

ASCOFAME 2019

Formative OSCE: its role in Professionalism

Madalena Patricio



BEFORE STARTING

LAYOUT

- 1. Professionalism: definition and its importance**
- 2. Is OSCE a good exam to assess professionalism**
- 3. Implementation an OSCE in professionalism**
- 4. OSCE potentialities vs. limitations**
- 5. Final challenges**

1. Professionalism: definition and its importance

2. Is OSCE a good exam to assess professionalism

3. OSCE Implementation in professionalism

4. OSCE potentialities and limitations

5. Final challenges

WHAT IS PROFESSIONALISM





WEB PAPER
BEME GUIDE

Teaching professionalism in medical education: A Best Evidence Medical Education (BEME) systematic review. BEME Guide No. 25

HUDSON BIRDEN¹, NEL GLASS², IAN WILSON³, MICHELLE HARRISON⁴, TIM USHERWOOD⁴ & DUNCAN NASS³

Systematic Review, 2013

viewpoints and opinions as well as empirical research. We performed a comparative and thematic synthesis on all papers meeting inclusion criteria in order to capture the best available evidence on how to teach professionalism.

Results: We identified 217 papers on how to teach professionalism. Of these, we determined 43 to be best evidence. Few studies provided comprehensive evaluation or assessment data demonstrating success. As yet, there has not emerged a unifying theoretical or practical model to integrate the teaching of professionalism into the medical curriculum.

Discussion: Evident themes in the literature are that role modelling and personal reflections, ideally guided by faculty, are the important elements in current teaching programmes, and are widely held to be the most effective techniques for developing professionalism. While it is generally held that professionalism should be part of the whole of a medical curriculum, the specifics of sequence, depth, detail, and the nature of how to integrate professionalism with other curriculum elements remain matters of evolving theory.

There is **no best methods** for teaching professionalism, nor even on **how professionalism should be defined**

Evident themes in the literature are that role **modelling and personal reflections**, are the important elements in teaching

While it is accepted that professionalism should be part of the whole curriculum, the specifics of sequence, depth, detail and integration still need to be defined

Format: Abstract ▼

Send to ▼

Med Teach. 2014 Jan;36(1):47-61. doi: 10.3109/0142159X.2014.850154. Epub 2013 Nov 19.

Defining professionalism in medical education: a systematic review.

Birden H¹, Glass N, Wilson I, Harrison M, Usherwood T, Nass D.

+ Author information

Systematic Review, 2014

RESULTS: we identified 195 papers on the topic of definition of professionalism in medicine. Of these, we rated 20 as high quality and included these in the narrative synthesis.

CONCLUSION: As yet there is no overarching conceptual context of medical professionalism that is universally agreed upon. The continually shifting nature of the organizational and social milieu in which medicine operates creates a dynamic situation where no definition has yet taken hold as definitive.

Comment in

General competences on medical professionalism: Is it possible? [Med Teach. 2015]

Defining professionalism: Simplex sigillum veri! [Med Teach. 2014]

Comments on "defining professionalism in medical education: a systematic review". [Med Teach. 2014]

PLoS One. 2017; 12(5): e0177321.

PMCID: PMC5428933

DOI: 10.1371/journal.pone.0177321

PMID: 28499999

Systematic Review, 2017

Honghe Li,¹ Ning Ding,^{#1} Yuanyuan Zhang,^{#2} Yang Liu,³ and Deliang Wen^{1,*}

Gianni Virgili, Editor

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I PROPOSE WE USE THE AQU DEFINITION TO DEFINE PROFESSIONALISM



Agència
per a la Qualitat
del Sistema Universitari
de **Catalunya**

Professionalism includes not only medical knowledge and skills, but also commitment to a set of shared values, autonomy for establish and enforce them and the responsibility to defend them.

KEY ELEMENTS OF PROFESSIONALISM

- A set of knowledge and skills
- Commitment to values
- Autonomy to implement them
- Responsibility to defend them



**FOR THE PROFESSIONAL COMPETENCIES
WE MAY USE AGAIN THE AQU LIST**



Agència
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del Sistema Universitari
de **Catalunya**

2004-2008



Agència
per a la Qualitat
del Sistema Universitari
de Catalunya

Professional competences of medical schools in Catal

DISSENY programme medicine
UB, UAB, UdL and URV

2004



UAB
Universitat Autònoma
de Barcelona



Agència
per a la Qualitat
del Sistema Universitari
de Catalunya

Competències profession comunes dels llicenciats formats a les universitats

Grup de treball del programa
UB, UAB, UdL i URV

2004

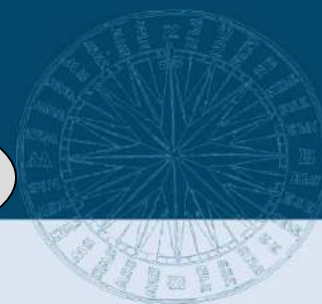


UAB
Universitat Autònoma
de Barcelona



Agència
per a la Qualitat
del Sistema Universitari
de Catalunya

2009



GUÍA PARA LA EVALUACIÓN DE COMPETENCIAS EN MEDICINA



La calidad, garantía de mejora.

AQU PROFESSIONAL COMPETENCIES

The next 7 slides are not for reading in detail

**Just to give an idea of the 13 Competencies
defined by AQU which will be sent to you**

1. Reconocimiento de los elementos esenciales de la profesión médica, incluyendo los principios de la profesión..

2. **1. Moral and ethical principles**

2. Professional values

3. **3. Personal development**

4. **4. Improvement for patient benefit**

5. **5. Good patient-doctor relationship**

5. Hacer conciencia de la relación entre el médico, el paciente, los familiares y la comunidad, así como del respeto al bienestar del paciente, a la diversidad cultural, a las creencias y a su autonomía.

6. Moral judgement to decide conflicts

7. Continuous professional development

8. Respect for health professionals

9. Improvement for patient benefit

10. Good patient-doctor relationship

- 11.** Manage time to cope with changes
- 12.** Personal responsibility for patients
- 13.** Research attitude for Medicine progress

AQU HAS DONE MORE

AQU IDENTIFIED OTHER INITIATIVES TO DEFINE PROFESSIONAL COMPETENCES



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de **Catalunya**

2004-2008

INITIATIVES TO DEFINE PROFESSIONAL COMPETENCIES

- **BLUEPRINT, 1974**
- **AAMC Outcome Project, 1984, 2004, 2008**
- **Scottish Doctor, 2000**
- **CANMEDS Project, 2000**
- **Board of Higher Education Council Brazil, 2001**
- **AMFEM Catalog of learning outcomes, 2001**

INITIATIVES TO DEFINE PROFESSIONAL COMPETENCIES

- Institute International Medical Education, 2002,
- Joint Commission of the Swiss Medical Schools, 2002
- Amee Guide 25, 2003
- Tomorrow's doctors, 2003
- WFME Standards Program, 2003
- Tuning America, 2004, 2007- 2008

INITIATIVES TO DEFINE PROFESSIONAL COMPETENCIES

- Sedem 2004, 2005, 2006
- ANECA, The white book, 2005, 2008
- Australian Medical Council, 2006
- MEDINE, WFME Standards Program for Europe, 2007
- IAMSE, WFME Standards Program for students, 2008
- LCMC, 2008

IS THE CONCEPT CLEAR FOR ALL OF US



‘A picture is worth a thousand words’

Tess Flanders 1911

**'If a picture worth a thousand words
what's a video worth?'**



**‘The point made by Patch made the difference
.... It’s about professionalism’**

PROFESSIONALISM IS OF FUNDAMENTAL IMPORTANCE



THEODORE ROOSEVELT WAS THE FIRST TO SAY



Nobody cares how much you know,
until they know how much you care.

— *Theodore Roosevelt* —

AZ QUOTES

We know that ...

SPECIAL ARTICLE

Unprofessional behavior during medical school has been shown to indicate the incidence of subsequent disciplinary actions by US medical boards on doctors in practice

Article Figures/Media

December 22, 2005

N Engl J Med 2005; 353:2673-2682

A good part of the reported medical errors are very related to a lack of professional values.

Students with professional values well - develop doctors committing fewer medical errors

1. Professionalism: definition and its importance

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4. OSCE potentialities vs. limitations

5. Final challenges

IS OSCE A GOOD EXAM TO ASSESS PROFESSIONALISM



Criteria for good Assessment

Criteria for good assessment: Consensus statement and recommendations from the Ottawa 2010 Conference

JOHN NORCINI¹, BROWNELL ANDERSON², VALDES BOLLELA³, VANESSA BURCH⁴, MANUEL JOÃO COSTA⁵, ROBERT HAYES⁸, ATHOL KENT⁹, VANESSA PERROTT¹⁰ & THOMAS

¹FAIMER, USA, ²AAMC, USA, ³University of Cape Town and Groote Schuur Hospital, South Africa, ⁴University of Cape Town, South Africa, ⁵University of Cape Town, South Africa, ⁶University of Cape Town, South Africa, ⁷National Board of Medical Examiners, USA, ⁸Keele University, UK, ⁹University of Cape Town, South Africa, ¹⁰University of Cape Town, South Africa, ¹¹University of Leeds, UK

2011

Abstract

In this article, we outline criteria for good assessment that include: (1) validity or coherence, (2) reproducibility or consistency,

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[Med Teach](#). 2018 Oct 9:1-8. doi: 10.1080/0142159X.2018.1500016. [Epub ahead of print]

2018 Consensus framework for good assessment.

Norcini J¹, Anderson MB², Bollela V³, Burch V⁴, Costa MJ⁵, Duvivier R⁶, Hays R⁷, Palacios Mackay MF⁸, Roberts T⁹, Swanson D¹⁰.

+ Author information

Abstract

INTRODUCTION: In 2010, the Ottawa Committee for the Accreditation of Medical Education (OCAME) since then the working group monitored the progress of preparing similar criteria for systems of accreditation and so the working group was reconvened.

METHODS: Consideration was given to various issues and the group believed that they were. Consequently, a new report was produced in the 2010 report.

RESULTS AND DISCUSSION: This paper also presents a new set of criteria that apply to systems of assessment and, recognizing the challenges of implementation, offers several issues for further consideration. Among these issues are the increasing diversity of candidates and programs, the importance of legal defensibility in high stakes assessments, globalization and the interest in portable recognition of medical training, and the interest among employers and patients in how medical education is delivered and how progression decisions are made.

ent. These were well received and consideration be given in the future to be timely to undertake that task ion.

or single assessments and the and duplicate relevant portions of

UPDATE
2018

- 1. Validity or Coherence**
- 2. Reproducibility, Reliability, or Consistency**
- 3. Equivalence**
- 4. Feasibility**
- 5. Educational Effect**
- 6. Catalytic effect**
- 7. Acceptability**

- 1. Fairness**
- 2. Relevance**
- 3. Satisfaction**

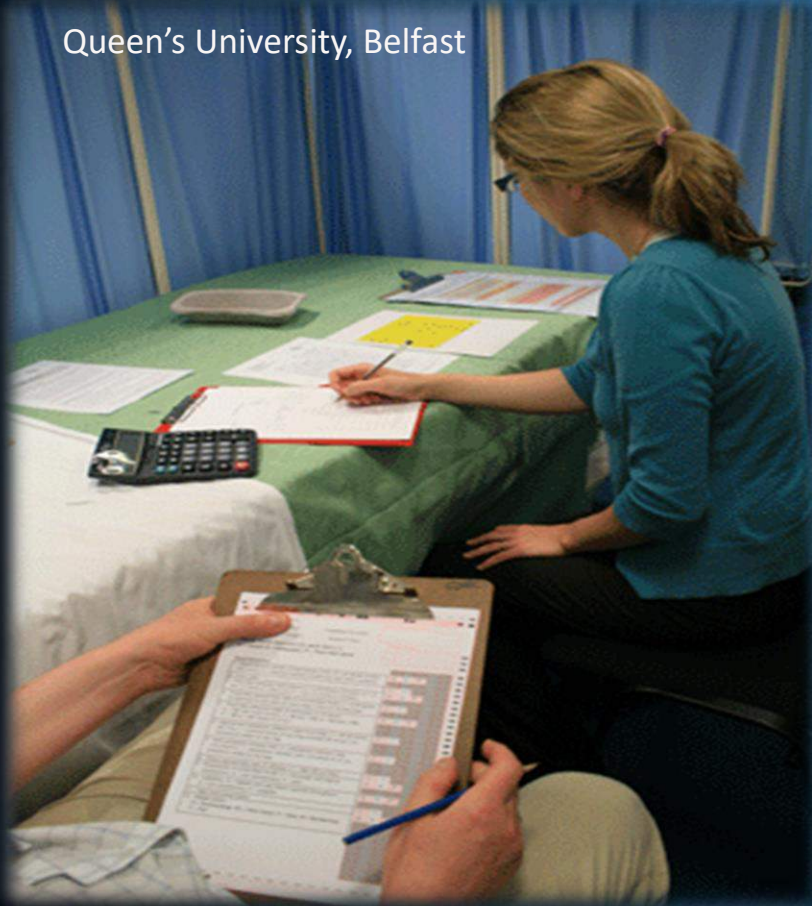
IS OSCE MEETING THOSE CRITERIA



Independently of

USING A STRAIGHT-FORWARD STRUCTURE

Queen's University, Belfast



INTERNAL Medicine OSCE stations, Laos

OR A COMPLEX STRUCTURE



Kirsty Forrest, Consultant Anaesthetist, School of Medicine

THE OSCE IS ALWAYS



An exam based
on **stations**
with all
students under
the **same**
circumstances

Same **TASKS**

Same **PATIENTS**

Same **EXAMINERS**

A ROBUST EXAM VALID & RELIABLE

OSCE is Testing...

- Individual components of a competency
- Broad sample of competencies
- Process & product
- Knowledge, skills and attitudes

THE OSCE

Based on...

- Preset standards
- Validated checklists or global ratings
- Objective questions
- Standardized Patients (real or simulated)

EVIDENCE ON OSCE AS A FEASIBLE EXAM?

2013; 35: 503–514



Is the OSCE a feasible tool to assess
competencies in undergraduate medical
education?

OSCE can assess all types of competencies
namely the professional ones

Ab

Back

problems (e.g. ...). The ... values
with arguments as 'why using such a demanding format if other methods are available?'

Aim: To review and synthesize evidence on technical and economic feasibility of OSCE in undergraduate medical studies.

Methods: Best Evidence Medical Education methodology was applied by two independent coders to 1083 studies identified

OSCE IS A PRACTICAL EXAM

OSCE can assess students doing the:

- right professional competencies**
- professional competencies done in the right way**

WITH EDUCATIONAL & CATALYSTIC IMPACT

**Evidence from the first OSCE
Implemented in Dundee**



**Students only do what they know
they are going to be assessed**

Rowntree 1989

OSCE is meeting the good assessment criteria so it should be used to assess professional competencies

**OSCE is meeting the good assessment
criteria so it should be used to assess
professional competencies**

WEB PAPER
AMEE GUIDE

Integrating professionalism into the curriculum: AMEE Guide No. 61

**The use of OSCE is
suggested by
AMEE Guide 61**

AMEE Guide No. 61: Integrating professionalism into the curriculum. The AMEE Guide takes a structured stepwise approach and sequentially addresses: (i) agreeing an institutional definition, (ii) structuring the curriculum to integrate learning across all years, (iii) suggesting learning models, (iv) harnessing the impact of the formal, informal and hidden curricula and (v) assessing the learning. Finally, a few well-evaluated case studies for both teaching and assessment are provided.

AMEE Guide 61 also in Spanish



OSCE AS MORE SUITABLE EXAM

In order to evaluate the competencies, what is lacking is the student to demonstrate the acquisition by means of corresponding realizations, and establishing practical evidence, especially with the OSCE, as the most suitable assessment procedure

1. Professionalism: definition and its importance

2. Is OSCE a good exam to assess professionalism

**3. Implementing the OSCE in
professionalism**

4. OSCE potentialities vs. limitations

5. Final challenges

WE NEED TO BLUE PRINT THE STATIONS

To define the content of each station

We need to be aware that

ACQUIRING PROFESSIONALISM



HERE IS AN EXAMPLE

OSCE Health Promotion Station

STATION 6 STUDENT BRIEF

At station 7 you will meet Mr David Bergmann and his wife.

He is being discharged from the hospital where he has been treated for a myocardial infarction. You can see the details of his presentation and management in his case notes.

When you meet him, advise him about his management following discharge from the hospital

**WE CAN USE THE ABOVE AQU LIST TO DECIDE
ON THE CONTENT OF THE STATIONS**



**WE CAN USE OTHER SOURCES
TO DECIDE ON THE STATIONS**

FOR EXAMPLE

Ronald M Harden
Pat Lilley
Madalena Patrício

THE DEFINITIVE GUIDE TO THE **OSCE**

The Objective Structured Clinical Examination
as a performance assessment

A list of learning outcomes, including professional competences , successfully assessed by the OSCE, is available from this book

Published Reports of LO

Clinical Skills	381
Practical Procedures	95
Patient Investigation	107
Patient Management	152
Health Promotion & Disease Prevention	43
Communication	275
Information Handling	31
Understanding of Basic & Clinical Sciences	56
Attitudes & Ethics	72
Decision Making/Clinical Reasoning	102
Role of the Doctor	2
Personal Development	7

15 CASE STUDIES ARE AVAILABLE FROM THE BOOK

Ronald M Harden
Pat Lilley
Madalena Patrício

THE DEFINITIVE GUIDE

CASE STUDY 6

Culture OSCE for Paediatric Residents

Elisabeth K. Kachur et al.

Foreword by
Geoff Norman

ELSEVIER

**After station content is defined we may adapt
the Harden's model
for Outcome Based Education**

Outcome-Based Education



Doing the right thing

What the doctor is able to do

- Clinical skills
- Practical procedures
- Investigations
- Patient management
- Health promotion
- Communication
- Information handling

Doing the thing right

How doctor approaches their practice

- Scientific understanding
- Attitudes & ethics
- Decision making

The right person doing it

The doctor as a professional

- Role of the doctor
- Personal development

Outcome-Based Professional Competencies

Doing the right thing



What the doctor is able to do

- apply moral & ethical principles
- respect professional values
- self professional development
- protecting patients and society
- mutual understanding
- apply moral principles in conflicts
- self assessment of CPD
- respect other professionals
- obligation for applying palliative care
- information legal aspects
- coping with incertitude and changes
- personal responsibility for care
- continuous research attitude

The right person doing it

The doctor as a professional

- Role of the doctor
- Personal development

Doing the thing right

How doctor approaches their practice

- Scientific understanding
- Attitudes & ethics
- Decision making

-
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POTENTIALITES

THE OSCE IS MEETING THE GOOD ASSESSMENT CRITERIA

- Feasible exam
- Robust exam
- Practical exam
- Providing feedback





The OSCE is an ideal exam for giving detailed feedback to students which is of fundamental importance in what concerns professionalism



The possibility for providing feedback makes the OSCE an ideal formative exam

The flexibility of the OSCE allows teachers to design stations based in role play, which according to BEME GUIDE 25 is a key element

This is the value of the OSCE
From here we understand why ...

IN 2002 NORMAN STATED ...



‘The objective structured clinical examination, with its multiple samples of performance has come to dominate performance assessment.’

Learning in practice

Research in medical education: three decades of progress

Geoff Norman

The specialty of research in medical education began just over three decades ago with a small group of clinicians and educational researchers at the medical school in Buffalo, New York. Since that time it has expanded worldwide. This paper is a personal reflection on how this research has informed our understanding of learning, teaching, and assessment in medicine.

Measuring progress

In medicine, indicators of scientific progress might be measured by objective indicators such as death from cardiovascular disease. In education such “hard” evidence may be lacking for several reasons. Firstly, paradoxically, real differences in educational strategies may not be reflected in outcomes, such as licensing examination performance, simply because students are highly motivated and are not blinded to the intervention, so will compensate for any defects in the curriculum.¹⁻⁵ Secondly, a curriculum is not like a drug, which can be given at standard doses, but instead contains many components, delivered with variable quality by different teachers. Finally, the time between learning and important outcomes may be so

Summary points

Research in medical education has contributed substantially to understanding the learning process

The educational community is becoming aware of the importance of evidence in educational decision making

Areas of major development include basic research on the nature of medical expertise, problem based learning, performance assessment, and continuing education and assessment of practising physicians

clinicians were distinguished by the possession of general “clinical problem solving” skills. This was wrong; what emerged was that expertise lay predominantly in the knowledge, both formal and experiential, that the expert brought to the problem.^{7,8}

THIS WAS WHY THE OSCE WAS CALLED

A GOLD STANDARD EXAM

LIMITATIONS

DESPITE BEING A GOLD STAR EXAM

The OSCE is not a holistic exam

It should be used with other exams

‘A single measure is no measure’



It **DESPITE BEING A GOLD STAR EXAM**

The OSCE is a resource demanding exam

Requiring high human and financial resources

There is evidence that all those aspects
can be overcome

-
1. Professionalism: definition and its importance
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**Professionalism is of
utmost importance because**

FOR A GLOBAL PROFESSIONAL WE NEED A GLOBAL CURRICULUM



.... AND A GLOBAL ASSESSMENT



CHALLENGE 1

WHAT we assess

HOW we assess

WHO will assess

**All are measures of WHAT WE VALUE
in terms of Professionalism
for tomorrow's doctors**

**This is why the decisions on the OSCE
design are so important**



CHALLENGE 2

The Professionalism curriculum and its assessment cannot be implemented in isolation

**Professionalism teaching and assessment
should be embedded in entire curriculum**

*Branch 2000; Wear & Castellani 2000; Howe 2003;
Cruess 2006b; Cruess & Cruess 2006b; Goldie 2008)*

BEME Guide



CHALLENGE 3

Besides the 'curriculum in paper' and the 'hidden curriculum', there is the 'curriculum in action' where the way teachers treat their students is fundamental



Today's medical students



DOCTORS OF FUTURE

Autumn Assembly 2015

**This was what I learned from
EMSA Autumn Assembly,
Berlin 2015**





CHALLENGE 4

**Moving to assess Professionalism
with the OSCE needs TIME**





***To change a culture
takes time***



CHALLENGE 5

No need to start from scratch

Look at what others have done, to be adapted to your context

The OSCE implementation should occur in COLLABORATION



CHALLENGE 6

**Make the OSCE your process and your
students' process
Fall in love with this huge challenge**



Ownership / Passion

WHAT WE VALUE

NOT IN ISOLATION

NEW CULTURE

TIME

COLABORATION

OWNERSHIP / PASSION

Before concluding ...

LET ME BE BACK TO THE TITLE I WAS GIVEN

‘
Formative OSCE :
its role in professionalism ‘

Why only Formative OSCEs?

What do we miss if not using a Summative OSCE to assess professionalism?

THIS IS WHY I PROPOSE

‘
Formative and Summative OSCEs :
their role in professionalism ‘

THIS IS WHY I HOPE



***YOU GO back to your schools
and start working on the OSCE to assess
Professionalism***

From my side I will send you the supportive material used to prepare this presentation.

Please keep in touch to let me know your results in this so important area

Thanks so much ... Muchas gracias
Muito obrigado

Thanks also to Prof. Maria Rosa Fenoll-Brunet
for her collaboration in what concerns AQU



patricio@medicina.ulisboa.pt



CHALLENGE 1

The importance of instilling and protecting the development of qualities, values, attitudes and personal behaviors.

CHALLENGE 2

**Professional development is key to the
practice of medicine**

CHALLENGE 3

Not only must learning and teaching be carefully constructed , but also the assessment of professional competencies

The measurement of outcomes continues to be a difficult task