

The mapping competences of the nurse Case/Care Manager in Intensive Care

Emanuela Alfieri¹, Anna Chiara Ferrini², Francesca Gianfrancesco³, Gianluca Lise⁴, Giovanni Messina⁵, Lorenzo Tirelli⁴, Ana Lorenzo⁵, Leopoldo Sarli¹

¹ Department of Medicine and Surgery, University of Parma, Italy; ² Hospital in Cesena, Italy; ³ Hospital in Rimini, Italy; ⁴ Hospital in Piacenza, Italy; ⁵ National Cancer Treatment Center in Milan, Italy

Abstract. *Background and aims:* Since the recent introduction of the Case/Care Manager's professional figure, it is quite difficult to identify properly his/her own particular features, which could be mainly be found revising mainly in American studies. Therefore, the present study intended to identify the Case/Care Manager's skills and professional profile in an Intensive Care Unit experience, taking into consideration the staff's activities, perception and expectations towards the Case/Care Manager. In particular, it has been compared the experience of an Intensive Care Units where the Case/Care Manager's profile is operational to a different Unit where a Case/Care Manager is not yet in force. *Method:* a Levati's model was used to map the Case/Care Manager's skills, involving each unit whole working staff, executives and caregivers through semi-structured interviews. The comparative study has taken into consideration the Anaesthesia Unit and Emergency Unit of Cesena's healthcare organisation where the Case/Care Manager's profile has been implemented and a Cardiology Intensive Care Unit of Piacenza's healthcare organisation, where the Case/Care Manager's profile has not been experimented yet. Firstly, it a data collection in each healthcare organization has been organised. Subsequently, semi-structured interviews to doctors, unit nurses, caregivers, nurses' coordinators and medical staff have been used to compare the healthcare system. The interviewees' described their expectations in relation to the Case/Care Manager working in a critical area. Then, every data collected during interviews has been organised to map a Case/Care Manager's essential professional profile to work in a critical area together with medical staff. *Results:* Piacenza's O.U. critical area experience reported a major demand for patients' and patient's families' assistance. On the other hand, the very same aspects seem to have been better achieved in Cesena's O.U., where a Case/Care Manager's recent introduction has actually helped to overcome the void in organising systems. *Conclusions:* a Case/Care Manager's profile has been drafted on the basis of the comparative analysis conducted. It has been noted how the Case/Care Manager's professional profile can really improve relationships and communications between medical staff and patients, promoting a major unity among the working team. According to the present research, the Case/Care Manager's profile has been proved helpful in positively influencing the team activity and to elicit major satisfaction both in patients and their family.

Key words: Healthcare Organizations, critical skills, Case/Care Manager, understanding, professionale role

Abbreviations:

ICU: Intensive Care Unit
CICU: Coronary Intensive Care Unit
UAP: Unlicensed Assistive Personnel
O.U.: Operational Unit

Introduction

In the last ten years the increasing complexity of the healthcare system has forced a deep reconsideration and a re-planning of hospital-based and community-

based settings as well as contemporary care systems. This change facilitates integration between hospitals and territory while immediately involving the patient and his family in a proactive role in the course of the treatment and assistance.

The health care professionals who operate in this system are the driving force behind the system itself. For this reason, each individual competence and performance impacts on the quality of the organization where the need to ensure and satisfy the patients' expectations has become normatively and strategically important.

While efficiency and effectiveness are essential components of care organizations and a reduction of time and costs are in constant need, it is critical to appoint a professional figure able to secure the management of these procedures and to improve the communication between patients, families, clinical teams and territory. The Case/Care Manager seems the most qualified to guarantee the efficiency, the effectiveness, the quality, the continuity of care and the patients' approval.

In 2008, the Case Management Society in the UK defined the Case/Care Managers "an individual in charge of a collaborative process of assessment, planning, facilitation, care coordination, evaluation, and advocacy for options and services to meet an individual's and family's comprehensive health needs through communication and available resources to promote quality, cost-effective outcomes" (1).

In 1993, the Case Management Society of America outlined the work of the Case/Care Manager as "providing professional collaboration across the health care continuum, assessment, implementation, monitoring, and selection of treatment plan and the path to reaching the best possible outcomes for patients and their families" (2).

The proposed Case/Care Manager professional figure helps "curtail the health care costs while improving the quality of the patients' hospitalization through professional collaboration across the health care range. In the hospital, the nurse works with patients to understand their needs, to assess their progress, and uncovering mutually agreed upon solutions to achieve their healthcare goals" (1). Among several authors who support Case/Care Managers, Cohen and Chesta (3)

state that nurses are the most suitable professionals for the role of Case/Care Manager experts. As a matter of fact, nurses can guarantee the majority of services that other professionals can offer to patients, while being equipped to provide direct assistance. Furthermore the Case/Care Manager roles for both their clinical skills and their ability to improve the coordination of services in order to ensure more positive outcomes for individual patients' healthcare needs, and for the holistic focus which characterizes their professionalism. Essentially, the nurse Case/Care Manager represents a pivotal changing figure within the current healthcare settings because he is responsible to implement, diffuse, and offer to the patients a new care system.

He takes care also about financial aspect. In this sense, Barbieri (4) emphasizes that "The financial role, in collaboration with physicians and other members of the clinical team, ensures that patients will not receive inadequate treatments and it maintains the allocation of appropriate resources for the length of the hospitalization. It works to avoid unnecessary duplication or fragmentation of the planned activity, so as to produce the best distribution and sharing of resources."

Therefore, it seems more and more important to make sure that an effective rights-based management of the healthcare system will not affect every patients' needs for care. According to the abovementioned studies, a Case/Care Manager could actually manage to ensure effective and proper care and assistance for patients and their families while ensuring an efficient and careful use of healthcare system resources.

A qualitative research was used to examine the nurse Case/Care Manager's role in critical care (ICU). The main aim of the present study is to map the specific competences of the Case/Care Manager in ICU with a qualitative comparative study between two different organizational contexts: a setting in which a Case/Care Manager is already operating and a setting in which there is no Case/Care Manager. The comparative study aims to evaluate the Case/Care Manager's activities, assessment, other health professionals' expectations, and inter-professional relations. Evaluations regarding whether a Case/Care Manager's professional skills in a specific critical area are effectively significant or not were assessed on caregivers', nurses' and doctors' answers to specific questions regarding:

1. the continuity of care and the coordination of care setting;
2. the role of a reference during the entire patient's treatment and hospitalization;
3. the level of integration and communication within the multidisciplinary clinical staff.

The final aim of the present study intends to obtain a summary of the competences of the Case Care Manager in two ICU in the Emilia -Romagna Region. In the near future, the gathered data may certainly initiate a mapping of competences of the Case/Care Manager role at a national level.

Method

Model of research

In 2005, Levati and Saraò (5) defined the *role* as a set of behavior indicators, which include activities, expectations, and integration demanded by the organization's culture. This concept, meant as a system of expectations related to the organizational culture and highlights both human resources and actions that are crucial for any specific development. It emphasizes also the interaction between different professionals to ensure the patient care.

The role is a behavioral model that satisfies the organization's potentials and its expectations of the patient. It manifests in various ways according to the contextual needs, since the competences of each role do not involve just the individual role's holder, but also all the correlated roles; in fact, for one same position there may be different expected behaviors. The methodology that has been used is defined as competency mapping - a valid, observable, and measurable list of the knowledge, skills, and attributes demonstrated through behavior that allows an organization to survey an individual performance in a particular work context (5). The subjects investigated have been chosen based on the premises of the concept of *role*. The methodology is defined as a "System of Expectations" aimed at achieving results in a manner that is consistent with the organizational expectations and desired behaviors of the Case/Care Manager.

The areas examined by this study are the activities attributed to the Case/Care Manager, which include

the perception of the individual who must review the role of the Case/Care Manager; the expectations of the various professionals with whom the Case/Care Manager interacts; and finally what kind of professionals the Case/Care Manager relates with and why.

Context

Two contexts have been taken into consideration. Both operating units provide intensive care and are located in the same region, Emilia Romagna. However, they do present a different organizational structure: the ICU in Piacenza is based on a primary nursing system while the ICU in Cesena centers on a Case Management approach, a natural evolution of primary nursing.

The first context we investigated was the Anesthesia and Resuscitation Department of the hospital in Cesena that includes two divisions, still structurally and functionally separated and distinct. On the one side, the Anesthesia and Resuscitation Department, also called Neuro-resuscitation, has a total of eleven available beds. It manages a network of complex activities (major trauma management, management of urgency of care, and neurosurgical and neuroradiological approach) which requires, according to Hub's and Spoke's model, a high level of technology and multiple areas of professional expertise. On the other side, the Anesthesia and ICU, also called "Ati-polivalente," with five beds, which provides intensive care, resuscitation, monitoring, diagnostics, and therapy for patients with pathologies seriously compromising their vital and acute surgical functions. In both departments the strength in the management of the patient is represented by an integrated medical-nursing care and team-work that involve various professionals.

The second context we examined was the Cardiology Department at the "Guglielmo da Saliceto" Hospital of Piacenza, Italy. This particular division treats cardiovascular diseases, and specializes in interventional treatment of coronary syndromes and arrhythmias, implantation of electrical cardioversion, and management of patients with heart failure. This division has only one room with six monitored beds and two single monitored boxes that can provide dialysis and invasive ventilatory assistance. The unit helps patients with acute heart failure by providing a

staff specialized in interventional procedures; it offers a hemodynamic management 24/7; it provides online service to diagnose and treat arrhythmias; and it ensures an adequate outpatient service to contain the wait list. Furthermore, it is committed to providing high quality services in order to reduce the migration of patients (i.e. passive mobility) outside the district, while increasing services at points of care (i.e. active mobility) and to guarantee cardiac surgery in collaboration with the Cardiac Surgery Department of Parma, Italy.

The abovementioned settings have been chosen for this research because they present some similarities in organisation, structures and medical staff service. However, they also present some differences that could have been used effectively for the purposes of the present research. In particular, in Cesena Hospital critical area, a Case/Care Manager has been appointed whereas in Piacenza Hospital critical area a Case/Care Manager has not been appointed yet. Therefore, it has been utterly useful to investigate how a Critical Area environment works differently with/without a Case/Care Manager.

Participants

To select the participant we employed a purposive sampling based on the organizational characteristics of each facility, including nurses, doctors, coordinators, caregivers and representatives of nursing managers' offices. The selection of the participants was based on the analysis of the organization chart.

All nurses, doctors, coordinators, UAPs, caregivers of the two divisions who were willing to participate, took part in the project, without any contractual or gender differentiation. Some representatives of the nursing manager's office participate in the project too.

Staff members who did not consent, students, new hires, or post-graduates were excluded. After being carefully informed about the project, the participants voluntarily agreed to this study by signing a waiver form.

A total of 28 participants (18 female) were divided in:

1 nursing coordinator, 3 Case/Care Managers, 4 nurses, 4 doctors, 1 nursing staff member (from nurs-

ing manager's office), 3 caregivers of Anesthesia and Resuscitation Department of the "M. Bufalini" hospital in Cesena;

1 nursing coordinator, 3 nurses, 3 doctors, 1 nurse's aide (UAP), 1 nursing staff member (from nursing manager's office), 3 caregivers of Cardiological Intensive Care Unit of the "G. da Saliceto" hospital in Piacenza.

Instruments

For the present survey, the organogram of the two divisions (also called "O.U." – *Operational Unit*) has been used among other tools in order to clearly identify the participants based on the hierarchical relations among their roles.

For the purpose of the study, semi-structured interviews, based on Levati's model (5), were conducted with selected personnel from each hospital in order to allow the researchers to develop a keen understanding of the interviewees. The gathered data regarding patients and caregivers have been processed anonymously only mentioning the context and role.

The data collection, carried out in the Operating Unit of Piacenza, focuses on the organized interview to those who represent the same professional figures in Cesena due to collect data, concerning the Case/Care Manager's expectations and wanted skills. The Case/Care Manager's professional figure should be essential to guarantee the quality of service in the operating unit of Piacenza where, up to now, there isn't one.

Later the obtained data have been organized to confront and give a full comparison of the two study settings, highlighting organization and roles.

In this way, the Case/Care Manager's professional role is essential to solve problems in a critical area.

As a matter of fact 4 points are contemplated for every O.U. activity, judgment, expectations, interpersonal relationship between the Case/Care Manager and the medical staff.

Each persons interviewed has been questioned on the four abovementioned aspects of the research by asking them at least from 7 to 10 questions about how they considered the Case/Care Manager professional, what kind of skills they wished the Case/Care Manager has to develop and how they hope the Case/Care

Manager could improve in a critical area healthcare environment.

Subsequently, in order to fully explain the data collected, it has been chose to organize every interviewees' answers in an essay.

Data analysis

In the qualitative analysis of the data, we show the contents that emerged from the examination of the interviews in the two contexts. The analysis is based on the research team's collective reasoning. For each division four aspects have been considered: A. activity, B. assessment, C. expectations, and D. inter-professional relations.

The data obtained from different subjects were then compared to reach a more uniform and complete interpretation.

As for the qualitative analysis of the system of expectations, the contents that emerged from the analysis of the interviews in the two contexts were classified according to the interviewee's point of view regarding his/her expectations. Each participant was asked to express not only his/her expectations for the role under examination, but also the expectations for all the people with whom the Case/Care Manager interacts.

We used grid codes aimed to include a thorough description of each one of the four analyzed contexts based on unaltered examples taken from transcripts. The analysis of the content is limited to the most common words leaving room for a subsequent quantitative analysis, which allows one to calculate and compare contents (6) of the interviewees' answers.

Results

The summary and the categorization tables developed through the data collection helped to identify the ideal Case/Care Manager's professional profile.

It has been clarified by the interviewees that the Case/Care Manager should have concentration, talent, work organization, coordination towards the other professional figures in the ward. The Case/Care Manager should also have natural capabilities of empathy and mediation as he/she mediates between patients

and their relatives, doctors and health officers encouraging contact and explanations regarding healthcare procedures and therapies.

This professional figure of the Case/Care Manager is very essential in the Intensive Therapy setting because he/she controls treatment and how to explain it to patients and their families, working together with the doctors to look for a suitable treatment.

The comparison between the two contexts has shown that in Cesena the activities/tasks of the Case/Care Manager are homogeneous and can be gathered together in for main areas in relation to: total patient care; family with mediating and reference roles; the medical team as coordinator among people and professionals involved; and the organizational structure whose activities include diagnostics/care planning and correct exchange of information.

Although it is not clear who should be in charge of assessing the Case/Care Manager: it is often mentioned that the nursing coordinator should supervise him/her.

In Piacenza, the activities and tasks expected from the Case/Care Manager are not only technical and professional but also involved patients, relatives, and caregivers in order to be aware of the specific characteristics and background of the patient.

Essentially, the Case/Care Manager's activities comprise the coordination of the patient's hospitalization until the complete discharge, such as a health-related activity but with managerial characteristics.

Regarding the question of who should assess the Case/Care Manager, the gathered data do not provide a clear answer.

The gathered data from the interviews conducted in the two divisions allow us to identify a few similarities. Since the ICU in Piacenza does not list among its personnel the Case/Care Manager professional, we can confirm that the activities assigned to this role are in line with those performed by the Case/Care Manager in Cesena. They include, specifically taking charge of the patient and family; coordination of the patient's treatment until discharge; avoiding repetitions and filtering information; care continuity to avoid repeated hospitalizations; and personalized assistance.

The expectations stress, in both contexts, the usefulness of a Case /Care Manager within the new health

environment which aims to reduce health care costs and provide correct management of available resources without compromising the patient's therapeutic procedures. The points of view of the two coordinators in their respective contexts agree with each other when it comes to the intensity of treatment, the priority given to the patient, and his course of treatment. For the doctors in both divisions the professional skills of the Case/Care Managers are equal.

In terms of relations/communication, we may notice that the actual role of the Case/Care Manager in Cesena is not so different from any professional operating in Piacenza. In Cesena the Case/Care Manager interacts with and relates to a registered nurse ensuring a constant assistance to the patient while avoiding incomplete and disconnected communication, exactly like what a Case/Care Manager in Piacenza would do. The communication with doctors is privileged even when sharing and facing difficult choices. The planning and the organizational management would be smoother in Piacenza if assigned to a Case/Care Manager. In both contexts the organization focuses on the needs of the patient, family, and on the responsibilities that come with them.

Some general aspects which differentiate the two contexts, are the fragmentation of work within the division in Piacenza and the patient's management, from hospital admission to discharge, in terms of difficulties in supporting relatives within the structure. The continuity of care, the staff and relatives' support and patient-centered care are also aspects that differentiate the data of Cesena from the data collected in Piacenza. The expectations that the Case/Care Manager would have in Piacenza are fairly high because he/she would have to fill the gaps that an organization based on primary nursing presents. What is most striking in the data gathered from the interviews in Cesena is the personnel's and caregivers' positive response to the fluency in managing the patients. This fluency ensures continuity of care by caregivers, management of complex needs of patients and patients' significant others, patients' access to and continuity of the care process, and helps to maintain civil, affable relationships among professionals.

Conclusions

This study highlights the urge to review operating practices and consolidated habits that are no longer adequate to the context, and to the changes of patients' and population's needs to guarantee continuity of care for patients with fragile medical conditions.

This can be achieved by introducing health care professionals responsible for formulating a coordinated, comprehensive plan for patients who need long-term health care supervision, as the Case/Care Managers.

An additional reflection concerns precisely the introduction of this professional within a multi medical specialists unit in acute care. The vast range of competencies of the Case/Care Manager within the multidisciplinary team could be perceived as an overlapping role and it could be confused with the role of other professionals. For instance, it could be problematic to differentiate between the role of a Primary Nurse and that of a Case/Care Manager.

Therefore, it would be useful to draw a profile and formulate a list of tasks and competences of the Case/Care Manager in ICU in order to better integrate the Case/Care Manager within the ICU team of professionals.

It would be recommended to explain the role of the Case/Care Manager and the assessment criteria in order to avoid a misrepresentation of the role of this professional figure.

The most relevant consideration concerns the "perception of quality." The comparison between the two almost identical contexts analyzed shows how a patient-centered care approach, typical of the Case/Care Management, translates into a more positive perception of that facility.

The constant presence and availability of a figure of reference would definitely improve the patient's and family's awareness of the treatments received as well as their evaluation of the health care facility. In the acute phase of critical illness, characteristic of ICU patients, it would be important to arrange for patients and families some dedicated time without interfering with the procedure of the therapy. Despite the professionalism of each staff member in both locations, the presence of one constant point of reference seems to be indispensable for the patient and

family members to understand and adapt to such a difficult situation.

Furthermore, we ascertained that the presence of the Case/Care Manager has improved relationships, communication, and bond among staff members while diminishing conflict and helping create a more constructive environment. With this in mind, we can say that even though we have not directly analyzed the degree of user or team satisfaction to identify a qualitative indicator, we can observe that, with the introduction of the Case/Care Manager, the outcomes in relation to organization, clinical care, patient, family, and team satisfaction are positively influenced. This study provides useful suggestion to define the role and profile of the Case/Care Manager (tasks, competences, and operational areas) that could be implemented in future studies.

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Correspondence:

Emanuela Alfieri

Department of Medicine and Surgery,

University of Parma, Italy

E-mail: emanuela.alfieri@nemo.unipr.it

