Throughout history, different leadership models and definitions have been elaborated, depending on the different socio-cultural and geopolitical situations. Aristotle (367 - 322 BC) said: “From the hour of their birth, some are marked out for subjection, others for rule”; Nicholas Machiavelli (1469 - 1527) said: “A prince is not born a leader but has innate abilities to achieve and maintain power”.

Are leaders born or made? Some authors have devoted time to analyze whether leaders are born or made. We believe minimum qualifications are required to become an effective leader. Yet, leadership is the result of a personal maturity process. A manager says: “I have managed to launch a Unit”; a leader says: “We have contributed to transform the hospital Departments of Cardiology and Cardiovascular Surgery, and to include these Services in the European map.”

The leader “is made”; it is the business schools that turn a manager into a leader: “I’m sending you a manager, please send me back a leader.” This is a titanic endeavor that sometimes turns out unsuccessfully; preparing a new leader is difficult.

How is a leader defined? There are as many definitions of leadership as the number of people who have attempted to define the concept of leader. A leader is like beauty: difficult to define, easy to recognize. A leader is the person who guides others to achieve a common goal.

Undoubtedly, life is full of great challenges! A leader is someone who is willing to take risks and innovate! Changing the management style motivates employees and increases productivity. Negative atmosphere and lack of motivation are important causes of absence from work. A good manager (leader) is surrounded by competent people, and lets them grow professionally. Leadership is not granted but conquered.

Steve Jobs said: “A leader is able to lead his people beyond what he himself believes he is able to reach.”

Leaders –as chess players– are forced to play and solve simultaneous games under pressure. They do not follow a linear behavior or a strict schedule of duties. On the contrary, they have learned to move around, connect, relate, explore the same topic, reorder priorities, or make mid-course adjustments. Leaders have a sort of double “vision”, because they have to manage the present and visualize the future at the same time (see picture at the end).

What is leadership? It is the ability to influence a group to achieve goals. It is the ability to communicate with others to gain their cooperation and support.

Leadership is made up of a triangle with three interrelated vertices: the leader, the followers, and the goal or mission that brings them together.

Wikipedia defines leadership as the set of management skills a person has to influence people, encouraging them to work enthusiastically as a team in order to achieve goals.

To talk about leadership, it is very important to consider these three vertices for two reasons: they highlight that leadership has nothing to do with a position but with a process, but also with a relationship and a project. Therefore, we prefer to talk about leadership, not leaders.

An effective leadership takes into account four factors: 1) The human quality and skills; 2) the interaction with collaborators or followers; 3) the project’s worth; and 4) the success of the decision taken and the results to achieve the goal.

Leadership (a complex and dynamic process) should not be confused with leader (vision of change, thinking about the future).

There are multiple forms of leadership: social, political, and business leadership. The latter must be associated with the quality of services.

The leader is responsible for management and encourages the group through a vision. The vision should be innovative and feasible, allowing for the creation of a future project with tangible results.

What is the difference between managing and leading? The present is managed (management) the future is led (leadership).

A leader encourages and facilitates the process of
change in the organization. A leader is an entrepreneur, an innovator with disruptive creativity. A leader renews. The manager organizes, makes plans and coordinates.

A great leader should have greatness, as Socrates, Buddha, Kung Tse, Confucius, or Jesus Christ.

What are the skills of a good leader? Technical skills (knowledge), conceptual skills (ability to understand and to work in teams), and humanistic skills (empathy, sensitivity to interact with the group and the people).

The Washington Post defines leaders with six qualities: 1) Courage and boldness; 2) Honesty and integrity; 3) Humility (learning from mistakes); 4) Absence of narcissism or selfishness; 5) Empathy (emotional intelligence); and 6) Collaboration (teamwork).

Leadership inspires and motivates others toward the goal of the organization, giving meaning to their work. Leadership is development. Ricardo Mutti, director at La Scala in Milan (1986-2005) was a clear example of leadership.

Do not speak of “I” but of “We”. Change “Me” by “We”.

Finally, the decalogue of a good leader can be defined as: Working capacity, human relations skills, political skills, good negotiator, foresight, passion in what he does, integrity, curiosity, risk, and driving force of change.

Insights on leadership. Leadership is one of the concepts which have raised more passion since the times of the Greeks up to the present day. The success of a team begins with full confidence in their leader. People no longer want bosses but leaders. Leaders are the true driving forces of change.

Leadership and healthcare. Leadership affects the quality and even the safety of patient care. Leaders are needed at all times, but the need is essential in times of crisis. Healthcare must pervade society; investing in healthcare implies prevention, protection, and promotion and innovation in management must have a cross-disciplinary approach.

Leadership and management of changes. An effective leader should manage changes and step outside the comfort zone.

IBM’s decline was not the result of a decrease in the demand for computers, and Pan Am did not disappear because people stopped flying. Rather, the failure of these companies was their inability to see or respond to their own changes.” Dinosaurs lived for 160 million years and went extinct because they did not adapt to changes.

A modern Department of Cardiology or Cardiovascular Surgery should be built upon four pillars: assistance, teaching, research, and marketing. The latter gains importance in the era of new technologies.

One day, a patient told me: –Doctor, how come that you –being who you are– earn less than Lionel Messi? I replied: –When I’m operating on a patient, at most, only the anesthesiologist is watching what I do; when Messi plays football, millions of people watch him. Marketing is essential for the Departments of Cardiology and Cardiovascular Surgery.

Leadership includes a deep analysis of the “Self”, of its values, attitudes, and emotions. Managing one self. Most of us will have to learn how to manage ourselves. We have to place ourselves where we can make the greatest contribution. That is why we must ask ourselves: Which are my strengths? How do I work? Which are my values? Where is my place? How should I contribute to the organization?

A leading formula from expert to manager is the “H2”: Do and let do; each of the members of the team should have a part of the ‘cake’ to develop themselves (Figure 1). Generosity is necessary to grow; otherwise, one may die of success.

Richard Foster and Sarah Kaplan estimated that in 2020, successful companies will only last for a decade and that more and more companies will manage to survive and fewer companies will stand out from the others.

All companies (Departments) have a process of evolution-revolution, going through different stages in time: crisis of leadership, of authority, of control, of growth, or identity crisis.

Proposal for a change. What culture do we want in our company? Knowledge-based or client-based culture? It is the well-known scale of values of institutions. Healthcare is all about the patient (sometimes, politicians do not understand it). An example was David Beckham hired by the Real Madrid. They were considering hiring Ronaldo de Assis Moreira (Ronaldinho) or Beckhan. But money and not knowing how to play football prevailed. In the first year, only in China millions of Beckhan football T-shirts were sold, more than paying for his signing in.

Driving the change can be a definitive test for an

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Fig 1. A new concept in leadership has emerged: technager, which is the sum of expert technician and leader (manager), together with technical knowledge.
effective leader. No Department of Cardiology or Cardiovascular Surgery survives in the long run if it is not able to change and reinvent itself. But human nature resists any change.

Personal resistances to change: a) We have tried it before but it did not work; b) We do not have time or resources; c) You cannot teach an old dog; d) I am afraid of looking ridiculous; e) We have managed without it for a long time; f) Let’s set up a working group; g) It will not work in our department. Ultimately, not stepping outside the comfort zone.

Quality. The quality of a Department of Cardiology or Cardiovascular Surgery goes hand in hand with an effective leader.

Let’s talk about quality. We, physicians, strive for excellence in our medical practice. Quality medicine, don’t you agree?

Quality is not only an essential element when talking of competitiveness and sustainability of the organizations, but also an objective parameter that measures patient guidance and care.

What is quality? Quality of care consists in applying medical science and technology to improve population health and quality of life.

It means doing what is correct, in a correct way; it means good assistance, teaching and research. It means always improving and innovating; it means ongoing assessment of our patients’ satisfaction (clients).

Quality is not fashion but a need: it is the means to achieve the best results in healthcare through its different processes.

Quality is a strategic element on which transformation and improvement of the healthcare systems are based on.

What does quality consist of? Low operative mortality, low perioperative complication rate, good postoperative quality of life, and positive long-term outcomes. Low mortality rate in acute myocardial infarction and low rate of complications in a coronary intervention. Experience and number of procedures performed by the team, the cardiologist or the surgeon, are indisputable features of good quality.

Quality should be ensured not only in procedure indication but also in surgery or angioplasty. We need reliable databases.

It is well documented that coronary artery bypass surgery is better than stent to treat patients with multiple vessel disease, particularly in diabetic patients. However, stent is still being indicated, lowering the quality of revascularization.

The IDIS Foundation (Institute for the Development and Integration of Healthcare) evaluates the quality of healthcare in hospitals. It acknowledges the excellence of healthcare centers through an Auditing Committee (www.acreditacionqh.com).

The ranking of the most efficient healthcare systems worldwide performed by the Bloomberg Agency reveals that Singapore is in the first place, followed by Hong Kong and Italy. In 2013, Spain was in the 5th place, in 2014 it was in the 14th place (increased waiting lists, etc.), Germany was in the 23rd place, USA in the 44th, and Brazil in the 51st.

The Spanish National Health System (NHS) is a high-quality institution in which innovation, industry, and professionals are interconnected. It is necessary to involve professionals and patients in hospital quality management.

The general purpose of quality is to improve healthcare in the Departments of Cardiology or Cardiovascular Surgery, and that it can be perceived by the population (perceived quality).

What is the quality challenge? To have equity, to be efficient, and to develop interinstitutional policies.

Equity. Addressing those who need it most, the most vulnerable groups. The Spanish NHS is universal and gives access to all citizens, irrespective of their social status. Equity is a challenge!

Efficacy. To achieve the goals with the lowest cost of available resources; sometimes, we are inefficient. We need a sustainable health system.

Interinstitutional policies. They are stated by the healthcare authorities: time in waiting list, time of operating room use, postoperative unit stay, total stay, time from AMI to primary angioplasty, etc.

What do organizations measure when committing to the development of their leaders? Business results 57%, retention and loyalty of employees 56%, employee satisfaction and commitment 54%, promotion of graduates to new positions 25%, client satisfaction 16%, and reputation and brand image 12% (source: global study on trends, development, and leadership).

Which are the basic principles associated to quality? 1) Leadership (it is the lever for success in healthcare organizations). 2) The people (doctors, nurses, health personnel) are the only ones who can change healthcare. 3) User focused. 4) Drawing up protocols of all the healthcare processes. 5) Enhancing clinical management. 6) Continuous improvement and quality assessment.

Which are the main actors in quality? Patients, workers, institution. That is the order of importance (order of values); the level of quality of the institution is given by the workers. The patient must be at the center of the healthcare process.

Why is quality important in Cardiology and Cardiovascular Surgery? It improves user and worker satisfaction. It improves the relationships and teamwork. It improves the use of available resources and reduces morbidity and mortality.

Innovation is essential to improve healthcare quality; we want smart and safe healthcare.

A big yes to culture based on results: Departments should publish the results in medical journals and in the hospital website; transparency of results is vital.

A big yes to participation in registries for different diseases. It is essential to use surgical risk indexes with previous validation (EuroSCORE I and II).
Comparing results among the different departments or surgeons is the driving force to improve quality. What is quality measurement of our actions for? For improvement. It is a patient’s right; it is an obligation we have with our patients. Measuring quality improves the healthcare system.

**Reasons to provide a quality healthcare service:** ethical, safety, and efficacy reasons.

**Ethical reasons.** Quality is the main exponent of respect to patients. Quality is ethical. How can we influence in the civil, professional and organizational society so that medical actions are done within the scientific consensus? Ischemic cardiomyopathy is a clear example, for which guidelines on clinical practice, approved by professional consensus, are not applied. Therefore, we must influence on the civil society spreading the word about the advantages of cardiac surgery.

**Safety reasons.** Quality must be assured in facilities, procedures and treatments. Highly qualified staff: Continuous education of professionals. Prevention and protocols of all the healthcare processes avoid errors and improve quality.

**Efficacy reasons.** Increased efficacy and lower costs do not necessarily mean more technology. Lower consumption of available resources. Motivation and effort of the teamwork improve quality and lower costs. Illusion (commitment to the hospital or department, and its defense).

**Quality perceived by patients.** Unfortunately, healthcare is oriented not to people but to processes (protocols): clients-patients. The physician’s ethical obligation is to take care of the patient, strive for efficacy and healthcare quality; quality and efficacy go hand in hand.

When the patient comes to the hospital, he is ill and in distress. The relationship should be personal, meticulous and not adjusted to a protocol. Sometimes, you are requested some information, such as what health coverage the patient has and whether he can pay the bill, and the least important is the patient, the client; the quality as perceived by the patient will be crucial for the Department’s recognition and growth. If the patient leaves dissatisfied, it will cast a negative light on our Department.

**Who should measure quality?** The Ministry of Health? Independent organizations? Scientific societies? Or the one who pays the bill? Measuring quality is not auditing. It is well known that measuring quality to know where we stand with respect to others improves the results.

**Coordinating nurse of healthcare processes.** The role of the coordinating nurse is the cornerstone in the organization of cardiac surgery. The coordinating nurse is the link among physicians, patients, and their families, and accompanies patients before, during, and after surgery.

The healthcare system is a real puzzle (Figure 2).
The Spanish Society of Cardiology, the Spanish Society of Thoracic and Cardiovascular Surgery, and the European Society of Cardiology are working on two projects: Incardio and InnovaSEC.

**Incardio:** Its purpose is to evaluate the quality indicators of the NHS. Measuring to compare quality is necessary; if what we do is not measured and compared with other Departments, we cannot talk about quality. Quality is an ethical and strategic commitment.

**InnovaSEC:** Participation in the use of new technologies in the NHS; we must differentiate and support innovation that adds value to our patients.

The Spanish Ministry of Health published a consensus report in 2011 with the following recommendations:

Most of the surgeons in the Departments of Cardiovascular Surgery should have European certification. Regarding the number of surgeons and surgeries per Department, at least 600 cases per year should be performed, excluding congenital heart diseases. A registry of activities and results should be kept. Anesthesiologists specialized in heart surgery. Independent unit for postoperative cardiac patients. Analysis of risk-adjusted mortality. Clinical and mortality sessions of all patients.

Reoperation for bleeding lower than 5%, surgical wound infection lower than 7%, and mediastinitis lower than 2%. Mechanical ventilation <48 hours is recommended in most patients.

High percentage of patients with mitral regurgitation undergoing mitral valve repair. Complete coronary artery revascularization with arterial grafts is recommended for all patients.

In conclusion, quality in Cardiology and Cardiovascular Surgery is the responsibility of all of us.

**Conflicts of interest**

None declared. (See authors’ conflicts of interest forms in the website/Supplementary material).