



SPECIAL ARTICLE

Document on the state of affairs of the Spanish model of Intensive Care Medicine. SEMICYUC Strategic Plan 2018–2022[☆]



P.M. Olaechea Astigarraga^{a,*}, M. Bodí Saera^b, M.C. Martín Delgado^c, M.S. Holanda Peña^d, A. García de Lorenzo y Mateos^e, F. Gordo Vidal^f, on behalf of the Grupo de Trabajo de Planificación, Organización y Gestión de la Sociedad Española de Medicina Intensiva, Crítica y Unidades Coronarias (GTPOG-SEMICYUC)

^a Servicio de Medicina Intensiva, Hospital Galdakao-Usansolo, Galdakao, Vizcaya, Spain

^b Servicio de Medicina Intensiva, Hospital Universitario de Tarragona Joan XXIII, Tarragona, Spain

^c Servicio de Medicina Intensiva, Hospital Universitario de Torrejón, Torrejón de Ardoz, Madrid, Spain

^d Servicio de Medicina Intensiva, Hospital Universitario Marqués de Valdecilla, Santander, Spain

^e Servicio de Medicina Intensiva, Hospital Universitario La Paz-Carlos III/IdiPAZ, Madrid, Spain

^f Servicio de Medicina Intensiva, Hospital Universitario del Henares, Coslada, Madrid, Spain

Received 19 April 2018; accepted 23 April 2018

Available online 9 November 2018

KEYWORDS

Intensive Care Medicine;
Spanish model;
Strategic plan

Abstract The role of Critical Care Medicine in Spain requires continuous revision and reflection. We have values and strengths that are evidenced in our daily work and by their important effects in routine hospital activity. Other medical specialties seeking to assume activities referred to critical patient care, as well as a number of other circumstances, may have a negative impact upon our routine duties.

This article reflects the impressions of an important number of members of the Planning, Organization and Management Task Force of the Spanish Society of Critical Medicine Society (*Grupo de Trabajo de Planificación, Organización y Gestión; GTPOG-SEMICYUC*). The actions required to upgrade our Critical Care Medicine model are presented, evolving towards a broader view such as the 'ICU without walls' or 'Expanded ICU'. The subject is addressed from three complementary standpoints: actions involving the administrative authorities; actions required on the part of our scientific Society; and initiatives to be implemented locally in each Intensive Care Unit (led by the corresponding Unit representatives) at both hospital level and involving the regional authorities.

© 2018 Elsevier España, S.L.U. and SEMICYUC. All rights reserved.

[☆] Please cite this article as: Olaechea Astigarraga PM, Bodí Saera M, Martín Delgado MC, Holanda Peña MS, García de Lorenzo y Mateos A, Gordo Vidal F, et al. Documento sobre la situación del modelo español de Medicina Intensiva. Plan estratégico SEMICYUC 2018-2022. *Med Intensiva*. 2019;43:47–51.

* Corresponding author.

E-mail address: pedromaria.olaecheaastigarrag@osakidetza.eus (P.M. Olaechea Astigarraga).

PALABRAS CLAVE

Medicina Intensiva;
Modelo español;
Plan estratégico

Documento sobre la situación del modelo español de Medicina Intensiva. Plan estratégico SEMICYUC 2018-2022

Resumen El modelo español de Medicina Intensiva requiere una revisión y reflexión continuas. Tenemos valores y fortalezas que se concretan en nuestra actividad y en el importante papel que realizamos a diario a nivel hospitalario. Otras especialidades pugnan por compartir actividades de cuidados del paciente crítico y otras circunstancias pueden hacer mermar esa actividad.

Este artículo es el reflejo de la reflexión de un importante número de miembros del Grupo de Trabajo de Planificación, Organización y Gestión de nuestra Sociedad (GTPOG-SEMICYUC). Se afrontan las acciones que se deben llevar a cabo para la actualización del modelo de Medicina Intensiva, hacia un modelo más abierto de UCI sin paredes o UCI extendida. Se aborda desde tres puntos de vista que deben ser complementarios: las acciones a nivel de la Administración, las acciones a nivel de nuestra Sociedad Científica y las llevadas a cabo por cada uno de los Servicios (liderados por sus representantes), tanto a nivel hospitalario como a nivel de las autoridades sanitarias en cada comunidad autónoma.

© 2018 Elsevier España, S.L.U. y SEMICYUC. Todos los derechos reservados.

In a recent meeting held by directors of Critical Care Units (CCU) the actual healthcare model of Intensive Care Medicine was discussed. There was an interesting debate on the strengths and weaknesses of our medical specialty, the future perspectives and what contributions can modern Intensive Care Medicine make to the actual healthcare model when it comes to implementing the actual social, technical and structural advances. Another meeting held by members from the Planning, Organization and Management Task Force of the Spanish Society of Intensive and Critical Care Medicine and Coronary Units (GTPOG-SEMICYUC) discussed the different initiatives that are being implemented in various centers and the possibilities of change in the light of new concepts in the management and use of the technological resources available today. The present document sums up the points of view of different GTPOG-SEMICYUC members who reflected on what direction should the actual model of our specialty take in our country in the near future.

The main trait of the medical specialty of Intensive Care Medicine is its transversality. Something it shares with these two medical specialties: Family Medicine and Internal Medicine.^{1,2} This makes Intensive Care Medicine share a common ground with all the other vertical specialties when it comes to patient care in the hospital setting. Thus, at one time or another, the common ground it shares with these other specialties can affect patient care, which requires the collaboration of all healthcare providers involved to provide the best possible healthcare for critically ill or potentially critically ill patients.³

Nowadays, it is a fact that we do not need that many highly invasive devices since they are being replaced by less invasive techniques that can be used in an increasing number of less critically ill patients.⁴ After being admitted to different hospital units, patients may require less monitoring and less personnel, which has led to the proliferation of intermediate care units specific to other medical specialties. Stroke units or cardiac care units are examples of respiratory intermediate care units. The threat to our specialty here is obvious and has to do with the growth and expansion

of these units at the expense of less activity in the CCUs. However, the consequences of having these units are also known: incomplete patient care and higher costs (due to planning without global perspectives, duplicity of responsibilities, and lack of standardized healthcare processes).

The fact that this situation has been going on for a long time and that it changes from one hospital to the next makes it necessary to identify the options that guarantee the ongoing quality care of critically ill patients. Also, we need new models and different opportunities to keep our service portfolio alive and maintain our specific weight as a predominantly hospital-based medical specialty. Although solutions will be local, we wish to contribute the thoughts and reflections of our group in an attempt to change the actual paradigm in our medical specialty model.

CCUs need to adapt themselves to the characteristics of the hospitals they belong to with different sizes and very different organizations based on the complexity of the CCUs, the service portfolio and the existence of other medical specialties. This makes that the very function of CCUs, oriented towards the care of critically ill patient, cannot be carried out always the same and requires other models, different sometimes, to offer added value within the organization.

Values and principles in Intensive Care Medicine

What should distinguish our specialty from other medical specialties whose main goal is the management of critically ill patients (or at risk of being critically ill patients) are our values that can be summarized into these:

- Competences (knowledge, skills and abilities): based on our teaching and continuous medical education (CME) team and supported by SEMICYUC Task Forces in collaboration with the Spanish Society of Intensive Nursing and Coronary Units (SEEIUC).
- Availability and opportunity: anytime, anywhere.^{5,6}

- Diversity: possibility to handle all medical or surgical conditions in critically ill patients within the global management of patients.
- Quality in all dimensions: always patient-based effectiveness, efficiency, safety and opportunity. We provide quality and we wish to evaluate the quality we provide for quality-planning purposes.^{7,8}
- Proactivity: both during healthcare and in keeping our values. Capacity to drive new healthcare processes.
- Leadership: the 360° view of the patient allows us to condition and match the efforts of our healthcare providers with the efforts of other specialists in the decision-making process for the benefit of critically ill patients.⁹
- Team work: there are too many of us taking care of the patients, which is why we have to team work in a multi-disciplinary way.¹⁰

The implementation of these values is complementary meaning that no value can be implemented isolated from the others.

Updating the model

Each hospital and each CCU is different. Each place requires unique solutions based on the service portfolio and patient population of each hospital where balancing the different competences has been the standard practice to date and conditioned the present time. We believe that positioning ourselves against unqualified practices from other medical specialties should be approached from three different levels.

The administration

We need to inform state and autonomous administrations of how important our values really are and distinguish our specialty from other medical specialties. We need to let the Spanish ministries know about how core subjects can influence our residents' training and ultimately how interrelated our medical specialty is with other medical specialties with which we can build alliances or disagree. The limits and functions of our specialty can be explained at this level, which is why we should take an active role in the process of change when it comes to new models of teaching medical specialties whether through core subjects or any other way. Without a doubt, it is the representatives of our scientific societies (SEMICYUC and GTPOG) who should represent the interests of our medical specialty and guarantee the existence of specialists with enough competences to assist the critically ill patient in the best possible way.

Also, we need to explain our competitive values to all autonomous communities. Health districts have the authority to make decisions such as create new ICUs without the presence of intensivists; define common health policies for the entire network of hospitals that will in turn set the limits of one medical specialty with respect to another and accredit and designate the name that the units that take care of critically ill patients will have. Both the autonomous societies and the local directors of our units should raise their voices before these health districts in a proactive and

non-reactive way. We need to put on the table issues such as the availability of intensivists, their knowledge and our competence to conduct other activities that adapt our service portfolio to the actual needs of each hospital.

Scientific societies

Scientific societies, in our case SEMICYUC, are created to promote and put in the map the medical specialty and associates it endorses. Therefore, they play an essential role in several aspects such as the following:

- Look for legal support to outline the specialists' fields of action and spread the news among its associates.
- Tell the citizenship what the core of the specialty really is through informative campaigns, explain the reach of our medical specialty and that there are no ICUs without Intensive Care Medicine.
- Look for alliances among the scientific societies of other medical specialties.
- Advocate for the model of Intensive Care Medicine before the Spanish Ministry of Health, Social Services and Equality (MSSSI) and the corresponding health districts of all autonomous communities. Such a model proposes new service portfolios where the intensivists' role will be key at the hospitals.
- Open up a process of reflection on the possibility of accrediting ICUs to distinguish them from other units that may have a similar name to other medical specialties. Then only accredited units will be endorsed and these criteria will need to be promoted and implemented by the corresponding authorities of the autonomous communities (e.g. the specific legislation in force in the Autonomous Community of Madrid).¹¹
- Brief the MSSSI General Directorate of Professional Ordinance on the specialists' concerns on issues regarding overlapping specialties such as sedation; strokes; coronary patients; patients receiving non-invasive mechanical ventilation; etc.
- Promote efficient studies conducted by experts in the political economy of health that show the cost of healthcare models such as critically and semi-critically ill patient units not ran by intensivists.
- Promote that health districts and hospitals conduct comparison studies evaluating the impact that different healthcare models have on healthcare quality (in terms of safety, effectiveness, and efficiency).
- Promote the training and CME of the scientific society associates in areas of innovative competences that guarantee CME programs that are consistent with new technologies while implementing updated educational tools.
- Develop registries to evaluate the outcomes and strategic planning.
- Promote high quality research through Task Forces in an effort to develop multicenter studies and search for clinical trial funding through public and private competitive bids.
- Reach positioning through the active participation in international scientific societies – both European and non-European in an attempt to achieve strategic positioning and visibility.

- Make public knowledge of Intensive Care Medicine within the academic plan of college degrees and certificate degrees in Health Sciences (as it is already the case with some Spanish universities) where the comprehensive healthcare of critically ill patients should be an optional subject of the curriculum.

Hospitals

It is obvious that none of the aforementioned will be effective if we do not accomplish the most important thing – leadership at the hospital level. The Intensive Care Medicine competence map should be adapted to the characteristics of each hospital. The capacity to take good care of critically ill patients is based on the level of competence and compromise and commitment in this medical specialty.

A wait-and-see attitude with the critically ill patient is not acceptable. Planning quality healthcare can only happen if we have a global view of the patient and the opportunity to be involved early in the decision-making process and not wait for someone to give us a call. Therefore, we need to increase our service portfolio, look for and assist patients wherever they may be and detect those who may be at risk of getting worse. That is why leaders and service directors need to be leading this model change, their colleagues and, above all, the hospital management and representatives of the autonomous communities. CCUs need to proactively match the needs of the healthcare organizations they belong to by looking for solutions when the healthcare pressure is high using planned strategies that bring the right answer to timely demands by assisting patients outside our own units or avoiding cancelling scheduled surgeries.¹²

CCUs need to evolve outside the ICU setting. In many countries, Spain included, there are rapid response teams (RRT) consisting of one physician and one nurse who provide urgent care to all patients with acute events who require high-resolution consultations.¹³ This opens up the healthcare provided in Intensive Care Medicine to hospital patients too, which is a considerable change of mindset. These patients may never see the inside of an ICU but will surely benefit from our care and capacity to detect patients at risk of getting worse. The intensivist can and should treat critically ill or potentially critically ill patients outside the physical restrictions of the ICU. We should be providing the patients, the families, and the healthcare providers with open units and implement humanization plans that have already proven necessary following the impact and benefit they have had on the final outcome.¹⁴

The experiences of those CCUs that have already changed their service portfolio towards ICUs without walls or extended intensive care services (EICS) teach us that hospitals value this new approach^{15–20} which, on the one hand, gives us more control over the patients that will eventually be admitted to ICUs or intermediate care units and, on the other hand, makes us indispensable for the hospital management avoiding or minimizing the temptation to create other units. Therefore, we advocate for extending the scope of CCUs towards the hospital so that our healthcare can reach out to those patients who remain outside the ICU setting both prior to admission and after the patient has been discharged from the ICU.

The perspective we should take here is that RRTs are some sort of link between the ICU and the hospital floors by minimizing the healthcare imbalance that may occur when the patient is transferred from the thorough care provided at the ICU to the less intensive care provided at the hospital floor. This is another aspect we should take into consideration since it provides a new window of opportunity for intensivists to take action at the hospital setting and outside the ICU.

At local level, we can also develop other activities to increase our service portfolio. Sedation outside the ICU setting for short invasive procedures should not be at the center of Intensive Care Medicine, but instead conducted by intensivists in hospitals when needed. There is no legislation that prohibits it, since all physicians are responsible for their own acts regardless of their medical specialty and there is enough legal evidence backing this up. There is no question that we are fully capable of conducting short sedations while keeping all the values aforementioned. These patients should not be less important to us than the most complex ones. If we do it, we must do it right.

Circumstances and political decisions have limited the scope of our healthcare to potentially critically ill patients such as acute cardiac patients, those who suffer strokes, patients who require pacemakers, those who receive non-invasive mechanical ventilation, etc. At local level, we should understand that integration and non-dispersion in multiple units is more cost-effective. Also, at the hospital level, we should be aiming at other opportunities such as post-ICU syndrome consultations – of which we already have one experience in our country that has awakened the interest of health authorities²¹; parenteral nutrition in hospital floors; counselling on palliative care; need for a highly qualified technology (ECMO, MARS); cancer patients care, etc. We should encourage team work inside ICUs and CCUs not only looking to improve quality but also to engage all healthcare providers and reduce professional burnout rates.²²

These plans should be implemented every day and all intensivists should be engaged here at all time assuming that it won't always be easy to implement them and that there are no magical recipes for each center. Only when we understand that advocating for our medical specialty means we must all accept and play our own role we will be able to give younger residents and assistant physicians the future we all want to see that they also demand. Management guidelines say that our attitude should be based on three words: insistence, persistence and resistance. Let's go for it.

Conflicts of interest

The authors declare no conflicts of interest whatsoever while preparing and writing this manuscript.

References

1. Plan estratégico de los Servicios de Medicina Intensiva en el entorno de la libertad de Elección 2015-2019. Madrid: Subdirección de Gestión y Seguimiento de Objetivos en Hospitales Dirección General de Atención Especializada, Servicio Madrileño de Salud, Consejería de Sanidad, Comunidad de Madrid; 2015.

2. Leung S, Gregg SR, Coopersmith CM, Layon AJ, Oropello J, Brown DR, et al. Critical care organizations: business of critical care and value/performance building. *Crit Care Med*. 2018;46:1–11.
3. Marshall JC, Bosco L, Adhikari NK, Conolly B, Diaz JV, Dorman T, et al. What is an intensive care unit? A report of the task force of the World Federation of Societies of Intensive and Critical Care Medicine. *J Crit Care*. 2017;37:270–6.
4. Vincent JL, Creteur J. The hospital of tomorrow in 10 points. *Crit Care*. 2017;21:93, <http://dx.doi.org/10.1186/s13054-017-1664-7>.
5. Burchardi H, Moerer O. Twenty-four hour presence of physicians in the ICU. *Crit Care*. 2001;5:131–7.
6. World Federation of Societies of Intensive and Critical Care Medicine; Federación Panamericana e Ibérica de Sociedades de Medicina Crítica y Terapia Intensiva; European Society of Intensive Care Medicine; Sociedad Española de Medicina Intensiva, Crítica y Unidades Coronarias; Soci  t   de R  animation de langue Fran  aise. Santander Statement: Intensive Care Medicine. Patient-centered care for the critically ill; 2012. Available from: http://www.semicyuc.org/sites/default/files/santanderstatement_english.pdf [accessed 25.03.18].
7. Junta Directiva de la Sociedad Espa  ola de Medicina Intensiva, Cr  tica y Unidades Coronarias (SEMICYUC). Medicina Intensiva en Espa  a. *Med Intensiva*. 2011;35:92–101.
8. Mart  n Delgado MC, Gordo-Vidal F. La calidad y la seguridad de la medicina intensiva en Espa  a. Algo m  s que palabras. *Med Intensiva*. 2011;35:201–5.
9. Moreno RP, Rhodes A, Donchin Y. European Society of Intensive Care Medicine, patient safety in intensive care medicine: the Declaration of Vienna. *Intensive Care Med*. 2009;35:1667–72.
10. Palencia Herrej  n E, Gonz  lez D  az G, Mancebo Cort  s J. El futuro de la Medicina Intensiva en Espa  a. *Med Intensiva*. 2011;35:232–5.
11. Comunidad de Madrid. Orden 577/2000, de 26 de octubre, de la Consejer  a de Sanidad. Available from: http://www.madrid.org/wleg_pub/secure/normativas/contenidoNormativa.jsf?opcion=VerHtml&nmnorma=903&cdestado=P#no-back-button [accessed 25.03.18].
12. Mart  n Delgado MC, Gordo Vidal F. Intensive medicine services. How to add value to the surgical process? *Med Intensiva*. 2018, <http://dx.doi.org/10.1016/j.medin.2018.02.012>.
13. Hern  ndez-Tejedor A, Pe  uelas O, Sirgo Rodr  guez RG, Llompарт-Pou JA, Palencia Herrej  n E, Estella A, et al. Recommendations of the Working Groups from the Spanish Society of Intensive and Critical Care Medicine and Coronary Units (SEMICYUC) for the management of adult critically ill patients. *Med Intensiva*. 2017;41:285–305.
14. Heras La Calle G, Alonso Ovi  s A, G  mez Tello V. A plan for improving the humanisation of intensive care units. *Intensive Care Med*. 2017;43:547–9, <http://dx.doi.org/10.1007/s00134-017-4705-4>.
15. Jones DA, DeVita MA, Bellomo R. Rapid-response teams. *N Engl J Med*. 2011;365:139–46.
16. Abella   lvarez A, Torrej  n P  rez I, Enciso Calder  n V, Hermosa Gelbard C, Sicilia Urban JJ, Ruiz Grinspan M, et al. Proyecto UCI sin paredes. Efecto de la detecci  n precoz de los pacientes de riesgo. *Med Intensiva*. 2013;37:12–8.
17. Gordo F, Abella A. Intensive care unit without walls: seeking patient safety by improving the efficiency of the system. *Med Intensiva*. 2014;38:438–43.
18. Gonz  lez-Castro A, Ortiz-Melon F, Suberviola B, Holanda MS, Dom  nguez MJ, Blanco-Huelga C, et al. Impact of a new model of intensive care medicine upon healthcare in a department of intensive care medicine. *Med Intensiva*. 2013;37:27–32.
19. Holanda Pe  a MS, Dom  nguez Artiga MJ, Ots Ruiz E, Lorda de los R  os MI, Castellanos Ortega A, Mel  n F, et al. SECI (Servicio Extendido de Cuidados Intensivos): Mirando fuera de la UCI. *Med Intensiva*. 2011;35:349–53.
20. Mozo MT, Gordo VF. Innovation in the management of intensive care units: this is the right time. *Med Intensiva*. 2016;40:263–5.
21. Extremera P, A  n JM, Garc  a de Lorenzo A.   st  n justificadas las consultas externas de medicina intensiva? *Med Intensiva*. 2018;42:110–3, <http://dx.doi.org/10.1016/j.medin.2017.07.010>.
22. Moss M, Good VS, Gozal D, Kleinpell R, Sessler CN. An official Critical Care Societies Collaborative statement: burnout syndrome in critical care healthcare professionals: a call for action. *Crit Care Med*. 2016;44:1414–21.