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## Intensive care medicine: a multidisciplinary competence-based approach\*

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### Conflicts of interest

The authors declare no competing interests.

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### Summary

During the Covid-19 pandemic general interest in intensive care medicine emerged as besides a majority of other diseases and conditions also patients with Covid-19 pneumonia were treated by intensivists. This acute demand was taken as the rationale by the **European Society of Intensive Care Medicine (ESICM)**, which represents only a small portion of all intensivists throughout Europe, to launch an initiative to recognise Intensive Care Medicine in Europe as a medical specialty according to Annexe V of the European Directive on the recognition of professional qualifications. The discussion having Intensive Care Medicine as a primary discipline is old and the disadvantages have been clearly stated long ago. Intensive care medicine according to the **Multidisciplinary Joint Committee of Intensive Care Medicine (MJCIM)** of the **European Union of Medical Specialists (UEMS)** should be multidisciplinary as this serves our patients best. During the pandemic, we learned that all specialties that cover Intensive Care Medicine in their training were able to treat affected patients and to provide intensivists to additionally built ICUs. Most of them were anaesthesiologists who were set free from the operating theatres because of the cancellation of many elective operations. However, other disciplines that provide high-level ICU care, such as internal medicine, surgery, neurosurgery and cardiac surgery, were also recruited to face the pandemic. With a single,

primary specialty, this would have not been possible on that scale.

Certainly, for all highly trained specialists, free movement throughout Europe is an important goal. Therefore, training in Intensive Care Medicine throughout Europe should be according to a common competence-based curriculum and this training and examination on top of a mother discipline should be recognized as a ‘particular qualification’ throughout Europe.

From our point of view, regarding Intensive Care Medicine, this approach in combination with competence-based training and examination in tandem with a primary discipline allows free movement of our doctors and also serves our patients best, for the future and also for the current and future pandemics.

### Introduction

In 2020, nurses, doctors and allied health professionals working in Intensive Care Medicine were – amongst specialists working in the area of infectious diseases and virology – in the spotlight because of the coronavirus disease 2019 (COVID-19) pandemic. People were honouring staff from Intensive Care Units (ICUs) by clapping their hands every evening in European cities, such as Berlin and Paris. Residents were clapping and banging pots out of their windows in New York City (<https://www.dw.com/en/coronavirus-how-nightly-applause-saved-my-sanity-as-a-new-berliner/a-53700250>; <https://www.washingtonpost.com>

com/world/europe/clap-for-carers/2020/03/26/3d05eb9c-6f66-11ea-a156-0048b62cdb51\_story.html). This all happened because staff working in ICUs were trying to save lives of patients with very severe COVID-19 disease. However, these nurses and doctors are simply doing what they did and do every single day, every single hour and minute throughout our world, trying to save lives of critically ill patients. Critical illness can occur after complex operations, after severe cardiac conditions, after complex cardiac surgery in neonates with congenital heart disease, after complications during delivery, after complications during chemotherapy, after severe head injuries, after intracranial bleeding, after immune-modulated neurological diseases and... with COVID-19 pneumonia.

This acute and increased demand for Intensive Care Medicine because of the COVID-19 pandemic was taken as the rationale by the **European Society of Intensive Care Medicine (ESICM)**, which represents only a small portion of all intensivists throughout Europe, to launch an initiative ([https://www.esicm.org/wp-content/uploads/2021/01/ESICM-Consultation-Paper\\_Intensive-Care-Medicine-as-recognised-under-Annex-V-1.pdf](https://www.esicm.org/wp-content/uploads/2021/01/ESICM-Consultation-Paper_Intensive-Care-Medicine-as-recognised-under-Annex-V-1.pdf)) to recognise Intensive Care Medicine in Europe as a medical specialty according to Annex V of the European Directive on the recognition of professional qualifications (Directive 2005/36/CE of the European Parliament and the European Council) and to promote free movement for intensive care physicians. The initiative of the ESICM to promote unified training and certification to allow free movement for Intensive Care Medicine specialists in Europe is to be welcomed and a common goal with the **Multidisciplinary Joint Committee of Intensive Care Medicine (MJCIM)** of the **European Union of Medical Specialists (UEMS)**. However, the initiative to have Intensive Care Medicine as an Annex V specialty is not an approach that serves Intensive Care Medicine best and was launched without informing many scientific societies that also deal with Intensive Care Medicine.

### Intensive care medicine as a medical specialty: a history of the problem

The discussion on Intensive Care Medicine as a primary specialty versus a secondary specialty on top of a primary specialty, for example, internal medicine, surgery or anaesthesiology, and integration into Annex V of the 2005/36/EU directive is old, complex and can interfere with national legislation and standards. Certainly, European harmonisation should be as simple as possible, but not simpler. Just adding Intensive Care Medicine to Annex V is too simplified an approach. In 2008, in a meeting of the MJCIM, the medical disciplines involved in Intensive Care Medicine voted against the idea of Intensive Care Medicine becoming an independent primary specialty.

This position of the MJCIM had already been stated clearly a decade ago [1]; Intensive Care Medicine should not be made a primary discipline and should not be added as an Annex V medical specialty. The position of the MJCIM has not changed since then. The reasons why the authors and the MJCIM believed that Intensive Care Medicine should be part of a primary mother discipline have been discussed for years.

First, Intensive Care Medicine is too complex to be covered by a single medical specialty alone. Intensive care medicine as an additional competence to a primary specialty has significantly increased the quality of treatment in severely ill patients with various underlying organ conditions. Second, separating Intensive Care Medicine as a primary specialty would tend to impede mutual communication and collaboration among different professionals with specific knowledge, expertise and skills; and third, Intensive Care Medicine is extremely demanding physically and mentally. Establishing Intensive Care Medicine as a primary specialty would disqualify intensivists from working in another specialisation, whereas the 'particular qualification' approach allows them to return to their 'mother disciplines', rotate back there for a period or

allow those working in the mother discipline to participate in the on-call system [2]. However, adding Intensive Care Medicine to Annex V would remove all these advantages of the present system.

During the pandemic, we learned that all specialties that cover Intensive Care Medicine in their training were able to treat affected patients and to provide intensivists to additionally built ICUs. Most of them were anaesthesiologists who were set free from the operating theatres because of the cancellation of many elective operations. However, other disciplines that provide high-level ICU care, such as internal medicine, surgery, neurosurgery and cardiac surgery were also recruited to face the pandemic. With a single, primary specialty, this would have not been possible on that scale. The shortage of intensivists in some countries is not because of the pandemic but the pandemic has revealed problems with the infrastructure and inadequate training of a sufficient number of doctors in Intensive Care Medicine, which cannot be resolved by free movement of intensivists, who are needed during this crisis in their own home countries.

Certainly, for all highly trained specialists, free movement throughout Europe is an important goal. Therefore, training in Intensive Care Medicine throughout Europe should be according to a common competence-based curriculum. Fortunately, the MJCIM of the UEMS and its working group, the **European Board of Intensive Care Medicine (EBICM)**, has agreed with their parent sections of UEMS on a unified training programme. This programme, the **European Training Requirements (ETR) for the Core Curriculum of Multidisciplinary Intensive Care Medicine – European Standards of Postgraduate Medical Specialist Training** – was adopted by UEMS in 2014. This ETR aims to have Intensive Care Medicine as a multidisciplinary field accessible from several medical specialties. It focuses on the competence required to provide high-quality care whatever the primary specialty is. The MJCIM believes that training in Intensive Care Medicine should be in tandem with a

primary specialty, and free movement of these specialists should be possible with their diploma of the primary discipline and their structured Intensive Care Medicine training in addition to their primary specialties. This additional training and these competences in Intensive Care Medicine should be recognised throughout Europe as a 'particular qualification'. It is important to work together with the UEMS and European policymakers to have this recognised within the European legislation.

For the very few countries that have Intensive Care Medicine as a primary discipline for doctors planning to work in other healthcare systems, additional training should be offered to get access to one of the other disciplines that are the basis of Intensive Care Medicine in the vast majority of European countries (anaesthesiology, cardiac surgery, cardiology, internal medicine, neurology, neurosurgery, paediatrics, respiratory medicine, surgery and emergency medicine). Unfortunately, if 'primary ICU specialists' want free movement to countries without a primary specialty, then the only option not interfering with the national system in these countries is additional training and part-recognition of the ICU skills of these specialists. Only with this additional training, free movement for all primary intensivists would be made possible without interfering with national legislation and

within the current European legal framework.

As stated above, the MJCIM believes that Intensive Care Medicine requires competence-based training and a formal European examination. Concerning certification at the European level, at the moment two large scientific societies propose two different diplomas: the ESICM with the **European Diploma in Intensive Care** (EDIC) and the **European Society of Anaesthesiology and Intensive Care** (ESAIC) with the **European Diploma in Anaesthesiology and Intensive Care** (EDAIC). These two certifications share the same aims: to guarantee professional standards, to allow free movement of clinicians and to promote a European certification beyond countries' differences based on the ETR ICM. Other sections involved in Intensive Care Medicine already have ETRs for their specialty, and together with the MJCIM and the EBICM, could also easily develop additional training and a diploma for their competence in Intensive Care Medicine.

Therefore, UEMS should work together with European authorities to incorporate Intensive Care Medicine and certainly a number of other specialised areas within existing specialties as 'particular qualifications' in a future revision of the European Directive 2005/36/EU to allow mutual recognition and free movement within European Union member states.

From our point of view, regarding Intensive Care Medicine, this approach in combination with competence-based training and examination in tandem with a primary discipline allows free movement of our doctors and also serves our patients best, for the future and also for the current and future pandemics.

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