional. A partir deste diagnóstico, foi geradoo um plano de ação para tratar as não-conformidades identificadas e propor iniciativas de ações preventivas seguindo as diretrizes constantes em documentos elaborados pelo Comitê da Qualidade. A experiência de implantar essa metodologia desenvolveu uma disciplina e organização no serviço que possibilitou a identificação e gerenciamento dos seus processos, planejamento e padronização de procedimentos, controle de documentos e registros, além incentivar a análise crítica dos resultados objetivando promover a melhoria de desempenho dos processos.

Descritores: Sistema de gestão da qualidade; Serviço de diálise; Controle de qualidade

### RESUMEN

En este artículo se presenta la metodología utilizada para implantar un Sistema de Gestión de la Calidad en un Centro de Diálisis en Sao Luis-MA. Hubo aplicación de un cuestionario fundamentado en la legislación vigente en los Servicios de Enfermería, Médico, Farmacia, Nutrición, Estación de tratamiento del agua, Depósito, Higienización, Manutención y Seguridad del Trabajo, dando como resultado un diagnóstico situacional. A partir de ese diagnóstico, fue generado un plan de acción para tratar las inconformidades identificadas y proponer iniciativas de acciones preventivas siguiendo las directivas constantes en los documentos elaborados por el Comité de la Calidad. La experiencia de implantar esa metodología permitió el desarrollo de disciplina y organización en el servicio que posibilitó la identificación y administración de sus procesos, planificación y patronización de procedimientos, control de documentos y registros, además de incentivar el análisis crítico de los resultados objetivando promover la mejoría del desempeño de los procesos.

Descriptores: Sistema de gestión de calidad; Servicios de diálisis; Control calidad

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### **INTRODUCTION**

The Ministry of Health, based on the Resolução da Diretoria Colegiada nº. 154/2004 (Collegiate Board of Directors' Resolution n. 154/2004), established the technical regulation on dialysis service functioning. This regulation determines that "dialysis services must function while meeting the quality requirements and a certain medical care standard" Thus, dialysis centers are responsible for providing a safe and quality service to these clients, offering more appropriate treatment for their health condition. Nowadays, it has become more and more common for nephrology services to seek quality due to a social and technical need, and the adoption of a quality management system is a strategic decision of organizations.

According to the NBR ISO (International Organization for Standardization) 9001/2000, quality management is "a set of activities coordinated to guide and control an organization in terms of quality"<sup>(2)</sup>.

Quality management principles are used for an organization to plan, identify and control processes, promote environmental organization, qualify human resources, make critical analysis, meet client requirements and promote continuous improvement.

It is understood that this system can be perfectly applied to dialysis services and that those responsible for such services must be committed to the quality management system development and implementation. In addition, they must know and apply, whenever possible, management concepts that aim at process improvement, including enhancement of the resources available and increase in client satisfaction level.

The project and implementation of a Quality Management System (QMS) are influenced by several needs, specific objectives, products provided, processes employed, and organization size and structure. The adoption of an approach to the process promotes the development and improvement of system effectiveness to increase client satisfaction by meeting their requirements.

When used in a QMS, the approach to the process emphasizes the importance of understanding and meeting the requirements, the need to consider processes in terms of the aggregate value, the achievement of process performance and efficacy results, in addition to promoting the continuous improvement of processes, based on objective measurements<sup>(2)</sup>.

## QUALITY MANAGEMENT SYSTEM IMPLEMENTATION

QMS implementation in the *Centro de Nefrologia do Maranhão* – Cenefron (State of Maranhão Nephrology Center) began with the creation of a Quality Committee

(QC) formed by a multiprofessional team of the institution and an outside consultant. Quality Committee members, known as "Facilitators", were defined to give support and follow quality actions in the areas. A Quality Manual was designed, where the objectives are set and the requirements for QMS development are specified. A situational diagnosis of the areas was performed, using as instrument a questionnaire founded on the law in effect that regulates the dialysis service in Brazil<sup>(3)</sup>; the result of this diagnosis was presented to those responsible for each area, creating action plans to correct non-conformities identified and bringing about reports on preventive actions, with each area being henceforth followed by a facilitator defined by the QC.

Mapping of processes and service flow chart were made.

The following eight documents, known as General Procedures (GP), were designed and implemented to provide directives to the QMS:

PGcenefron001 – Control of documents and records: Guides their preparation, verification, approval, review and distribution in the areas.

PGcenefron 002 – Control and treatment of a non-conforming product and preventive and corrective actions: Establishes directives to guarantee that the products/services not conforming to specified requirements have their non-intentional use prevented and that preventive and corrective actions be established and implemented.

PGcenefron 003 – Acquisition process: Establishes the directives and product acquisition flow.

PGcenefron 004 – Human Resources Management: Document that guarantees employee recruitment, selection, qualification and training process.

PGcenefron 005 – Control and treatment of client complaints and suggestions: Defines directives to control and treat suggestions and complaints of inside and outside clients.

PGcenefron 006 – Statistical control: Provides directives to control processes through data collection.

PGcenefron 007 – Environmental organization: Document designed to guide work environment organization.

PGcenefron 008 – Critical analysis from management: Control of input and output data for top management critical analysis.

Each service is responsible for the preparation, training and implementation of standard operational procedures and work directions, where the medical service is responsible for the preparation of clinical protocols.

An information bulletin, published every three months, was implemented to spread service quality actions. In addition, a Suggestion Box was implemented to be a communication channel with clients, for which the Quality Committee is responsible, in terms of assessment and

feedback to these clients.

# QUALITY MANAGEMENT SYSTEM OBJECTIVES

- To meet client requirements, aiming to increase their satisfaction;
- To achieve a view of the organization, using the process approach;
- To measure and assess process performance and efficacy results;
  - To promote continuous improvement of processes.

## QUALITY MANAGEMENT SYSTEM OPERATIONAL FLOW

- Situational diagnosis;
- Implementation of general procedures to control processes;
  - Monitoring;
  - Quality inspection;
  - Assessments.

The questionnaire used to perform the situational diagnosis was applied in the following Services: Nursing, Medical, Pharmacy, Nutrition, Psychology, Water Treatment Station, Storeroom, Hygiene Procedures, Work Maintenance and Safety.

While questionnaire was being applied to perform the situational diagnosis, it was observed that services already had an organization, but there was no established standard, so that some adjustments were necessary.

The need to standardize, approve and validate documents, in addition to the lack of definition of the record retention time, was identified.

In terms of management, service managers held

meetings, but there was not a schedule with an established regularity. In addition, indicators were assessed, but there were no established goal and critical analysis for such.

As regards the environment, the clinic has a new and modern structure that meets the infrastructure and safety requirements, in addition to machines and equipment that meet the legal requirements for efficient and safe treatment. However, an effective preventive maintenance program was not identified, thus revealing the need to establish a preventive maintenance schedule and a control system of the outsourced company for this service. This analysis identified non-conformities, observations and opportunities for improvement in all services. Moreover, the methodology proposed aims to contribute to the dialysis processes in the implementation of a quality management system that meets client requirements and enables continuous process improvement, using the ISO 9001/2000 Norm requirements as framework<sup>(2)</sup>.

### **CONCLUSION**

The development of a methodology to implement a quality management system in the *Centro de Nefrologia do Maranhão* is necessary to continually improve the processes whose main focus is the satisfaction of clients who use this service.

The importance of a quality management system in the Cenefron should be emphasized, as it promoted: activity planning and the search for better alternatives with higher efficacy and lower operational cost; systematic follow-up with critical analysis of results, enabling rapid correction of "deviations" and avoiding repetition of work; greater safety and immediate decisions; improvement in the management system through more consistent control of processes; more reliable indicators; and better organizational environment.

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