INTRODUCTION

Consensus exists regarding the elements that an organization must address in order to achieve quality management and obtain the best results: focus on results and users, managing by processes, involvement of staff members, leadership and concrete results, and promotion of continuous improvement and social responsibility.1-6

Management by Processes is one of the mainstays of Total Quality Management;5, 7 it is an instrument for the visualization, analysis and improvement of organizational workflows.8, 9 Managing by Processes is one of the eight principles, or fundamental concepts, of excellence constituting the basis of the Total Quality Model of the European Foundation for Quality Management (EFQM), which underlies the analysis of the excellence of any institution.

These eight concepts, listed in Table 1, are: achieving balanced results; adding value for customers; leading with vision, inspiration and integrity; managing by processes and facts; succeeding through people; nurturing creativity and innovation; building partnerships and taking responsibility for a sustainable future.6, 10-12

The EFQM model of excellence consists of nine criteria (Figure 1) and an evaluation scheme that makes it possible to know what level of excellence exists in an organization, being a tool for continuous improvement and the promotion of innovation and creativity to achieve excellent results.7

According to this reference framework, Managing by Processes is one of the key elements for operating an organization with maximum efficiency and efficacy because it involves not only organizing all interventions and actions, but also eliminating anything that does not contribute added value. Consequently, Managing by Processes involves identifying the essential components of clinical care.

Many definitions of process exist (Table 2), but the underlying concept in all of them is the same: A set of actions, decisions, activities and tasks linked in a sequential and organized fashion and designed to achieve a result that satisfies the requirements of the target patient/population.13-16

The concept of "process" is especially useful for organizing what is done and measuring and improving it.17

In the framework of healthcare organizations, the care process is defined as the set of activities carried out by healthcare providers (preventive strategies, diagnostic tests and therapeutic activities) for the purpose of increasing the level of health and degree of satisfaction of the population receiving the services, understood in a broad sense (organizational, care and other aspects).3

In this context, the Instituto de Psiquiatría y Salud Mental of Hospital Clínico San Carlos (HCSC Institute of Psychiatry and Mental Health) of Madrid established the strategy of implementing Management by Processes in 2009 and identified the Clinical Management Process for Anxiety and Depression, including specialized services and Primary Care as one of its key processes.

Once the process is prepared and defined according to the basic scheme shown in Figure 2, this process should be made known, accepted and, finally evaluated in terms of both the degree of implementation and the results obtained from application.18

Evaluation is the necessary final step in the descriptive phase of clinical management processes and consists of the preparation of a system of indicators that facilitates the evaluation and control of the process, allowing the
Comparison between situations previously defined as desirable and reality, analyzing the discrepancies and offering suggestions for avoiding them.  

Definitively speaking, we need to know what results we propose to obtain (the clinical management process is a means to achieving a result) and what results we are obtaining in order to make decisions and establish corrective measures. Monitoring, evaluation and measurement are needed.

For the application of the classic cycle of Continuing Improvement, the PDCA cycle, Plan, Do, Check, Act (Figure 3), one of the features of Managing by Processes, it is
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It is necessary to define quality criteria and monitor process indicators. In other words, it is difficult to improve something without first understanding it. The evaluation of a process would not have any sense if, after the evaluation and after checking the discrepancies in relation to what is desirable, the necessary corrective actions are not applied.

The purpose of this paper is to describe the development of the system for evaluating the Clinical Management Process for Anxiety and Depression.

**METHOD**

Based on the definition of criterion as the condition that must be satisfied in practice in order to comply with quality requirements, the multidisciplinary working group that participated in the preparation of the Clinical Management Process for Anxiety and Depression as well as the establishment of the quality control system, the first objective of the working group was to identify framework criteria, based on two points used to define criteria:

1. Inherent criteria guaranteeing the Clinical Management Process for Anxiety and Depression.
2. Criteria focused on achieving balanced results with the clinical management process, as understood by EFQM (European Foundation for Quality Management).

The first criteria are designed to reflect the vision that guided the development of the process. Insofar as the strategic vision does not change, these criteria should be maintained over time and used to monitor the level of commitment, or adherence, of professionals to the clinical management process that has been defined for use in practice.

The second criteria are designed to monitor whether the previously defined expectations regarding the outputs of the clinical management process are satisfied.

The same working group developed the Clinical Management Process for Anxiety and Depression (see: “Steps for the development of a management process of Anxiety and Depression from Primary Care up to the Psychiatry Departments” in this supplement). The group was constituted by four psychiatrists, one of them the director of the clinical management process, two primary care physicians, an expert in the management of healthcare services and an expert in clinical management external to the HCSC Institute of Psychiatry and Mental Health of Madrid. This group worked systematically in time- and form-structured group sessions directed by expert personnel in the material and identified nine framework criteria (Table 3).

The second objective set by the working group was to define the criteria indicators to be used in evaluation, understanding that this measure will serve to control and assess the quality of the activities. This measurement instrument is used to monitor the most important aspects of different areas and activities. In summary, it is an objective assessment of what is being done.

The working group defined the following characteristics of a quality indicator:

- **REPRESENTATIVITY**: An indicator must allow conclusions to be reached about the output of the clinical management process.
The preparation of an indicator requires the precise definition of all terms and their expression using a matrix, so that, after defining (Objective - Name of Indicator - Data Source) the indicators, a graph/matrix is prepared for each and every indicator with the following content:

- Name/Designation of Indicator
- Justification
- Dimension
- Formula
- Explanation of Terms
- Population
- Type
- Data Source
- Guidance Standard
- Observations

The Clinical Management Process Commission, headed by the process manager, will be responsible for guaranteeing the management (conduct, evaluation and review) and improvement of the clinical management process. Therefore, it is necessary that both the process manager and the Committee members comply with three requirements or basic conditions:

- **KNOW**: Process managers and committee members must have in-depth knowledge of the clinical management process that they are responsible for.
- **DO**: They should be capable of decision-making and delegating personnel for decision-making about the clinical management process under consideration.
- **WANT**: They must voluntarily take responsibility for the clinical management process.

### RESULTS

The final result was eighteen indicators obtained for the purpose of determining whether clinical practice conforms to the clinical management process defined and whether application yields the expected outputs or not.

1. **Indicators of the inherent criteria guaranteeing the clinical management process**

   1.1. **Knowledge of the clinical management process**
   Indicator: Number of professionals knowledgeable about the clinical management process in all care settings (Primary Care and Specialized Care).

   1.2. **Suitability of the process to clinical practice**
   Indicator: The percentage of staff of Primary Care and the Institute of Psychiatry and Mental Health who consider the clinical management process to be suitable for their clinical practice.

   1.3. **Evidence, convention or consensus based on the scientific literature**
   Indicator: Review of the evidence, convention or annual scientific consensus relative to the clinical management process (Yes/No).

   1.4. **Resolution of each episode at the respective care level according to the definition and protocol of the clinical management process**
   Indicator 1: Patients in contact (other than the first visit), with a stage 2 or higher conditions, who should receive care in a Mental Health Center.
   Indicator 2: Patients with a mild anxiety disorder or adaptive disorder who should receive care by Primary Care.

2. **Criteria focused on the result of the clinical management process as understood by the EFQM**

   2.1. **External Customer Satisfaction**
   Indicator 1: Number of times that claims are filed by...
<table>
<thead>
<tr>
<th>Name of indicator</th>
<th>Percentage of professionals of Primary Care and the Institute of Psychiatry and Mental Health who consider the process suitable for their clinical practice.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justification:</td>
<td>This indicator allows us to evaluate the usefulness of the clinical management process in daily medical practice of Primary Care and Specialized Care. Should be clear and easily managed.</td>
</tr>
<tr>
<td>Dimension:</td>
<td>Suitability.</td>
</tr>
<tr>
<td>Formula:</td>
<td>No. of professionals in Primary Care Area 7 and IPMH who consider the process suitable for their clinical practice. Total no. of professionals in Primary Care Area 7 and IPMH.</td>
</tr>
<tr>
<td>Explanation of terms:</td>
<td>The professionals to be surveyed are staff members and long-term residents (not substitutes for temporary leave or vacation) with more than one year of service.</td>
</tr>
<tr>
<td>Population:</td>
<td>Staff members of Primary Care Area 7 and residents with &gt; 1 year of service. Staff members of IPMH and residents with &gt; 1 year of service.</td>
</tr>
<tr>
<td>Type:</td>
<td>Clinical management process.</td>
</tr>
<tr>
<td>Source of data:</td>
<td>Annual survey.</td>
</tr>
<tr>
<td>Reference standard:</td>
<td>90%.</td>
</tr>
<tr>
<td>Observations:</td>
<td></td>
</tr>
</tbody>
</table>

Source: Prepared by Consultoría y Gestió and the working group responsible for developing the process

**Figure 4**  
**Graph/matrix of the adaptation of the clinical management process to clinical practice**

<table>
<thead>
<tr>
<th>Name of indicator</th>
<th>Level of severity of the anxiety process treated by professionals of mental health centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justification:</td>
<td>The clinical management process has been defined by clearly assigning the responsibility of professionals at each care level in relation to severity in the management of the patient with anxiety.</td>
</tr>
<tr>
<td>Dimension:</td>
<td>Suitability.</td>
</tr>
<tr>
<td>Formula:</td>
<td>No. of patients with mild anxiety disorder or adaptive disorder who received care in mental health centers. Total no. of patients in mental health centers for an anxiety process.</td>
</tr>
<tr>
<td>Explanation of terms:</td>
<td></td>
</tr>
<tr>
<td>Population:</td>
<td>Patients receiving care for anxiety in mental health centers.</td>
</tr>
<tr>
<td>Type:</td>
<td>Clinical management process.</td>
</tr>
<tr>
<td>Source of data:</td>
<td>Process information center.</td>
</tr>
<tr>
<td>Reference standard:</td>
<td>70% of the total of well-classified patients.</td>
</tr>
<tr>
<td>Observations:</td>
<td>Patients with mild anxiety disorder or adaptive disorder should not be treated in mental health centers, but in Primary Care centers.</td>
</tr>
</tbody>
</table>

Source: Prepared by Consultoría y Gestió and the working group responsible for developing the process

**Figure 5**  
**Graph/matrix of the resolution of the episode at the respective care level as defined by the process**
Name of indicator: Percentage of patients in outpatient care who have passed from stages 2, 3 and 4 of depression to stage 0b six months after diagnosis

Justification: The evaluation of the output of the clinical management process in terms of health is the ultimate objective of the work carried out on the process. Therefore, this indicator involves monitoring the effectiveness of managing the patient in the outpatient setting.

Dimension: Effectiveness.

Formula: No. of patients discharged with stage 0b in outpatient clinics after treatment according to the clinical management process for depression in which the initial diagnostic assessment was stage 2, 3 or 4.

Explanation of terms: - Patients discharged in a 1-year period who received care in outpatient clinics.
- Patients with an outpatient discharge and stage 0b initially diagnosed as stage 2, 3 or 4.

Population: Total no. of patients receiving outpatient care. Patients discharged with stage 0b in the period will be identified and the initial diagnosis will be retrospectively analyzed.

Type: Result.

Source of data: Process information system.

Reference standard: To be assessed by the executive team.

Observations: If this indicator does not conform to the standard, although the cause is multifactorial, it can be compared to other process indicators to obtain the first causal estimate.

Source: Prepared by Consultoría y Gestió and the working group responsible for developing the process.

Figure 6 Graph/matrix of the complete remission of depression in patients treated in an outpatient setting in mental health centers

Name of indicator: Percentage of patients discharged for an anxiety process who return to Primary Care within six months of diagnosis

Justification: The evaluation of the output of the clinical management process in terms of health is the ultimate objective of the work carried out on the process. Therefore, this indicator involves monitoring the effectiveness of managing the patient in the outpatient setting.

Dimension: Effectiveness.

Formula: Total no. of patients in mental health outpatient clinics for anxiety diagnosed in a one-year period who have been treated for 6 months or discharged.

Explanation of terms: Patients with an outpatient discharge who return to Primary Care.

Population: Total.

Type: Result.

Source of data: Process information system.

Reference standard: 70%.

Observations: 70%.

Source: Prepared by Consultoría y Gestió and the working group responsible for developing the process.

Figure 7 Graph/matrix of the resolution of anxiety disorder in mental health centers
contact patients treated for an Anxiety or Depression condition in a given period (3 months or 6 months).

INDICATOR 2: Number of times that satisfaction is expressed by contact patients treated for an Anxiety or Depression condition in a given period (3 months or 6 months).

INDICATOR 3: Percentage of patients with a discharge report issued by a mental health center.

INDICATOR 4: Number of professionals wearing visible identification while providing care.

2.2. Internal Customer Satisfaction

INDICATOR 1: Number of publications and communications to national and international congresses.

INDICATOR 2: Number of clinical sessions (of the Institute and of the Institute with Primary Care) conducted in the setting of the clinical management process for Anxiety and Depression.

INDICATOR 3: Percentage of overall satisfaction of Primary Care professionals in relation to different aspects of the clinical management process [Primary Care Professionals Satisfaction Survey].

2.3. Value to Society

INDICATOR 1: Number of research projects related to the Clinical Management Process for Anxiety and Depression under development or finished in the period.

INDICATOR 2: Number of teaching sessions conducted for the Clinical Management Process for Anxiety and Depression.

2.4. Health Outcomes

INDICATOR 1: Percentage of patients in outpatient care who have passed from depression stages 2, 3 and 4 to stage 0b six months after diagnosis.

INDICATOR 2: Percentage of hospitalized patients who present syndromal remission at discharge.

INDICATOR 3: Percentage of patients discharged after an episode of anxiety who are referred to Primary Care 6 months after discharge.

INDICATOR 4: Number of suicides of patients treated according to the Clinical Management Process for Anxiety and Depression.

2.5. Cost/Effectiveness Results

INDICATOR: Number of antidepressants prescribed per condition severity level.

The aim of this paper was not to present each and every indicator identified that allowed the evaluation of the Clinical Management Process for Anxiety and Depression, but to describe how the organization prepared a system of evaluation of the clinical management process. Consequently, some indicators are shown as examples, centering on results-focused criteria that attempt to measure Health Outcomes, which are considered key indicators of the clinical management process because they measure whether the application of the clinical management process achieves the primary objective of disease remission, as shown in figures 4, 5, 6 and 7.

CONCLUSIONS

The development and implementation of the Clinical Management Process for Anxiety and Depression of the HCSC Institute of Psychiatry and Mental Health is the material expression of the philosophy of Patient-Focused Care (PFC), which aims fundamentally at:

- providing patients more suitable and satisfactory services, and ensuring a continuum of care (the clinical management process includes Primary Care),
- providing high quality services (that satisfy needs and expectations), thus improving efficiency, and
- facilitating the daily work of professionals (by equipping them with a decision-making tool).

The clinical management process and its indicator-based evaluation and monitoring system is a management tool that not only makes it possible to understand and organize what we are doing but also, what is particularly important, enables improvement. In first place, the clinical management process eliminates from practice everything that does not add value to the outcome. In second place, evaluation allows us to apply the necessary corrective measures when the result obtained is not the desired result. Monitoring and measurement thus constitute the basis for knowing what is being obtained, the degree in which the desired results are achieved and where improvement efforts should focus. Definitively speaking, the clinical management process is a dynamic model in which we define, do, evaluate and improve.

REFERENCES


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