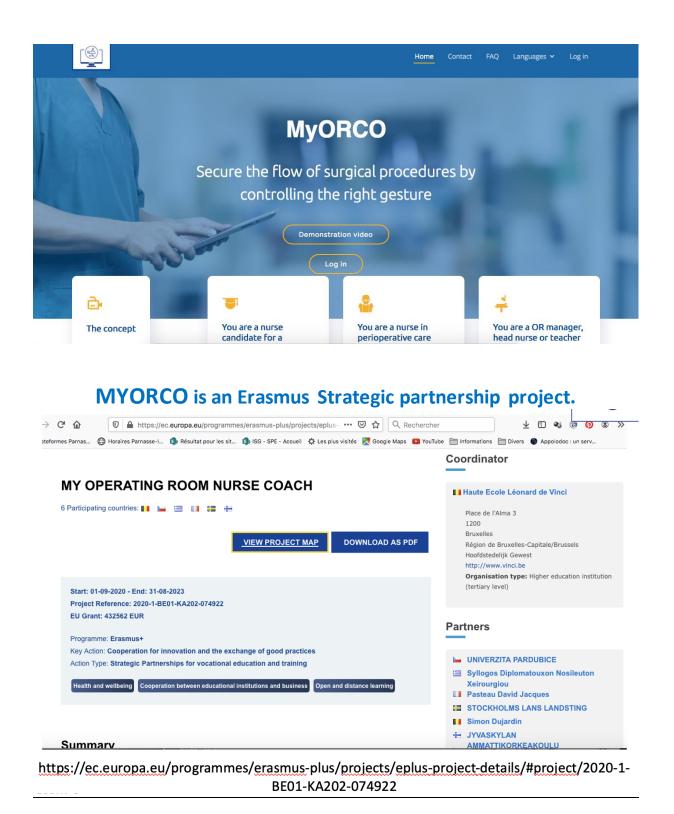
# **MYORCO: MY Operating Room nurse COach**

## User guide



# Partners of the project:

Professional partners involved on a daily basis in the functioning of operating theatres.

The coordinator of the project is a Belgian university college (Haute Ecole Vinci). Do also take part in the project: three universities training nurses (FI, SE, CZ); a national association of operating room (OR) nurses: (G); the designer of the KSM method (F) and a technical partner (B). Three professional groups representing the profession participate as associated partners: EORNA (European Operating Room Nurses Association), AFISO (L'Association francophone des infirmières de salle d'opération de Belgique), UNAIBODE (Union Nationale des Associations d'Infirmier(ère)s de Bloc Opératoire Diplômé(e)s d'Etat,France).

Czech Republic: The University of Pardubice

Finland: The JAMK University of Applied Sciences in Jyvaskyla

Sweden: The Karolinska University hospital (Pediatric operating department) in Stockholm

Greece: GORNA The Greek National Association of Perioperative Nursing in Athens

France: David Pasteau - ensures the quality assurance of the project

Belgium: Video maker: Space Cowboy studio University college Léonard de Vinci based in Brussels

## **Foreword**

The user guide proposed for MYORCO was produced by Erasmus MYORCO project partners.

The user guide is a supplement to MYORCO application.

**Aknowledgements** to the OR (operating room) managers, the OR head nurses and the OR nurses, OR nurses students and OR nurses educators who participated to test and comment on the online application of MYORCO.

Thank you also to EORNA, UNAIBODE, AFISO who participated in the dissemination of the tool.

# **Preamble**

The patient's care in the operating room is complex and requires accurate and high-quality care to ensure the safety of the patient.

For the European operating room nurses, it is not mandatory in every country to have a specific training to work inside the operating theatre. European operating room nurses<sup>1</sup> are lacking training and are facing patient safety issues. An OR nurse works in a very special environment which is the operating theater. To simplify, she has, depending on the context, several functions such as circulating nurse, scrub nurse and anaesthetic nurse. This approach can differ in the European countries.

As a circulating nurse, she takes care of the patient and of the perioperative working flow in the operating room. She is the link between the sterile team and coordinates the smooth running of the surgical program.

As a scrub nurse, she assists the surgeon in the sterile area throughout the surgical procedure. Dressed in a sterile gown, she receives the sterile instrument trays, counts the instruments, arranges them on her table, etc. She stands by the surgeon throughout the surgical procedure, which can last from short time to several hours in order to do so, she hands to the surgeon the instruments or medical devices of all kinds needed.

*The anaesthetic nurse* assists the anaesthetist and cares for the patient during anaesthesia.

Perioperative Nursing is a diverse and complex specialist field with many subspecialties within it. Perioperative nursing predominantly covers the nursing care in the areas of surgical intervention, anaesthesiology and post anaesthetic care. In some instances, it also covers specialties such as ambulatory daycare, endoscopy, sterilization, interventional radiology and pain management. These varied roles are a challenge to the development of a perioperative nurse's core competencies. (https://eorna.eu/competencies/)

<sup>&</sup>lt;sup>1</sup> The term nurse is used in feminine gender for ease of spelling. While women represent 90-95% of the profession, nonetheless the profession remains open to men.

However, in most European countries, there is no compulsory training for OR nurses. If specialized training courses exist, it is not mandatory for a nurse to follow them before working in the operating room! There are also countries where a specialization, within Operating room care or anaesthetic care is mandatory for having an employment in an Operating unit.

At the same time, patients are getting older but also, we are operating on more premature, young and fragile patients thanks to medical and technical innovations. Staff turnover and interim staff is more frequent today than before. Now is increasing, medical and technical innovations are becoming more and more advanced and frequent, the operating theatre environment is becoming more and more multicultural with more and more interim staff... Outpatient surgery requires fluid, fast and safe reactions. Integrating new nurses without training is a major challenge whereby patient safety issues are disregarded.

In response to this existing situation, at the European level, the profession has set up two previous projects: KSM (Key Skill Management) and KSMOR (KSM in Operating Room).

These two projects focus primarily on the Circulating nurse function. They provide OR managers with tools to manage the quality and practices of their teams thanks to an application that has been tested in about twenty establishments in Europe. The current project aims to complete and extend KSMOR. This with the purpose of also describing the function of Scrub nurse and Anaesthetic nurse.

The result: a multi-language teaching platform with videos on the profession of Circulating, Scrub nurse and Anaesthetic nurse.

The aim of the project is to provide a platform that allows any OR nurse to acquire the necessary practices to work in the OR environment. Teaching paths differentiated by surgical specialty, by anesthetic procedures and by instrument type are all means that the OR manager or nurse can access on the platform.

A carefully prepared project by OR nurses for OR nurses.

The project was organized in the form of processes in which all partners participated. All activities were planned with the improvement of the videos in mind. The list of practices resulted from several months of preparatory work with the aim of having a draft list of videos representing the basic function of a nurse in the operating room from the beginning of the project.

Scenarios designed by operating theatre professionals put into images and tested by the profession.

All the videos are based on scenarios designed and validated by operating room staff.

Each scenario presents practices and gestures to which are added comments and realistic image processing.

A unique educational tool to smooth and facilitate the integration of newcomers in the OR, to make the teamwork safer and to improve patient safety.

Any operating theatre in the world can use video corpus and appropriate platform.

With the MYORCO project, we have:

- a multilingual digital platform, educational videos related to the working practices of the OR nurses in the common basis of their work and in a number of surgical specialties as also practices for the anaesthetic nurses
- on a European level, for the professionals and students within perioperative operating- and anaesthetic nursing to train whenever and in an autonomous manner.

## **Output 1: Videos**

**MYORCO** created and developed a wide range of video training.

Around 90 videos of working practices of perioperative surgical specialties as also practices for the anaesthetic nurses.

## **Output 2: Website**

**MYORCO** completes the KSMOR website with a tool where each module of videos can be seen. The working practices videos show sequences of basic skills needed in perioperative care. Self-assessment within KSMOR software allows the OR nurse/OR nursing student to evaluate his/her skills.

Consequently, each OR nurse/OR nursing student will be able to build his/her own training path and the OR head nurse/manager/nurse educator (teacher) will be able to manage the pedagogical courses of his/her team of nurses or students.

MYORCO enables:

• To the OR manager, create a training/educational plan for a novice perioperative nurse according to the needs of the workplace and the nurse's ability to adapt/learn. E.g.: assignment of a certain range of videos to study and subsequent practice of skills in in the specialties. The

OR manager has the option to insert his own materials, comments, or videos into the website for their own team. No one else can see their own material.

- OR nursing teachers to present individual procedures/skills to students in the form of videos that can be repeated, stopped at any time, and supplemented with comments. And according to the videos, manage the practical teaching of students in a simulated or real environment. The OR nursing teacher has the option to insert their own materials, comments or videos into the website, his own webpage.
- OR nurse can create an individual educational plan or verify the correct execution of a specific skill. He/she will use a set of pictures from surgical instruments and videos to do this.

# Presentation of the platform:

The tools produced by **MYORCO** are:

- translated into English and partner languages
- The languages available are those of the project partners: French, Greek, Czech, Swedish and Finnish.

MYORCO is co-funded by the Erasmuse programme of the European Union		Home	Contact FAQ K	SMOR Documentation 🗸	Languages V Log in
	MY	ORCO			./
Maste		safe gesture for safe cedures.	surgical	Contra I	
	Demo	Log in			
De Concept	You are a nurse specializing in	You are a perioperative nurse		a theatre r, charge nurse,	

You can choose the language.

The available languages are those form the project partners and English.





You can also have an explanation about the concept of the project.

And you can read the advantages if you are an OR nurse student.



If you click on this button, you have the advantages for the new or junior nurses.



And it is the same if you are a theatre manager, a charge nurse or a teacher in perioperative field.



# If you are interested by this tool, you can log in.



Explanation and warning	Log in	Register now
	Email	
	password	
	Status O nurse	
	O charge nurse manager	
	O MYORCO coordinator of the inst	itution
	O nursing department manager	
	O company representative	
	O National administrator	
	Send	
	CONNECTIO	ON
if was already o	egistered on the MYORCO or KSMOR platform, enter your e-mail add	
	an account, or request access from the MYORCO administrator in you	
Explanation a		al or a training facility: as the MYORCO coordinator of your our institution's account here, without any restriction regarding the
		o read the tutorials related to setting up an institution in order to manner. Once your account is activated, you will be able to regisi
	the nursing managers of your institution or the	tutors/professors of your training facility. These, in turn, will
		students. We strongly encourage you to go through your nation
	MYORCO administrator who will reference you	r institution. This will allow the teams within your institution to

If you are an administrator of a hospital or a school:

You wish to register as an administrator of a hospital or a school: as a MYORCO administrator of your institution, you have the possibility to create your institution's account here, without any restriction concerning the functionalities of the application. We invite you to read the tutorials related to setting up an institution to carry out all operations in a coherent and logical manner. Once your account is registered, you will be able to register the bouldering executives of your institution or the professors of your school. These, in turn, will register the nurses in their department or their students. So that the teams in your institution can take full advantage of all the features of the MYORCO application and online help, we strongly encourage you to go through the national MYORCO administrator who will refer your institution.

On the MYORCO Platform, you have 2 sections:

- one with the photos of the most used instruments in surgery because in the beginning of the work in the OR, the nurses are very stressed about the names of the instruments. So, this part will be very helpful for them.
- and a second one with videos of work practices and basic professional skills.

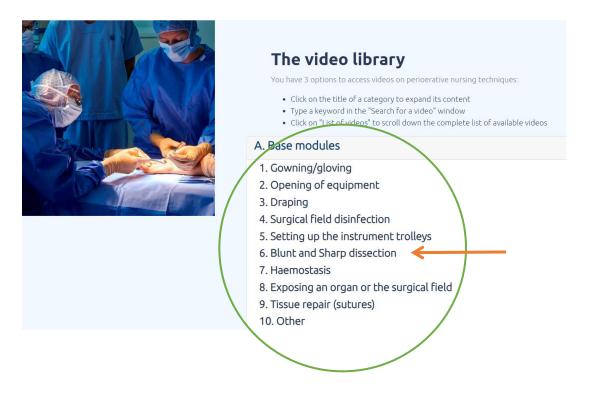
2 s	ections
The video library You have 3 options to access videos on perioerative nursing techniques:	4
<ul> <li>Click on the title of a category to expand its content</li> <li>Type a keyword in the "Search for a video" window</li> <li>Click on "List of videos" to scroll down the complete list of available videos</li> </ul>	The instruments Click on the title of the section or the instrument name to expand or close the content
A. Base modules	A. Instruments common to all surgeries
B. Anaesthesia	B. Specialty-specific instruments
C. Surgical specialties	Search for an instrument Q. Display all the instruments

For the videos, you have 3 sections:

- Base modules
- Anaesthesia
- Surgical specialties

	<b>The video library</b> You have 3 options to access videos on perioerative nursing techniques: • Click on the title of a category to expand its content • Type a keyword in the "Search for a video" window • Click on "List of videos" to scroll down the complete list of available videos
	A. Base modules
	B. Anaesthesia
State of the state	C. Surgical specialties
	Search for a video List of videos <b>Q</b>

If you click on "Base modules", you will open a list of sections similar to the different parts of a surgical procedure: you can click for example on "Blunt and Sharp dissection."



#### You can choose the content you want to view:

#### 6. Blunt and Sharp dissection Blunt - Present curved dissecting scissors to a right-handed surgeon <mark>@ 2</mark> Blunt - Present bended scissors for dissection to a left-handed <mark>@</mark> 2 Blunt - Peanut mounted on a Crile forceps ۲ Blunt - Peanut mounted on a Pean forceps holder **@** 2 Blunt - Tampon/nut mounted on a Foerster forceps ۲ Mount a blade on the scalpel handle with the help of a forceps or needle holder **@** 2 Sharp - Remove the scalpel blade from the handle with the help of a forceps or needleholder Sharp - Present scalpel to the surgeon in front or next to the scrub nurse **@** 2 Sharp - Retrieve the scalpel **@** 4 Sharp - Automatic sequencing : Incision (forceps with teeth, scalpel)

## Here an example for anaesthesia:



Choose a technique, for example "Present the endotracheal tube."



## Another example for Surgical specialties: Here, the example selected is "Microsurgery":

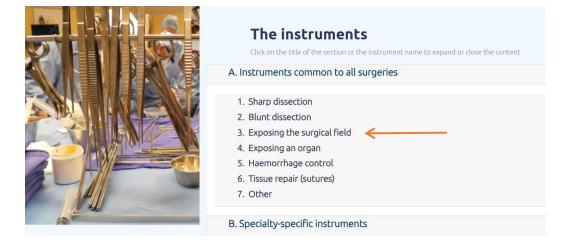


#### And the film: "Present micro-scissors."

1. Neurosurgery	
2. Neurosurgery or orthopaedic surgery	
3. Orthopaedic surgery	
4. Microsurgery	
Present an object under the microscope (eg microsurgical swab)	
Present micro-scissors (eg Wescott)	
Mounting a needle on a micro-needleholder for a left-handed	
Mounting a needle on a micro-needleholder for a right-handed	
Presenting a mounted micro-needleholder (to a right- or left-handed surgeon, next to or in fro	ont of the scrub nurse)

#### 5. Paediatric surgery

## The same principle is used for instrument photos. You can choose a section.



#### You can select the instrument you want to visualize.

Leriche retractor	Exclude this instrument
Love retractor	Exclude this instrument
Malleable blades	Exclude this instrument
Moskito, Leriche and Crile Forceps : comparison	Exclude this instrument
Senn retractor	Exclude this instrument
Short Adson Beckman retractor	Exclude this instrument
Stille retractor	Exclude this instrument
Volkman retractor	Exclude this instrument
Weitlaner retractor	Exclude this instrument

Click on the name of the instrument to see a photo of it. Clicking on the photo itself will display an enlarged version.



The specific possibilities for a charge nurse, manager or teacher:

- 1. They can register and invite their team members or students on the platform.
- 2. They will be able to see whether their team members or students are using the platform for their training.
- 3. They can add or modify videos, photos and explanations to suit their specific context.

To invite someone (nurse or student) to join your MYORCO team, you can invite each person individually or send invitations from an Excel file (larger number of people).

MY TEAM	
I invite a nurse / a student to join my team	Add members using an Excel file
Last Name	Select Excel Choisir un fichier Aucun fichier choisi File
Email	Envoyer
Save	Format of the file:
	<ul> <li>column 1: the gender (M = Man / W = Woman)</li> <li>column 2: Last Name</li> <li>column 3: First Name</li> <li>column 4: E-mail address</li> <li>Line 1: titles of the columns</li> <li>accepted extensions : .xlsx, .xls, .ods</li> </ul>
	Model file to download

The manager, charge nurse or teacher can add or modify videos, photos and comments for their team or students. These modifications will only be visible to their MYORCO team. Nurses and students cannot make changes.

Modifications can be made in the "Settings" section.

<b>settings</b> This page allows you to add a video or change video settings.
The video library
Add a video Edit a video&#quot;s info sheet
Photo library of instruments
Add an instrument modify the data of this instrument remove an instrument from the list

A page opens, allowing you to complete the information (here for an instrument)

THE INSTRUMENTS

Nom de l'instrument en français	
	Select the photo you want to transfer.
	Allowed formats: jpg, jpeg, png, gif maximum file size: 5 MB
	Parcourir Aucun fichier sélectionné.
Name of the instrument in English	Parcourir Aucun fichier sélectionné.
	Parcourn Aucun richier selectionne.
	Parcourir Aucun fichier sélectionné.
Situation d'emploi (en français)	Parcourir Aucun fichier sélectionné.
	Parcourir Aucun fichier sélectionné.
Situation of use (in English)	
areadon of use (in English)	
	<ol><li>Then click the button here below.</li></ol>
Remarque concernant cet instrument	send
Remark about this instrument	
	Situation d'emploi (en français) Situation of use (in English) Remarque concernant cet instrument

#### How to get started?

#### If you are a nurse or a student:

You create your own profile and then access the MYORCO platform.

#### If you are a charge nurse/manager/teacher and want to create a team :

- 1. If your institution already has an account on MYORCO :
  - Contact your institution's MYORCO coordinator to register you as a charge nurse, manager or teacher.
  - You can then create your team.
- 2. If your institution does not yet have a MYORCO account :
  - Decide within your institution who will take on the role of MYORCO coordinator. The MYORCO coordinator can be an administrator, manager, educator etc. The MYORCO coordinator can also be the manager/charge nurse/teacher (combined role of MYORCO coordinator and manager/charge nurse/teacher).
  - The role of the MYORCO coordinator is to register the institution on the MYORCO platform and to register the institution managers/charge nurses/teachers so that they can then create a team on MYORCO and add/modify content. The institution coordinator cannot view videos, modify or add content.
  - If the MYORCO coordinator is the same person as the manager/charge nurse/teacher: they log in as the coordinator and then register themselves as the manager/charge nurse/teacher (they can use the same email address). Then, when they log in, they will have to choose whether they want to log in as the institution's coordinator or manager/charge nurse/teacher.

# How can the MYORCO online tool be included in nurses' professional development?

## First step for the head nurse/manager:

- create a MYORCO account
- create a team in MYORCO
- become familiar with the tool

#### During the welcom interview with the new team member:

- Explain the principle of the MYORCO tool
- Invite them to join the team on MYORCO (send them an invitation)

• Help them to create access and use the tool

#### During the initial interview:

- Discuss the technical skills acquired or to be developed with the new team member.
- Explain the objectives and clarify the expectations in relation to the various techniques. Example: In order to provide safe, quality patient care, this is how we expect the procedure to be performed: ...
- If a gap in competence is identified in relation to a practice, ask the person to consult the MYORCO tool and the specific resource. The MYORCO tool will help the person to achieve the desired objective by clarifying the objective and the explanations in the videos.
- Agree on the priority practices to work on and draw up a training/professional development plan.

#### During progression interviews:

- Debrief in relation to the materials consulted (videos, photos, resources). Are there any questions that remain? Has he/she seen other practices?
- Application of the technique in the field, under the supervision of a tutor, followed by a debriefing (what has been learnt, what needs to be improved). Explain the person's reasoning. If necessary, review the technique on MYORCO with the tutor in order to create an exchange based on a visual aid.
- Re-apply the technique in the field, under the supervision of a tutor if practice has not yet been acquired.
- During subsequent progression interviews: discuss the development of the nurse's technical skills and adapt the training/professional development plan in consultation with the nurse, the tutor and the charge nurse/manager.