Vocational Education and Training in Quality Improvement Course

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3. European Association for Quality and Safety in General / Family Practice (EQuIP) – a Network organisation of WONCA Europe (World Organisation of National Colleges and Academies in general practice / family medicine)
4. Institute for Development of Family Medicine (ZRDM)
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6. Project HOPE Czech Republic (HOPE)

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Table of contents

Authors of the course......................................................................................................................... 4
Content.................................................................................................................................................. 5
Short description.................................................................................................................................... 6
Instruction for course delivers.............................................................................................................. 7
Programme........................................................................................................................................... 10

Module 1.............................................................................................................................................. 13
Module 1 – Description of the module................................................................................................. 14
Module 1 – Ppt slides: Introduction to teaching QI ........................................................................ 16
Module 1 – Teaching materials: Description of ICE breaker exercises........................................... 22
Module 1 – Group facilitators' instruction......................................................................................... 23
Module 1 – Evaluation Form............................................................................................................. 24

Module 2.............................................................................................................................................. 25
Module 2 – Description of the module................................................................................................. 26
Module 2 – Ppt slides 1: Teaching and assessment methods and skills........................................... 29
Module 2 – Ppt slides 2: Personal learning plan............................................................................. 38
Module 2 – Group facilitators’ instruction......................................................................................... 45
Module 2 – Evaluation Form............................................................................................................. 46

Module 3.............................................................................................................................................. 47
Module 3 – Description of the module................................................................................................. 48
Module 3 – Ppt slides: Theoretical background and overview of quality improvement methods..... 51
Module 3 – Group facilitators’ instruction......................................................................................... 64
Module 3 – Evaluation Form............................................................................................................. 65

Module 4.............................................................................................................................................. 66
Module 4 – Description of the module................................................................................................. 67
Module 4 – Ppt slides 1: Teaching quality improvement in GPs’ practices................................... 70
Module 4 – Ppt slides 2: Quality improvement: Concept and education. Quiz............................... 76
Module 4 – Teaching materials 1: Cases for group work............................................................... 85
Module 4 – Teaching materials 2: Template for group work........................................................ 86
Module 4 – Teaching materials 3: Dictionary of educational methods.......................................... 87
Module 4 – Group facilitators’ instruction......................................................................................... 89
Module 4 – Evaluation Form............................................................................................................. 90

Module 5.............................................................................................................................................. 91
Module 5 – Description of the module................................................................................................. 92
Module 5 – Ppt slides: Assessment of quality improvement skills and knowledge.......................... 95
Module 5 – Group facilitators’ instruction......................................................................................... 108
Module 5 – Evaluation Form........................................................................................................... 109

Course Overview.............................................................................................................................. 110
Authors of the course

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Content

The course is divided into 5 modules, presenting a good balance between about what quality of care is, and how to teach quality. The course faculty will give several lectures. Some of them summarize current knowledge and the “state of the art” in specific fields, while others are introductions to exercises and to plenary or small group work. Most of the activities are based on the active and interactive participation of the course members.

Module 1
Introduction to Course on How to Teach QI
(J. Kersnik)

Module 2
Theoretical background and overview of teaching and assessment methods
(Z. Klemenc-Ketiš, M. Petek-Šter)

Module 3
Theoretical background and overview of quality improvement methods
(K. Winell)

Module 4
Teaching Quality Improvement
(T. Tomasik, A. Domagała, A. Windak)

Module 5
Assessment of quality improvement skills and knowledge
(J. Kersnik)
Short description

Background
Family medicine is taught in the majority of European countries. Teaching quality is included in the family medicine curricula of the majority of European countries at all levels of education. The inclusion in the family medicine curriculum of specific quality subjects and their perceived importance indicates the existence of different perceptions about teaching quality. An international consensus on a standard curriculum for teaching quality can stimulate and support implementation. This has led to an increase in the demand for teachers experienced in both quality and family medicine. There is a similar need for trainers involved in speciality training for general practice. Most of the trainers in practice, teaching trainees on a one-to-one basis, are not trained to teach quality. They are usually practising physicians who want to contribute to the teaching of family medicine, but do not have the specific knowledge and skills necessary for this.

Source of the course
The Vocational Education and Training in Quality Improvement Course was designed and developed jointly by EQuiP and the Leonardo da Vinci project “Innovative lifelong learning of European General Physicians in Quality Improvement supported by information technology”, run by an international consortium promoted by the College of Family Physicians in Poland. All the written and electronic educational materials for the course were produced by the Leonardo da Vinci project.

General aim
To improve the quality of teaching Quality Improvement in Family Medicine in European Countries.

Implementation strategy
This course is aiming at educators in participating countries. This will prepare them to use the basic structure of the course in future in their own country, adapting it to country-specific requirements for the teaching process and the level of development of family medicine teaching. Participants should also be connected to a teaching institution to ensure the sustainability of the project in the longer term. On completion of the course groups of participants should be able to provide teacher-training courses to family medicine teachers in their own country.

At the end of the course each team of trainers will be able to develop a training program for teachers in their own country. The exchange of information and teaching programs between the participants from different countries will ensure wider a dissemination of the skills and knowledge acquired during the course.

Expected outputs
- Teaching materials for teacher training
- Teaching modules, adapted to individual countries
- A number of in-country courses
- A network of teachers and tutors

Expectations of course participants
This course has been designed to provide you with the necessary skills and materials to organize and deliver skills training courses for family medicine teachers in participants’ own countries. It is expected that a participant will:

1. Participate actively in the Leonardo Vocational Education and Training in Quality Improvement Course.
2. Work with his/her colleagues on the course to prepare, and translate where appropriate, course resource materials.
3. Organize and deliver a teacher training course in his/her own country.
Instruction for course delivers

The overall aim of VET course is to improve quality of teaching Quality Improvement in Family Medicine teaching. It is aiming at educators on all levels of family medicine education. On completion of this course, participants should be able to provide teacher-training courses to family medicine teachers. In this package, you were given the course materials you need for a successful delivery of the course in your country. Here we give you some guidance how to use the content of this package.

Before the course
You need to plan the venue and the faculty of the course (see below). When selecting the participants, you should be familiar with the level of their knowledge, skills and experiences in quality improvement and education in order to give them additional sources on the topics concerned. You should provide all participants with a package of course materials, i.e. General information, VET-timetable, Evaluation form for the whole course and for each of the 5 modules. The participants should get
1. Module X\textsubscript{1-5} module description
2. Module X\textsubscript{1-5} Presentation(s)
3. Module X\textsubscript{1-5} additional materials (if any)
4. Module X\textsubscript{1-5} evaluation form

You can give the evaluation forms separately during the course after each module and at the end of the course. The facilitator notes are meant only for the course directors / moderators of the groups and should not be given to the course participants.

You should send out the materials at least two weeks before the course, asking the participants to get familiar with the materials and to print them out in order to be ready for use during the course.

Probably, for better understanding it will be necessary to translate the materials into your native language.

Delivery of the course

Venue
For this VET course, you need one large meeting room allowing U-shape sitting for the appropriate number of participants planned to attend the course. You will need a projector, a computer and a flip chart in this room. Chairs must be free to move in a circle.

Additionally, you will need two additional rooms for small group work (one group can meet in the large meeting room). Each room must be equipped with a flip chart and with enough chairs for the number of small group participants and a moderator. Chairs must be free to move in a circle.

Faculty
A faculty of minimum 3 course directors/moderators who have already finished the VET course in Prague or poses enough expertise in quality improvement and teaching is needed to run a course for up to 30 participants, thus allowing small groups of up to 10 participants. For bigger number of participants, additional moderators are needed.

Expected outputs
- Teaching materials for teacher training
- Teaching modules, adapted to individual countries
- A number of in-country courses
- A network of teachers and tutors
Course structure

The course is divided into 5 modules, presenting a mixture of quality, teaching and assessment methods presented. There are introductory lectures. Some of them summarize current knowledge and “state of the art” in specific fields, others are introductions to exercises and plenary or small group work. Most of the activities are based on active and interactive work of the participants.

During the first module there will be a plenary introduction of all the participants.

During the lectures, the presenters will guide buzz groups or any other activity by themselves as planned in the description of the module.

During group work and during feedback sessions, some general rules have to be enforced, i.e. one of the course directors have to pinpoint the rules of normal communication in large and also small groups to meet the expectations of all for a fruitful course. A detailed description of activities is provided below.

When planned in the timetable there will be a feedback report from small groups to all participants. Reports should be up to 5 minutes long allowing 5 minutes discussion moderated by one of the module moderators. Power point presentations or flip chart can be used in feedback reports.

After the last module there will be a final review of the meeting where each participant can bring forward his / her own experiences of the course.

After each module and at the end of the course, the faculty will remind participants to fill in the evaluation forms.

Module 1

The participants will be asked to work in buzz groups on what is QI all about and why is it necessary to learn and teach on QI during the presentation. A buzz group is ad hoc established group of two to five participants either sitting closely together in the audience or set together by some simple rule to stimulate introductions of participants not known to each other and avoid “old friends” chat among themselves and newcomers are excluded. You can point the boarders between the groups to facilitate the decision who will be talking to whom. The aim of the buzz group is to discuss the topic offered and to report back few bullet points to the larger group. All participants in the group have equal roles and they can decide reporter on their own. Some sett-up rules are:

- In the case of two buzz groups, you can ask participants to meet someone not already known to them.
- In the case of setting up larger buzz groups, you can ask participants to repeatedly count themselves 1, 2, 3, … (if you have 20 participants and you are about to set up 4 groups, they should count up to 5 and start again) assigning themselves a number and then sitting together with participants with the same number.

Small group work aims to know each other better and to set up group dynamics. Basic rules will be listed and accepted by the group. Each member should have a possibility to contribute, we listen to each other, only one person speaks at once, each and everyone's opinion is respected, we discuss issues not persons, everybody contributes to the report, each person shall have a possibility to report back to large group, report is based on mutual agreement and not overrating. Everybody avoids lecturing, teaching or other means of non-democratic discussion. Moderator has to keep an eye that the rules are enforced.

Module 2

During the first presentation, there will be a short buzz group exercise in which participants will list and discuss key features of adult learning.

In small group work participants will reflect on learning and assessment with listing teaching and assessment methods for teaching QI and marking them on a scale from 1-5 according to appropriateness for adult learning. Second presentation is about personal learning plan as a tool for assessing needs in QI teaching. In small group work participants will develop their own personal learning plans.

Module 3

This will be an interactive presentation about the principles of quality improvement (QI) tools and methods with an exercise on QI circle (PDCA) in ad hoc small groups.
Module 4
At the beginning of the module, there will be a short presentation on its aims, covering the basic principles of the QI teaching, also indicating that this topic is still a new field in GP education.

In the first small group work, the participants will discuss how and why to teach QI competencies during postgraduate education (specialist training).

A short quiz in plenary will explore levels of understanding of the basic concepts of quality improvement, the terms used and their meaning.

The teacher shows the title of the quiz and opens the first screen, showing three fields of quality improvement. The questions have an associated score range from 100 (easy question) to 400 points (difficult question). The group, one after another, chooses the question and answers it. After the answer is given, the teacher shows the right answer with the reference. The sum of all points collected by each group is given. The winner of the quiz is the group with the greatest number of points scored. During the quiz, the participants should not look for the answers in the course materials. To achieve this, you should ask them to put their course materials away.

In the second small group work, the participants will hold a case-based discussion focusing on 3 case studies.

Module 5
It will start with a lecture about useful assessment methods in assessment of QI skills and knowledge with buzz group exercises in which participants will list, discuss strengths and limitations methods for the assessment of QI skills and knowledge and secondly the feasibility of them.

In small group work, the participants will plan assessment for quality improvement educational programmes in one of the domains (undergraduate, specialist or continuing medical education).
Programme

Vocational Education and Training in Quality Improvement Course

DAY 1

Introduction to teaching QI

14.30-15.00 Coffee break

<table>
<thead>
<tr>
<th>Time</th>
<th>Module 1 – Introduction to teaching QI (2.5h)</th>
<th>Method</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.00</td>
<td>M1.1 Formal introductions – who we are</td>
<td>Plenary</td>
<td>Faculty</td>
</tr>
<tr>
<td>15.30</td>
<td>M1.2 Why teaching QI?</td>
<td>Buzz groups</td>
<td>Janko Kersnik</td>
</tr>
<tr>
<td>15.40</td>
<td>M1.3 What is the course about?</td>
<td>Presentation</td>
<td>Janko Kersnik</td>
</tr>
<tr>
<td>16.00</td>
<td>M1.4 Ice breaker</td>
<td>Small groups</td>
<td>Group facilitators</td>
</tr>
<tr>
<td>17.00</td>
<td>M1.5 Review of group work</td>
<td>Plenary</td>
<td>Group facilitators</td>
</tr>
<tr>
<td>17.30</td>
<td>End of module 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Programme

### DAY 2

### Principles of teaching and assessment methods, principles of QI

<table>
<thead>
<tr>
<th>Time</th>
<th>Module 2 – Theoretical background and overview of teaching and assessment methods (3h)</th>
<th>Method</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.00</td>
<td>M2.1 Teaching and assessment methods and skills - adult learning</td>
<td>Presentation with</td>
<td>Zalika Klemenc-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>buzz groups</td>
<td>-Ketiš</td>
</tr>
<tr>
<td>09.45</td>
<td>M2.2 Reflection on learning</td>
<td>Small group</td>
<td>Group facilitators</td>
</tr>
<tr>
<td>10.15</td>
<td>M2.3 Review of group work</td>
<td>Plenary report</td>
<td>Zalika Klemenc-</td>
</tr>
<tr>
<td>10.30</td>
<td>Coffee break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.00</td>
<td>M2.4 Personal learning plan as a tool which includes learning needs in QI</td>
<td>Presentation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Small group</td>
<td>Marija Petek-Šter</td>
</tr>
<tr>
<td>11.15</td>
<td>M2.5 Personal learning plan</td>
<td>Plenary report</td>
<td>Group facilitators</td>
</tr>
<tr>
<td>12.00</td>
<td>M2.6 Review of group work</td>
<td></td>
<td>Marija Petek-Šter</td>
</tr>
<tr>
<td>12.30</td>
<td>End of module 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.30-14.00</td>
<td>Lunch break</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Module 3 – Theoretical background and overview of QI methods (2.5 h) preferred one large room</th>
<th>Method</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.00</td>
<td>M3.1 Basics of QI methods</td>
<td>Interactive presentation</td>
<td>Klas Winell</td>
</tr>
<tr>
<td>14.45</td>
<td>M3.2 Quality problem – decide about an improvement need</td>
<td>Small group</td>
<td>Group facilitators</td>
</tr>
<tr>
<td>15.15</td>
<td>Coffee break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.45</td>
<td>M3.3 Making an improvement plan</td>
<td>Small group</td>
<td>Group facilitators</td>
</tr>
<tr>
<td>16.15</td>
<td>M3.4 How to measure the change</td>
<td>Small group</td>
<td>Group facilitators</td>
</tr>
<tr>
<td>16.45</td>
<td>M3.5 Review of group work</td>
<td>Plenary</td>
<td>Klas Winell</td>
</tr>
<tr>
<td>17.15</td>
<td>M3.6 Take home messages</td>
<td>Plenary discussion</td>
<td>Klas Winell</td>
</tr>
<tr>
<td>17.45</td>
<td>M3.7 Concluding remarks</td>
<td>Short presentation</td>
<td>Klas Winell</td>
</tr>
<tr>
<td>18.00</td>
<td>End of module 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Methods</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.00-18.20</td>
<td>Short break – review of day</td>
<td>Gold-fish bowl</td>
</tr>
</tbody>
</table>

The voluntary goldfish bowl session provides an opportunity for course members to observe the faculty review of the day.
## Programme

### DAY 3  
**Teaching QI and assessment of QI learning**

<table>
<thead>
<tr>
<th>Time</th>
<th>Module 4 – Teaching QI (3 h)</th>
<th>Method</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.00</td>
<td>M4.1 Teaching QI in GP’ office</td>
<td>Presentation</td>
<td>Tomasz Tomasik</td>
</tr>
<tr>
<td>09.15</td>
<td>M4.2 Use of modern methods in teaching QI</td>
<td>Small group</td>
<td>Group facilitators</td>
</tr>
<tr>
<td>10.00</td>
<td>M4.3 Review of group work</td>
<td>Plenary</td>
<td>Tomasz Tomasik</td>
</tr>
<tr>
<td>10.30</td>
<td><strong>Coffee break</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.00</td>
<td>M4.4 Quality Improvement in practice - Quiz</td>
<td>Plenary</td>
<td>Tomasz Tomasik</td>
</tr>
<tr>
<td>11.30</td>
<td>M4.5 A case based discussion</td>
<td>Small group</td>
<td>Group facilitators</td>
</tr>
<tr>
<td>12.00</td>
<td>M4.6 Review of group work</td>
<td>Plenary</td>
<td>Tomasz Tomasik</td>
</tr>
<tr>
<td>12.20</td>
<td>M4.7 Summary of the session</td>
<td>Plenary discussion</td>
<td>Tomasz Tomasik</td>
</tr>
<tr>
<td>12.30</td>
<td>End of module 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.30-14.00</td>
<td>Lunch break</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Module 5 – Assessment of QI skills and knowledge (3 h)</th>
<th>Method</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.00</td>
<td>M5.1 Assessment of QI skills and knowledge</td>
<td>Presentation with buzz groups</td>
<td>Janko Kersnik</td>
</tr>
<tr>
<td>14.45</td>
<td>M5.2 Discussion</td>
<td>Questions and discussion</td>
<td>Janko Kersnik</td>
</tr>
<tr>
<td>15.30</td>
<td><strong>Coffee break</strong></td>
<td></td>
<td>Group facilitators</td>
</tr>
<tr>
<td>16.00</td>
<td>M5.3 Designing assessment for teaching QI</td>
<td>Small group</td>
<td>Janko Kersnik</td>
</tr>
<tr>
<td>17.00</td>
<td>M5.4 Review of group work</td>
<td>Plenary</td>
<td>Janko Kersnik</td>
</tr>
<tr>
<td>17.30</td>
<td>End of module 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Reflection and evaluation of the course</th>
<th>Method</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.30</td>
<td>Personal reflections of the course</td>
<td>Plenary</td>
<td>All</td>
</tr>
<tr>
<td>18.00</td>
<td><strong>End of the course</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*QI - quality improvement  
**GP - general practice  
***IT - information technology
Module 1

Introduction to teaching Quality Improvement course

J. Kersnik
Module 1 - Description of the module

CONTENT

<table>
<thead>
<tr>
<th>Module</th>
<th>Title</th>
<th>Type</th>
<th>Time – 2h30m</th>
</tr>
</thead>
<tbody>
<tr>
<td>M 1.1</td>
<td>Formal introductions - who are we</td>
<td>Formal introduction of the participants</td>
<td>30'</td>
</tr>
<tr>
<td>M 1.2</td>
<td>Why teaching QI?</td>
<td>Buzz groups</td>
<td>10'</td>
</tr>
<tr>
<td>M 1.3</td>
<td>What is the course about?</td>
<td>Presentation</td>
<td>20'</td>
</tr>
<tr>
<td>M 1.4</td>
<td>Ice breaker</td>
<td>Small groups</td>
<td>60'</td>
</tr>
<tr>
<td>M 1.5</td>
<td>Review of group work</td>
<td>Plenary</td>
<td>30'</td>
</tr>
</tbody>
</table>

AIMS

At the end of this module participants will:
1. Have introduced themselves to the faculty and to each other
2. Understand the course aims and methods
3. Be able to start to work effectively in their small group
4. Understand the value of the ice breaker exercise in group facilitation

METHODS

» Interactive and participatory workshop
» Presentation including buzz group
» Small group work
» Plenary presentation

DESCRIPTION

At the beginning the participants, including the faculty, will briefly introduce themselves one by one. This is followed by a formal presentation and discussion of the origin of the course, its timetable, content and working style. During this there will be a short buzz group exercise in which participants will discuss their experiences and needs in teaching QI at different levels, i.e. undergraduate, postgraduate and CPD level. At the end of this session an ice-breaking exercise will be organized, following which the participants will split into their course working groups to explore their ideas, concerns and expectations of the course. The groups will present their key issues to a final plenary session.

EVALUATION

Course evaluation form
Reflection
REFERENCES

None for this module

RECOMMENDATIONS FOR FURTHER READING

There are a number of books on games for groups – in authors’ view the best are:


HANDOUTS

On the resource-CD/internet file
- Copy slides
- Description of ICE exercise, and ice breaker exercises

EQUIPMENT:

- One large room for plenary session equipped with computer data projection
- Chairs arranged in a circle with clear area in the centre
- Break out rooms for groups
Module 1: PPT slides

inGPinQI Project
(No. 2010-1-PL1-LEO05-11473)

Module 1:
Introduction to teaching QI

Content

» 30’ Formal introductions - who are we
» 10’ Why teaching QI? – buzz groups
» 20’ What is the course about? – presentation
» 60’ Ice breaker – small group work
» 30’ Review of group work – plenary

At the end of this module participants will

» Understand the course aims and methods
» Be able to start to work effectively in small groups
» Understand the value of the ice breaker exercise in group facilitation

Vocational Education and Training in Quality Improvement Course
Introduction

What is the course about?

Course aims

At the end of the course participants will have an overview of and understand:

» different teaching and assessment methods
» different QI methods
» the theoretical frameworks for teaching and assessing QI and the terminology used
» The methodology of teaching and assessing QI most suited to FM/GPs

Formal introductions - who are we?

› Find someone whom you do not know.
› Talk to him/her and listen his/her introduction.
› Give 3 bullet points back on what you learnt from your neighbour.
› Points for discussion – previous experience in
  • QI
  • Teaching
  • Teaching QI
Course aims

At the end of the course participants will
» have begun to develop skills in using the appropriate tools for teaching and assessment QI.
» have practiced these skills in a secure learning environment.
» be able to apply their knowledge and skills in their own context as teachers.

Goal

To improve the quality of patient care by promoting teaching, learning and assessment of QI in FM/GP in Europe.

Impact on patients

» High quality care
» Equity, accountability, fairness
» Health care impact
  • individual patient
  • institution
  • country
» Ethical view
History of the course

» Leonardo da Vinci Project – “Innovative lifelong learning of European General Physicians in Quality Improvement supported by information technology ‘inGPinQI Project’ No. 2010-1-PL1-LEO05-11473”

The authors of the course

» Professor Janko Kersnik – Slovenia, IDFM, EURACT President, past EQuIP member
» Associate Professor Tomasz Tomasik – Poland, DFM Krakow, EQuIP member
» Professor Adam Windak – Poland, DFM Krakow, EURACT member
» Associate Professor Alicia Domagala, Poland, DFM Krakow
» Associate Professor Zalika Klemenc-Ketis – Slovenia, IDFM, EQuIP member, EURACT member
» Associate Professor Marija Petek-Ster – Slovenia, IDFM, EGPRN member, past EQuIP member
» Associate Professor Klas Winell – Finland, EQuIP member
» …

The faculty

» Professor Janko Kersnik – Slovenia, IDFM, EURACT President, past EQuIP member
» Associate Professor Tomasz Tomasik – Poland, DFM Krakow, EQuIP member
» Associate Professor Zalika Klemenc-Ketis – Slovenia, IDFM, EQuIP member, EURACT member
» Associate Professor Marija Petek-Ster – Slovenia, IDFM, EGPRN member, past EQuIP member
» Associate Professor Klas Winell – Finland, EQuIP member
Course structure

» 2.5 days
» 5 modules
» Presentations, group work, exercises
» Reflection
» Social activities and informal discussions

Expectations of you

» Participate actively in the course
» Work with your colleagues on the course to prepare it, and translate course resource materials where appropriate
» Repeat the course in your country
» Apply your new skills and knowledge in the teaching and assessment of QI in FM/GP in your own country

Desired outputs

» A sustainable and evolving series of courses
» Good quality course materials
» Training modules adapted to individual countries
» A network of teachers and tutors confident in teaching and assessing QI in FP/GP
» A number of cascaded in-country courses
» Publications
What it is not?

» Master class for teaching, quality or assessment experts
» Detailed study of individual methods
» In depth analysis of statistical methods

It is

» Practical overview for teachers
» Study of common examples in detail

Desired outputs

» **Module 2**: Theoretical background and overview of teaching and assessment methods
» **Module 3**: Theoretical background and overview of QI methods
» **Module 4**: Teaching QI
» **Module 5**: Assessment of QI skills and knowledge

inGPinQI Project
(No. 2010-1-PL1-LEO05-11473)

Time for question
**Vocational Education and Training in Quality Improvement Course**

**Module 1 - Teaching materials**

**DESCRIPTION OF ICE BREAKER EXERCISES**

Most of this course will be conducted in small group workshops. It is important to get groups working productively as quickly as possible and ice breaker exercises help with this. During this course we will be using the first exercise as it provides a theme for the small group work. We may also use either the Shark game or Untangling – these are more useful in larger groups, as “warm up” exercises.

<table>
<thead>
<tr>
<th>Game</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICE brainstorm</td>
<td>Course members will be split into their working groups. They will be invited to brainstorm their:</td>
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<tr>
<td></td>
<td><strong>I</strong>deas – what are their current inventions, fantasies or good ideas in the field of Quality Improvement,</td>
</tr>
<tr>
<td></td>
<td><strong>C</strong>oncerns – what are their anxieties, worries,</td>
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<tr>
<td></td>
<td><strong>E</strong>xpectations – of the course.</td>
</tr>
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<td></td>
<td>These will be summarised and recorded on a flip chart by the group leader, and presented and discussed in plenary.</td>
</tr>
<tr>
<td>Ball/name game</td>
<td>Each participant states their name. A ball is given to one participant who tosses it to another group member, saying that member’s name. If correct the member with the ball does the same, if unsuccessful the ball is returned. Forfeits, such as standing on one leg can be introduced. Alternative harder version – on receipt of the ball have to say all the names that have been said so far.</td>
</tr>
<tr>
<td>The Shark game</td>
<td>Course members will be invited to climb on chairs randomly; they will then be asked to re-arrange the distribution of the group in order of birthdays during the year, without falling into the “sea” and getting eaten by sharks. Course members should be invited to do this and be fit enough to climb on chairs: they should remove shoes.</td>
</tr>
<tr>
<td>Untangling the group</td>
<td>All participants raise their hands above their heads and move towards each other so as to join each hand with two other participants. Two members – each end of the string – only join with one hand. The task is to unravel the group to a line without breaking the grip. NB there may be a separate closed circle formed.</td>
</tr>
<tr>
<td></td>
<td>NB there may be a separate closed circle formed.</td>
</tr>
</tbody>
</table>
Module 1 - Group facilitators’ instruction

During this session there will be two interactive sessions.

---

**BUZZ GROUPS**

The participants will be asked to work in buzz groups on what is QI all about and why it is necessary to learn and teach QI. You have no formal role in this session but if a group near you is struggling with what a buzz group does then please assist.

---

**GROUP WORK**

This will be your first session with your group. You will have an hour, during which participants will be expected to produce a flip chart of their ideas, concerns and expectations of Quality Improvement. As it is the first group session you may find it helpful to run a small “let’s introduce ourselves again” session. There will be no more than 5 minutes for each group to feed back to the plenary, which will be strictly enforced. Please remind them of this as a general rule of the course, and it might be helpful if you present the results from your group in this first plenary.
Module 1 - Evaluation Form

Please evaluate the module and return the form to one of the organisers. The form should be completed by marking with a circle the figure which most accurately illustrates your opinion; 5 indicates the best relevance and quality, and 0 the least relevance and quality. We would also be very interested in any comments you wish to make on what went well and what could be improved; please write in the space provided.

Your feedback is important in revising and improving the course.

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<td>2</td>
<td>1</td>
<td>0</td>
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<td>4</td>
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<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

What went well:

What improvements might be made:

Thank you for your help.
Module 2

Theoretical background and overview of teaching and assessment methods

Z. Klemenc-Ketiš, M. Petek-Šter
Module 2 - Description of the module

CONTENT

<table>
<thead>
<tr>
<th>Module</th>
<th>Title</th>
<th>Type</th>
<th>Time – 3h30m</th>
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<tbody>
<tr>
<td>M 2.1</td>
<td>Teaching and assessment methods and skills – adult learning</td>
<td>Presentation with buzz groups</td>
<td>45’</td>
</tr>
<tr>
<td>M 2.2</td>
<td>Reflection on learning</td>
<td>Small groups</td>
<td>45’</td>
</tr>
<tr>
<td></td>
<td>Coffee break</td>
<td></td>
<td>30’</td>
</tr>
<tr>
<td>M 2.3</td>
<td>A personal development plan as a tool -which includes learning needs in QI</td>
<td>Presentation</td>
<td>15’</td>
</tr>
<tr>
<td>M 2.4</td>
<td>Personal learning plan</td>
<td>Small groups</td>
<td>45’</td>
</tr>
<tr>
<td>M 2.5</td>
<td>Review of group work</td>
<td>Plenary</td>
<td>30’</td>
</tr>
</tbody>
</table>

AIMS

At the end of this module participants will:
1. Be familiar with the key features of adult learning
2. Be able to list the teaching and assessment methods used in adult learning
3. Understand the strengths and limitations of the teaching and assessment methods used in adult learning
4. Be able to develop a personal development plan

METHODS

» Interactive and participatory workshop
» Presentation
» Buzz groups
» Small group work
» Plenary presentation

DESCRIPTION

This module will start with a lecture about teaching and assessment methods in adult learning. The lecture will present the key features of adult learning, the teaching and assessment methods used in adult learning, and their strengths and limitations. During this presentation, there will be a short buzz group exercise in which participants will list and discuss the key features of adult learning. This will be followed by small group work in which participants will reflect on learning and assessment by listing teaching and assessment methods for teaching QI and marking them on a scale from 1-5 according to how appropriate they are in adult learning. The small group work will be followed by a plenary review of the group work, in which each group's representative will give a short report.
about the group's discussion. A coffee break will be followed by a lecture on using a personal learning plan as a tool for assessing needs in QI teaching. This lecture will describe what a personal learning plan is, and why it is necessary for adult learners to have their own personal learning plan. The main goal of a personal learning plan is to make a systematic approach to our own education and to improve the quality of our work. The process of preparing a personal development plan will be presented. Before we begin preparing a personal development plan, we need to know the learner’s educational needs, based on his/her personal characteristics, previous learning experience, work environment and work profile. The aims of the personal development plan should be regularly followed. The personal development plan should be adapted from time to time with regard to changing educational needs. The lecture will be followed by small group work in which the participants will develop their own personal learning plan. Afterwards a plenary review will allow each group’s representative to give feedback on the group work.

**EVALUATION**

» Course evaluation form
» Reflection

**REFERENCES**


**RECOMMENDATIONS FOR FURTHER READING**

HANDOUTS:

On the resource-CD/internet file
» Copy slides
» Description of group work
» Example of a personal learning plan

EQUIPMENT:

» One large room for plenary session equipped with a computer and projector
» Chairs arranged in a circle with clear area in the centre
» Breakout rooms for groups
Aims
At the end of this session, the participants will:
(knowledge)
» Be familiar with key features of adult learning,
» Know the teaching and assessment methods used in adult learning,
(skills)
» Use appropriate teaching and assessment methods in QI,
(attitudes)
» Understand the strengths and limitations of the teaching and assessment methods used in adult learning.

Plan for the session
» Interactive plenary presentation:
  • Adult learning
  • Teaching methods
  • Assessment methods
» Buzz groups:
  • Features of adult learning
» Small group work:
  • Share personal learning and teaching experiences
» Plenary feedback
What is adult learning?

» The act, process, or experience of gaining knowledge, skills and attitudes … in adults.
» Different from child learning:
  • From pedagogy to andragogy
  • From passive to active learning

Buzz groups

» Form groups of two
» List and discuss the key features of adult learning
» Report to plenary – two key features

Principles of adult learning

» Autonomous and self-directed
» Life experiences and knowledge
» Goal-oriented
» Relevancy-oriented
» Practical
» Active/based on experience
Adult learning model

- CONCRETE EXPERIENCE
- FEELING
- WATCHING
- DOING
- THINKING
- EXPERIMENTATION
- REFLECTIVE OBSERVATION
- CONCEPTUALIZATION

How to teach adults

Adults respond best to learning that is:
- Active
- Experience-based
- Recognizes the learner as an expert
- Independent
- Real-life centered
- Task-centered
- Problem-centered
- Solution-driven
- Skill-seeking
- Self-directed
- Internally and externally motivated

Teaching methods

- Problem-based learning
- Seminars
- Group work
- Simulation
- Role play
- Self-learning
- Spaced lectures
- Case studies
Small group work

- Which teaching methods do you know about?
- Which have you **directly** experienced as a learner?
- Which have you **directly** experienced as a teacher?

**Record on flip chart, mark 1-5 for adult learning**
Assessment

Formative:
» To provide valuable feedback to learners (progress in learning)
» It does not count towards their mark or grade
» Includes both feedback and self-monitoring

Summative:
» Final assessment with a mark or grade
» Evaluation of learning outcomes
» Enables progress to the next module or stage
» Does not always include feedback and self-monitoring

Purpose of assessment

» To help learners get the most out of the course
» To help learners to develop their critical faculties
» To improve the teaching process
» To ensure that real learning has taken place on an individual basis
» To enhance understanding of the subject in question
» To help tutors contribute to the learners’ learning through a process of sympathetic and constructive criticism of their work
» To build confidence

Resistance to assessment

» The terrified learner: “I want to learn more about the subject but find the idea of being assessed quite frightening”.
» The passive learner: “I have paid my fee and don’t see why I should have to do assessed work when I am just here to learn about the subject from the tutor”.
» The 'been there, got the T-Shirt' learner: “I resent being forced to do essays – I gave up all that a long time ago”.
» The highly qualified learner: “I’m a qualified doctor – I don’t need credits since I already have a degree”.
» The ‘I’m too old for this’ learner: “I’m 76 and really can’t see the point of working towards credits at my age”.

Vocational Education and Training in Quality Improvement Course
What to assess?

» Knowledge
» Skills
» Attitudes

» Competence
» Performance

Performance

Competence

Does

Shows how

Knows how

Knows
Assessment methods

- MCQ
- WBA
- OSCE
- Consulting skills
- Oral exams
- Essays, seminars
- Structured reference
- Self assessment
- Critical reading
- Role play
- Group task
- Appraisal

"— Provides a sample of attitudes and opinions of colleagues on the clinical performance and professional behaviour of the GPs
— Helps to provide data for reflection on performance and gives useful feedback for self-evaluation.

"PSQ
— Evaluation of a doctor’s progress in his/her performance over time, in those areas of professional practice best tested in the workplace
— “Does” not “Can do”

"OSCE
— To test clinical skill performance and competence in skills

"AUDIT
— To assess performance in real-life clinical cases
Structured Reference

- Structured reference is a report by a supervising doctor on a doctor in training to permit progression in a training programme.

Self-Assessment

- Confidence rating scales
- Review of consultation record
- Video analysis of consultations
- Feedback from patients, colleagues and staff
- Random case analysis
- Problem case analysis
- Practice exchange visits

Critical Reading

- To assess learners’ skills in seeking, finding and using literature that can inform practice.

Role Play

- Allows assessment of attitudes in difficult areas.

PSQ

- Provides feedback to GPs by providing a measure of the patient’s opinion of the doctor’s relationship and empathy during a consultation.
- The evidence provided is useful in helping trainers and GPs to address needs and facilitate educational development during the training period.

Appraisal

- A structure reflection on performance, with a supervisor/mentor with the aim of producing and reviewing a personal learning plan.

Small group work

» Which assessment methods do you know about?
» Which have you directly experienced as a learner?
» Which have you directly experienced as a teacher?

Record on flip chart, mark 1-5 for adult learning.
Conclusion

Adults learn best when:
» They understand why something is important to know or do
» They have the freedom to learn in their own way
» Learning is experiential
» The time is right for them to learn
» The process is positive and encouraging

Time for questions
**Module 2 - PPT slides**

inGPinQI Project  
(No. 2010-1-PL1-LEO05-11473)

**Personal learning plan (PLP)**

*Author: Marija Petek Šter*

**Aims**

At the end of this session, the participants will:

*(knowledge)*  
» Know how to assess the learners’ needs  
» Know the structure of the PLP  
» Know how to assess a PLP

*(skills)*  
» Prepare their own PLP

*(attitudes)*  
» understand why is important to have their own PLP

**Plan for the session**

*Interactive plenary presentation:*
» Why is important to have a PLP  
» How to make a needs assessment  
» Instructions for preparing a PLP  
» Assessment of the PLP

*Small group work:*
» Preparing their own PLP

*Plenary feedback*
» an example of a PLP,  
» problems concerning preparing a PLP  
» potential gains and usefulness of having a PLP
Personal learning plan (PLP)

» Personal educational agenda
» Individuals can decide what they wish to learn
» Evaluation increases the usefulness of the exercise
» A PLP is an evolving instrument

Why PLP?

» Personal
» Needs related
» Reflective
» Relevant
» Record for lifelong learning
» Re-accreditation

Steps of PLP

Step 1: What do I think I need to learn?
» General area in which I need additional knowledge

Step 2: How do I know what I need to learn?
» How did I establish this need?
» What is the aim of my learning?
» What are the specific objectives that I wish to achieve?

Step 3: How will I learn?
» How do I intend to achieve these objectives?

Step 4: How am I going to know if I have done it?
» How will I evaluate my PLP?
» How will I demonstrate that I have undertaken this plan?
» What is my timescale?
Step 1: What do I think I need to learn?

» DO NOT FOCUS ON AREAS OF EXPERTISE, BUT ON AREAS OF DEFICIENCY

» What areas of work make you anxious?
» What keeps coming up as a problem?
» What are you good at (and might enjoy learning more about)?

Step 1: What do I think I need to learn?

List three things that:
» I do well
» I do badly

Step 2: How do I know what I need to learn?

» Staff views/observations
» Consultants’ comments
» Partners’ confidential appraisal
» PUNS („Patients’ Unmet Needs“)
  • Knowledge
  • Skills
  • Attitudes
  • Resources
» SEA („Significant event analysis“)
  • clinical or organizational
» Audit data: systematical and critical analysis of our work with the objective of improving patient care
Step 3: How will I learn?

» An outline of how you plan to address your learning needs
» Try to make these „SMART“:
  • Specific
  • Measurable
  • Achievable
  • Relevant
  • Timed

initial PLP

» What in particular do I need to learn?
» Why do I need to learn this?
» How am I going to learn it?
» How will I use this in practice?

Example of PLP: presenting skills

<table>
<thead>
<tr>
<th>What do I need to learn</th>
<th>How do I know this?</th>
<th>What are my learning aims?</th>
<th>How am I going to meet these aims?</th>
<th>How will I demonstrate I have learnt this?</th>
</tr>
</thead>
<tbody>
<tr>
<td>How to prepare more advanced power point presentation.</td>
<td>At the international meeting I found the other presenters had more advanced PP projections.</td>
<td>I am going to improve my skills in preparing power point presentations.</td>
<td>Read some articles (attending the workshop) about the structure and content of good PP. Analysing some examples of good PP. Discuss with an expert and ask him/her for tutoring.</td>
<td>Positive feedback from the audience and from the colleagues. Higher score on assessment form for presentation skills.</td>
</tr>
</tbody>
</table>
Step 4: Assessment

» Evaluation of PLP helps to make future learning more effective
» The purpose of assessment is not to make a pass/fail decision
» Assessment of the criteria provides observations that can be used to further the professional development of the GP
» These criteria can be used by GPs for self-evaluation, or others such as GP tutors who have responsibility for assessing their colleagues by looking at their PLPs
» Assessment of the PLP process by the GP provides useful feedback and helps to keep the focus on education where it belongs i.e. on the learner

Step 4: Assessment

» Evaluation should be made at least once a year
» Four questions:
  • Which were the most valuable learning activities and why?
  • Which were the least valuable learning activities and why?
  • How have you been able to apply your learning in practice?
  • What learning needs might you wish to carry forward to your next PLP?

Step 4: Assessment

» It is helpful to find a tutor with whom you can discuss your plan before its implementation or
» Have a discussion among your peers or
» You can do a PLP alone as you already did when you planned your CME
Assessment of needs

» Educational needs are of relevance to primary care
» There is a balance of needs
» The need represents a deficiency
» There is evidence of need
» If a GP has a specialised role, this is being considered
» Addressing the needs seems feasible

Assessment of objectives and activities

» The objectives are SMART
» The activities are appropriate

Assessment of evidence

» There is evidence of learning
» Evidence arises from mainstream activity
» There is evidence of reflective learning
» Certificates
Practical recommendations

» Make your first PLP simple
» Take time each week to work on your PLP
» Write and report on your progress (tutor, colleague)
» Amending the PLP: review and edit it as it grows (at least once a year)

Conclusions

» PLP is neither more nor less than: *a mechanism for establishing the way in which our educational priorities can be met and the success of our plans evaluated*
» Our learning can become an integral part of our practice lives, using experiences drawn from our work and applying the results of that learning back to the work in a cycle which should have benefits for practitioners and patients alike.

Additional reading

Rugani A.  
Module 2 - Group facilitators' instruction

During this session there will be three interactive sessions.

**BUZZ GROUPS:**

The participants will be asked to work in buzz groups in which they will be asked to list and discuss the key features of adult learning. You have no formal role in this session but if a group near you is struggling with what a buzz group does then please assist.

**GROUP WORK 1**

This will be your second session with your group and it will last for half an hour. As feedback from the group work will take place after this session, you should select a person who will report, and it is recommended that you do this as soon as possible. You should advise him/her to take notes. There will be no more than 5 minutes for each group to feed back to the plenary, and this will be strictly enforced. Please remind them once again of this general rule of the course.

During this group session the participants are expected to reflect on learning and assessment. You should devote no more than 5 minutes to this task. Then the participants should produce a flip chart of teaching and assessment methods for teaching QI, and mark them on a scale from 1-5 according to how appropriate they are in adult learning. You should devote no more than 20 minutes to this task. At the end, you should ask the person who will report to the plenary to summarize the findings and help him/her if needed; in this way, he/she will feel more confident when reporting.

**GROUP WORK 2**

This will be your third session with your group and it will last for 45 minutes. As feedback from the group work will take place after this session, you should select a person (different from the previous group work) who will report, and it is recommended that you do this as soon as possible. There will be no more than 5 minutes for each group to feed back to the plenary, and this will be strictly enforced. Please remind them once again of this general rule of the course.

During this group session the participants will have to develop one example of a personal learning plan. Firstly, the group leader should demonstrate the process of preparing a personal learning plan. One member of the group should explain his/her educational needs in the field of QI. Then, this member should produce a flip chart of their personal learning needs, with the support of other participants and your help. Then you should explore the other participants' educational needs in the field of QI. This task should last for no more than 20 minutes.

During this task, they can refer to the example of a personal learning plan prepared by the course faculty.

Afterwards, each of the participants should prepare his/her own personal learning plan. This task should last for no more than 20 minutes. At the end, you should ask the person who will report to the plenary to summarize the findings and help him/her if needed.
Module 2 - Evaluation Form

Please evaluate the module and return the form to one of the organisers. The form should be completed by marking with a circle the figure most appropriate to illustrate your opinion; 5 is the mark for the best relevance and quality – and 0 for the least relevance and quality. We would also be very interested in any free text you wish to make on what went well and what could be improved in the space provided.

Your feedback is important in revising and improving the course.

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What went well:

What improvements might be made:

Thank you for your help.
Module 3

Theoretical background and overview of quality improvement methods

K. Winell
Module 3 - Description of the module

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<td>Basics of QI methods</td>
<td>Interactive presentation</td>
<td>60’</td>
</tr>
<tr>
<td>M 3.2</td>
<td>Quality problem – decide about an improvement need</td>
<td>Small groups</td>
<td>45’</td>
</tr>
<tr>
<td></td>
<td><em>Coffee break</em></td>
<td></td>
<td>30’</td>
</tr>
<tr>
<td>M 3.3</td>
<td>Making an improvement plan</td>
<td>Small groups</td>
<td>15’</td>
</tr>
<tr>
<td>M 3.4</td>
<td>How to measure the change</td>
<td>Small groups</td>
<td>35’</td>
</tr>
<tr>
<td>M 3.5</td>
<td>Take home messages</td>
<td>Plenary discussion</td>
<td>20’</td>
</tr>
<tr>
<td>M.3.6</td>
<td>Concluding remarks</td>
<td>Plenary</td>
<td>5’</td>
</tr>
</tbody>
</table>

*QI – quality improvement*

**AIMS**

At the end of this module participants will:
1. Know the basics of systematic quality improvement (QI) methods
2. Be able to use of a quality improvement circle
3. Understand their needs for QI skills
4. Be able to set up a learning group for QI

**METHODS**

» Interactive lecture
» Supported small groups
» Plenary reflections

**DESCRIPTION**

This module will start with an interactive presentation about the basics of quality improvement (QI); terminology, presenting the basic tools and methods that can be used in GP, the emphasis is on quality circle (PDCA). In the interactive lecture commonly used tools will be presented by showing how they can be used in different phases of PDCA. These include patient opinion:
» Patient panel
» Patient focus group
» Initiative / complain box at practice
» Patient satisfaction survey (EUROPEP)
or GP/team opinion:
» Discussion group at practice (brainstorming, nominal group)
» Register information (annual reports, patient records, national records)
» Auditing a practice (APO-method, EPA, Maturity Matrix, Incident Inventory, Scorecard)
» Labquality
» Peer review, practice visiting, practice audit

The participants will be urged to give their ideas on some of the topics or give answers – based on discussion with a person next to or small group chats - to what methods they would use based on the experience they now have. New ideas will be served in the lecture. QI terminology and comprehensive quality systems will be shortly touched. Comments and questions are welcomed.

An exercise on QI circle will be demonstrated in small groups. This takes place by defining a need for improvement, making up an improvement plan and planning an assessment to evaluate the planned changes. Participants choose methods to the different phases from the previous lecture. Some of the tools presented in the plenary will be used in small group practices. Group discussions are followed and advised by teachers. The most important learning experiences are ventilated in the plenary in evaluation of take home messages.

EVALUATION

» Course evaluation form
» Reflection

REFERENCES


RECOMMENDATIONS FOR FURTHER READING

HANDOUTS

On the resource-CD/internet file
» Copy slides
» Description of group work
» Short presentation of tools and methods

EQUIPMENT:

» One large room for plenary session, and participants sitting around tables for group work in groups of five, equipped with a computer, data projector, and Internet connection (if required)
» Stickers for the wall technique
» Copies on the fishbone method
Module 3 - PPT slides

MODULE 3:
Theoretical background and overview of quality improvement methods

Author: Klas Winell

Aims

» to gain knowledge about the basics of (systematic) quality improvement (QI) methods
» to be able to use a quality improvement circle
» to understand personal needs for QI skills
» to be able to set up a learning group for QI

Contents

» Basics of QI methods
» Terminology in QI
» Comprehensive QI systems
» Exercise on QI using the QI circle (PDCA)
Definition of quality improvement in health care

"systematic, data-guided activities designed to bring about immediate, positive changes to the delivery of healthcare in particular settings”

Steps in quality improvement

» Find a need for improvement
» Choose the topic for improvement
» Make a plan of how to improve
» Act
» Assess the change

Find a need for improvement

» What methods would you use to find the need(s) for improvement in health care?
Find a need for improvement

» Patient panel
» Patient focus group
» Initiative/complaint box at practice
» Patient satisfaction survey (EuroPEP)

Find a need for improvement

» Discussion group at practice (brainstorming, nominal group)
» Register information (annual reports, patient records, national records)
» Auditing a practice (APO-method, EPA, Maturity Matrix, Incident Inventory, Scorecard)
» Labquality
» Peer review, practice visiting, practice audit

Choose the topic for improvement = analysing the results

» The wall technique
» Multi-voting
» Audit starting grid
» Statistical analyses
» Pareto chart
» Leaders role
Causes of quality problems

» Attitudes
» Lack of knowledge and skills
» Lack of or problems with equipment
» Lack of personnel resources
» No agreement on processes
» No agreement on goals

Make a plan for improvement

» Root cause analysis (fishbone)
» Mentoring (peer visit, quality network)
» Leader’s role
» CME (skills training, quality circle, CME courses)
» Standard setting (check list)
» Practice guidelines
» Process descriptions (flow chart)
**Act**

- Leader’s role
- Practice guidelines (telephone cards for nurses, practice protocols, limited lists)
- Process descriptions (flow chart)
- Comprehensive quality system (ISO, EFQM, BSC, CAF)

**Assess the change**

- Measuring (patient record, sample)
- Standard setting

**Steps of P-D-C-A…**

- **Plan**…establish the objectives & processes necessary to deliver high quality results…outcome expectations…
- **Do**…implement the plan, execute the process…produce the service…collect data for charting & analysis
- **Check**…review & analyze the results & compare to the expected to identify the differences
- **Act**…analyze to determine “root causes”…brainstorm potential solutions & implement one with the best potential impact
Measuring quality

- You get what you measure
- Measure only relevant things
- If you need a change – measure
**Criteria - Indicator**

» Criteria describes the relevant outcomes of the process that shows quality
  - e.g. blood sugar level in a diabetic patient
» Indicator shows how the criteria should be measured
  - e.g. % with HbA1c < 7% or number of hypoglycemic situations during the last month

**Criteria**

» Has to be in the core of the work that brings major health benefits
» Is important for the quality of work

**Indicator**

» Is a measurable thing that is related to the activity
**Standard**

- Describes the accepted minimum level of success in reaching the indicator target
  - e.g. 70% of T2DM patients with HbA1c < 7%

<table>
<thead>
<tr>
<th>STRUCTURE CRITERIA</th>
<th>INDICATOR</th>
<th>STANDARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLOOD GLUCOSE LEVEL</td>
<td>HbA1c measured ≥ 1/year</td>
<td>95% of T2DM patients</td>
</tr>
<tr>
<td>BLOOD PRESSURE</td>
<td>measured ≥ 1/year by a nurse</td>
<td>95% of T2DM patients</td>
</tr>
<tr>
<td>WEIGHT</td>
<td>BMI measured ≥ 1/year</td>
<td>95% of T2DM patients</td>
</tr>
<tr>
<td>BLOOD FAT</td>
<td>LDL-cholesterol measured ≥ 1/2 years</td>
<td>70% of T2DM patients</td>
</tr>
</tbody>
</table>

**First choose the criteria**

- Physical exercise is important in the treatment of diabetes
- So is it important to know?
  - If the patient exercises
  - If the patient has received advice on exercise
  - If a change has taken place in his/her exercise levels
Indicators are used for

Measuring and evaluating
- Structure
- Process
  - Intermediate outcome
- Outcome
  - Seldom possible in GP

Quality in health care rises in microsystems

- Clinical knowledge and skills
- Communication skills
- Process skills
- Working in teams
- IT skills

Improving the practice

- Comprehensive understanding of and control over the main processes
- Vertical processes – administrative or managerial or leadership or support care
- Horizontal processes – often clinical
 NOTEST:

**Main processes**

<table>
<thead>
<tr>
<th>CARE OF CHRONIC DISEASES</th>
<th>CARE OF ACUTE DISEASES</th>
<th>DIAGNOSTICS</th>
</tr>
</thead>
</table>

**GP’s consultations during one month (%)**

- **HIGH BLOOD PRESSURE**: 26%
- **ACUTE INFECTIONS**: 16%
- **DIABETES WITH COMORBIDITY**: 11%
- **PROBLEMS WITH EXTREMITIES OR BACK**: 9%
- **ABDOMINAL PROBLEMS**: 9%
- **UNCLEAR SYMPTOMS**: 7%
- **ENDOCRINOLOGICAL PROBLEM - nonDM**: 6%
- **ACCIDENT**: 5%

**Improving quality - framework**

"There must be a mistake, Nurse, all this man needs is an enema."
IOM – 6 quality steps into modern health care

» Safe
» Maximises health benefits
» Patient centered
» Timely
» Efficient – avoids all waste
» Thrives for equity

Models of QI...

» Plan-Do-Check-Act....

» European Foundation for Quality Management...

Improving quality

» Is based on expertise/EBM
» Is planned
» Is systematic
» Is structured
» Is visible
» Can be evaluated
» Takes into account local circumstances
» Commitment of the leaders is crucial
Quality problem – decide on an improvement need

» Brainstorming - which are the most relevant improvement needs in my practice?
» Write on stickers – one need on each piece of sticker – 10’
» The wall technique – place the sticker next to one that has the same idea – 10’
» Pareto chart – choose the one that has most votes – 10’

Root cause analysis – fishbone – 10’

» Analyse the root causes of your quality problem

Make an improvement plan – what elements will it include? – 5’

» Leader’s role
» Assuring the old decisions are followed
» Practice guidelines (telephone cards for nurses, practice protocols, limited lists)
» Check list
» Process descriptions (flow chart)
» CME (skills training, courses)
How will you measure that change has taken place? – 15’

- Criteria (brainstorming, list the ideas, multi-vote)
- Indicators – how will you formulate the exact question?
- How will you collect the information?

How do I know this?

What are my learning aims?

How am I going to meet these (learn this)?

Positive feedback from the audience and from the colleagues

Higher score on assessment form for presentation skills

How will I demonstrate I have learnt this?
Module 3 - Group facilitators’ instruction

During this session there will be four interactive sessions.

**BUZZ GROUPS DURING THE INTERACTIVE PRESENTATION**

The participants will be asked to work in buzz groups in which they will be asked to list and discuss the basics of quality improvement.
You have no formal role in this session but if a group near you is struggling with what a buzz group does then please assist.

**GROUP WORK 1**

This will be your first session with your group during this module and it will last for half an hour. An exercise on the QI circle (PDCA) will be demonstrated in small groups. This works by defining a need for improvement, making an improvement plan, planning an evaluation system and finally reflecting on the learning method. During this group work, the participants are expected to reflect on a quality problem and to decide on an improvement need. The participants should produce a flip chart. You should devote no more than 20 minutes to this task. At the end, you should summarize the findings. You should select a person who will feed back and it is recommended that you do this as soon as possible. You should advise him/her to take notes.

**GROUP WORK 2**

After the coffee break this will be your second session with your group and it will last for 30 minutes. You will continue the exercise on the QI circle (PDCA) by making an improvement plan. At the end, you should summarize the findings.

**GROUP WORK 3**

During this group work, the participants will have to discuss how to measure change and to develop a plan for quality assessment. The group work will last for 30 minutes. As feedback from the group work will take place after this session, you should again select a person to report and help him/her if needed. It is recommended that you do this as soon as possible.

There will be no more than 5 minutes for each group to feed back to the plenary, and this will be strictly enforced. Please remind them of this once again as a general rule of the course.

Finally, there will be a short presentation to repeat the main take home messages; you do not have a role in this part of the session.
Module 3 - Evaluation Form

Please evaluate the module and return the form to one of the organisers. The form should be completed by marking with a circle the figure most appropriate to illustrate your opinion; 5 is the mark for the best relevance and quality – and 0 for the least relevance and quality. We would also be very interested in any free text you wish to make on what went well and what could be improved in the space provided.

Your feedback is important in revising and improving the course.

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
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<tr>
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<tr>
<td><strong>Teacher</strong></td>
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<td><strong>Course materials</strong></td>
<td></td>
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<td></td>
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</tbody>
</table>

What went well:

What improvements might be made:

Thank you for your help.
Module 4

Teaching quality improvement

T. Tomasik, A. Domagała, A. Windak
Module 4 - Description of the module

CONTENT

<table>
<thead>
<tr>
<th>Module</th>
<th>Title</th>
<th>Type</th>
<th>Time – 3h</th>
</tr>
</thead>
<tbody>
<tr>
<td>M 4.1</td>
<td>Teaching quality improvement in GP practices</td>
<td>Presentation</td>
<td>15’</td>
</tr>
<tr>
<td>M 4.2</td>
<td>Use of modern methods in teaching QI</td>
<td>Small groups</td>
<td>45’</td>
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<tr>
<td>M 4.3</td>
<td>Review of group work</td>
<td>Plenary</td>
<td>30’</td>
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<tr>
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<td><em>Coffee break</em></td>
<td></td>
<td>30’</td>
</tr>
<tr>
<td>M 4.4</td>
<td>Quality Improvement in practice</td>
<td>Quiz</td>
<td>30’</td>
</tr>
<tr>
<td>M 4.5</td>
<td>A case-based discussion</td>
<td>Small groups</td>
<td>30’</td>
</tr>
<tr>
<td>M 4.6</td>
<td>Review of group work</td>
<td>Plenary feedback</td>
<td>20’</td>
</tr>
<tr>
<td>M 4.7</td>
<td>Summary of the session</td>
<td>Plenary discussion</td>
<td>10’</td>
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</tbody>
</table>

AIMS

At the end of this module participants will:
1. Be familiar with wide range of educational methods for teaching QI
2. Be able to use modern methods in QI learning
3. Understand the strengths and limitations of teaching QI in general practice
4. Understand the principal requirements of effective QI learning
5. Know how to apply QI education in practice

METHODS

» Presentation
» Small group work
» Plenary presentation
» Quiz
» Case study

DESCRIPTION

This module will start with a short presentation on its aims, covering the basic principles of QI teaching, and also acknowledging that this topic is still a new field in GP education. After the presentation participants will break into three groups and will discuss how to teach QI competencies during postgraduate education (vocational training), and why. Each group will focus on different competencies defined by the course leader Handouts and a glossary of the educational methods will be provided. Each group will need to decide:
» What are they going to teach? (QI competencies)
» Why are they going to teach it? (reasons for selecting a topic)
How are they going to teach it? (what methods are they going to use)
A representative of each group will present its conclusions in the plenary using a specific template, followed by brief comments.

After the break there will be a short quiz to explore the participants’ level of understanding of the basic concepts of quality improvement, the terms used and their meaning. The lecturer gives the title of the quiz and opens the first screen, showing three fields of quality improvement. The questions have an associated score range from 100 (easy question) to 400 points (difficult question). The groups, one after another, choose a question and answer it. After an answer is given, the lecturer gives the right answer with the reference. All the points collected by each group are calculated, and the winner of the quiz is the group with the most points.

The last exercise of the module will be a case-based discussion focusing on three case studies. The participants will work in three groups and discuss QI training at three educational levels: (1) undergraduate, (2) postgraduate and (3) continuing medical education. Each group’s spokesperson will present the results of the group work. The module is completed by a short summary concluding the session.

EVALUATION

» Course evaluation form
» Reflection

REFERENCES


RECOMMENDATIONS FOR FURTHER READING

5. Report: Analysis of the Existing Training Programs (Educational Models) in the Field of Quality Improvement in General Practice/Family Medicine In Europe. Available at: http://www.ingpinQI.eu/files/REPORT(R1)_Analysis%20of%20theexisting%20training%20programs.pdf
HANDOUTS

» Copy slides
» Glossary of the educational methods
» Template for group work
» Quiz questions and answers

EQUIPMENT

» Three separate rooms for small group discussion with a flipchart in each
» One large room for plenary session equipped with computer and projector
Introduction

» Improving the quality and safety of patient care has gained extensive acceptance as an important activity in FD/GPs’ practice.
» FD/GPs are expected to have competence in QI in order to apply them in practice.
» Consequently it is widely agreed that QI should be taught to students and residents.

Aims

» Be familiar with wide range of educational methods in teaching QI
» Be able to use modern methods in QI teaching
» Understand the strengths and limitations of effective QI learning
» Understand the principal requirements of effective QI learning
» Know how to apply QI education in practice
A 10-topic list for QI education

1. Dealing with faults (critical incidents).
3. Assessing the quality of electronic medical records of patients.
4. Implementing (EBM) guidelines.
5. Using the Plan-Do-Check-Act strategy for quality projects.
6. Patient centered working (starting from patient experience, reflecting on practice performances).
7. Working with the practice population.
8. Working in a team (in the practice, in a network and in the community).
9. Leadership of doctors as a motor for QI.
10. Teaching the theoretical framework behind QI.

Models of embedding QI in educational activities

EQuiP 2002; van Hoof JT et al. 2011; Shojania KG et al. 2012.
1. **Traditional CME**  
   Clinical topics in well-documented gaps in quality  
   No QI topics

2. **Traditional CME + Traditional QI**  
   Clinical topics  
   QI topics do not relate to clinical topics (provide general knowledge/skills about QI for different areas)

3. **Traditional CME + Specific QI**  
   Clinical topics  
   QI topics relate to clinical topics (provide specific knowledge/skills about QI in particular areas)
4. **Traditional CME+ Specific QI+Post-event deliverables**
Clinical topics
QI topics relate to clinical topics
Submitting results of applied QI project to CME providers

5. **Multicomponent QI project**
Large scale QI initiatives/projects CME embedded into a project as a part of an improvement strategy

### Table: Summary of evaluation results of QI curricula

<table>
<thead>
<tr>
<th>Outcome category</th>
<th>Describing outcome</th>
<th>Describing outcome</th>
<th>Only beneficial outcome</th>
<th>Describing outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>39</td>
<td>12</td>
<td>24</td>
<td>3</td>
</tr>
<tr>
<td>Attitude</td>
<td>6</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Knowledge</td>
<td>10</td>
<td>8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Skill/behaviors</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Process outcomes</td>
<td>27</td>
<td>9</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Patient outcomes</td>
<td>18</td>
<td>5</td>
<td>4</td>
<td>9</td>
</tr>
</tbody>
</table>
### Barriers to QI teaching in GP practices

- Unanticipated events, no time for detailed instruction
- Priority on patients care, education a “second task”
- Multiple patients health problems addressed simultaneously, difficulty to focus on one problem to teach
- Medical, psychosocial, other problems at the same time
- Teacher may find it difficult to admit errors
- Easier to be information provider then facilitator

### Barriers to QI teaching in GP departments/teaching centres

- Trainees’ perception of the unimportance of the QI topics compared with clinical content
- Competing educational demands
- Small numbers of faculty members with interest and experience in QI
- Difficulties in developing teaching materials
- Inadequate financial and technological resources to support experiential projects

### Challenges to QI teaching

- Ensuring trainees enthusiasm
- Combining education on clinical topics with QI
- Achieving the balance of didactic and experiential learning
- A discrepancy between the concepts in formal education and what trainees observe in routine clinical practice
- Development of information system that provides access to health data.
**Conclusions: Recommendations**

- Implement adult learning principles
- Combine didactic instruction with interactive and experiential learning
- Provide trainees with access to pre-existing performance data and improvement tools
- Encourage trainee to collect their own performance data
- Implement intervention through several small cycles
- Teach collaborative skills

**Conclusions: Evidence from literature**

- Little is known about the effectiveness of teaching QI
- Published study demonstrates improvement in learners’ knowledge and attitudes towards performing or participating in QI activities
- There is limited evidence that QI education has meaningful benefit in patient outcomes
Which of the following characteristics don’t belong to adult learning principles?

a. Enabling learners to be active participants
b. Teacher chooses the program content
c. Allowing learners to practice their learning
d. Supporting learners during self-directed learning
b. Teacher chooses the program content

Give the names of learning strategies focused on:

I. Children and young people
II. Adults
III. Elderly

I. Pedagogy (6-21 years)
II. Andragogy (21-60 years)
III. Gerontogogy (60 years & above)
Miller proposed his famous pyramid for assessment of learners’ clinical competence. At the lowest level of the pyramid is knowledge (knows), followed by competence (knows how).

**What are the next two levels?**

---

**Performance (shows how) and Action (does)**

- **DOES (action)**
- **SHOWS HOW (performance)**
- **KNOWS HOW (competence)**
- **KNOWS (knowledge)**

Kolb’s learning theory (which can be used in QI education) includes a cycle of experiential learning.

**Name all four stages in Kolb’s cycle.**
You asked trainees to think about and decide on the features of successful TQM program. They report that such a program incorporates all of the following:

- Continuous improvement
- Staff involvement
- Benchmarking
- Centralization in decision-making

Were trainees right?

No, “Centralization in decision-making” is wrong
You asked a trainee to explain what PDCA stands for. He answered that it was Plan-Design-Control-Act.

Was the answer correct?

No,
Plan-Do-Check-Act

Give at least two examples of external QI activities/methods.
Avedis Donabedian developed the classic paradigm for assessing quality of care, which is based on a three components. These components are:

1.....
2.....
3.....

E.g.: Accreditation, certification, re-certification, licensing, …….

Structure, process, outcome
You asked a trainee to assess how many patients with hypertension achieve BP level<140/90 mmHg in your practice. The trainee identified all patients with hypertension, made an alphabetical list and phoned every 10th patient to come to the practice for BP measurement. What is the sampling technique he used?

a. random
b. systematic
c. stratified
d. convenience
e. volunteer

b. systematic

You asked trainees: “What is calculated if one wants to determine the most typical case?” Their correct answer should be:

a. Median
b. Mean
c. Standard deviation
d. Mode
You asked students what Pareto charts are used for and received 3 different answers:

a. to provide guidelines for clinical training
b. to collect data for statistical analysis
c. to organize problems or errors

Which answer is correct?

c. to organize problems or errors
A fishbone diagram is also known as a:

a. Kaizen graph  
b. Pareto chart  
c. Ishikawa table  
d. Cause-and-effect diagram

d. Cause-and-effect diagram
Module 4 - Cases for group work

CASE 1

You are a teacher employed at a university department of family medicine. Your department is involved in the training process at the three following levels: undergraduate education, postgraduate education/vocational training and continuing medical education.

In the program of medical study at the undergraduate level, there are 110 hours of training in family medicine. The head of the department has delegated you with the preparation of the new module of training. You are responsible for planning and delivering an educational module in Quality Improvement for medical students. Propose the number of hours that should be designated to the training of QI and define: 1) aims, 2) content, 3) educational methods and 4) time schedule.

CASE 2

You are a teacher employed at a university department of family medicine. Your department is involved in the training process at the three following levels: undergraduate education, postgraduate education/vocational training and continuing medical education.

During four years specialization in family medicine (postgraduate education/vocational training) there are 44 days designated to theoretical training. The head of the department has delegated you with the preparation of the new module of training. You are responsible for planning and delivering the course in QI for trainees in family medicine. Propose the number of hours that should be designated to the training in QI and define: 1) aims, 2) content, 3) educational methods and 4) time schedule.

CASE 3

You are a teacher employed at a university department of family medicine. Your department is involved in the training process at the three following levels: undergraduate education, postgraduate education/vocational training and continuing medical education.

The head of the department has delegated you with the preparation of the new module of training. You are responsible for planning and organization of the QI module which is part of CME training for practising GPs. Propose the number of hours that should be designated to the training in QI and define: 1) aims, 2) content, 3) educational methods and 4) time schedule.
Module 4 - Template for group work

### GROUP 1

<table>
<thead>
<tr>
<th>Subject</th>
<th>QI Competencies</th>
<th>Reason for selection of topic/benefits</th>
<th>Methods of education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Care &amp; Safety</td>
<td>What?</td>
<td>Why?</td>
<td>How?</td>
</tr>
<tr>
<td>Effectiveness &amp; Efficiency</td>
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</table>

### GROUP 2

<table>
<thead>
<tr>
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<th>QI Competencies</th>
<th>Reason for selection of topic/benefits</th>
<th>Methods of education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity &amp; Ethical Practice</td>
<td>What?</td>
<td>Why?</td>
<td>How?</td>
</tr>
<tr>
<td>QI Methods &amp; Tools</td>
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</table>

### GROUP 3

<table>
<thead>
<tr>
<th>Subject</th>
<th>QI Competencies</th>
<th>Reason for selection of topic/benefits</th>
<th>Methods of education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuing Professional Development</td>
<td></td>
<td></td>
<td></td>
</tr>
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</table>
Module 4 - Dictionary of educational methods

Below is a list of educational methods. Those marked with a star come from the EURACT Educational Agenda.

» **Case studies** – a pedagogical method which most often uses practical, realistic examples/stories from GPs’ practices. Case studies make use of complex patient problems, giving insight into the context of a problem and illustrating the main educational points. They can enrich lectures and be used for small groups or even individual teaching.

» **Clinical work/practice under supervision** – teaching while working in a clinical environment or in a general practice/family practice/primary care setting; it can be organised with or without supervision.

» **Computer-based training** – a type of education in which the trainee learns by completing training programmes on a single computer, through an educational intranet or over the internet. Computer-based training provides a flexible alternative to classroom training and gives trainees the flexibility to work on their own schedule and at their own speed.

» **Discussions** – discussion sessions on a specific topic or case presentation can be organised as one-to-one sessions with tutors or supervisors, as a peer group session, as a small group session like a focus group or a Balint group or as a large/temporary group session at seminars, lectures or workshops.

» **Discussions (in groups of trainees)** – similar to the definition given above, but here the teacher’s aim is to create a learning environment by prompting and facilitating a discussion rather than by giving an instruction.

» **Discussions (in practice teams)** – learning by sharing ideas/opinions/concepts between trainees and practice staff members during formal or informal meetings; helpful also in building and developing a relationship as a total group/team.

» **Interactive (IT-based) learning** – a combination of modular reflection packages, linking case studies, focused reflection, discussion forums, library search and/or reflection in one educational process.

» **Lectures** – the provision of teaching content by presentation and explanation (possibly including a demonstration) by a lecturer.

» **A literature search** – learning to perform a medical database search, including defining a clinical question, looking for medical evidence, critical reflection on evidence and implementation in practice.

» **Observation** – learning through reflective observation by a tutor/supervisor in different educational settings: sit-ins with real patients or simulated patients or learning through video-taped consultation of real patients or simulated patients (observation by oneself or with a tutor/supervisor or peers, etc.).

» **PowerPoint presentations** – a description or an explanation of a topic to an audience (most often during a lecture, seminar, etc.) using Microsoft PowerPoint, a program which helps in the creation, design, management and delivery of visual presentations.

» **Problem-based learning** – a student-centred educational method, run ideally in small groups of 5 to 12, in which trainees collaboratively analyse a case (most often complex), solve problems and reflect on them. Problem-based learning starts with a clarification of unfamiliar terms and a definition of the problems. Learning

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objectives are formulated and self-directed study starts before returning to the group to discuss the case and formulate a conclusion. Several variations of the method exist.

» **Project work** – working on a personal project or as part of a group in a defined format: an audit project, a research project or a fieldwork project.

» **Role playing** – using the act of playing a role as a patient, as an accompanying person, as a doctor, as a nurse, etc., to derive educational insight into feelings, intentions and actions.

» **Scenario-based learning** – a learning process which uses a more or less developed scenario and is preferably based on a situation or context that a learner might come across in real life. Elements of a scenario include a projected course of action, descriptions of events or situations, the activity trainees will be engaged in, the role they will play and the tools they will use. Supporting materials and resources can be provided for a deeper understanding of the concepts.

» **Seminar** – a period of instruction based on written or oral contributions by the learners.

» **Significant Event Analysis (SEA)** – a process in which individual episodes/incidences occurring in a practice are systematic and analysed in detail. It includes both clinical (e.g. a delay in a diagnosis, a medication error) and non-clinical events (e.g. computer data loss). It can be used as an educational method, although its primary aim is to improve quality of care and minimise the chances of the negative event recurring.

» **Study visit/outreach event** – an educational visit to a practice, to clinical premises, to social-welfare institutions, to health authorities, etc.

» **Workshops** – a supervised session where students work on individual tasks and receive assistance and direction when needed.

» **The writing of patient studies, case studies** – an educational activity with a given task to provide a written description and/or reflection document, to get feedback from a tutor/supervisor.
Module 4 - Group facilitators' instruction

During this module there will be three interactive sessions.

GROUP WORK:

You should divide participants into three groups (preferably equal in number). They will have 45 minutes to discuss how and why to teach QI competencies at the level of postgraduate education. Each group will focus on different competencies:

**Group 1:** Patient Care & Safety and Effectiveness & Efficiency
**Group 2:** Equity & Ethical Practice and Methods & Tools
**Group 3:** Leadership & Management and Continuing Professional Development

You should provide the template and a glossary of the educational methods.
Each group will need to decide:
- What are they going to teach? (QI competencies)
- Why are they going to teach it? (reason for selecting a topic)
- How are they going to teach it? (what methods are they going to use)

The representative of each group presents its conclusions in the plenary. There will be no more than 10 minutes for each group to feed back to the plenary.

Examples of competences in each particular area may include:
- Patient Care & Safety (practice infection prevention and control; incorporate effective communication to improve patients safety)
- Effectiveness & Efficiency (implement evidence-based medical guidelines; ensure data quality)
- Equity & Ethical Practice (respect patients autonomy; understand intercultural patient concerns)
- Methods & Tools (use benchmarking and feedback; use PDCA cycle)
- Leadership & Management (work with partnership; negotiate with staff for change)
- Continuing Professional Development (use self-assessment methods; develop an individual learning plan).

QUIZ

You will use a PowerPoint Presentation. You should show the title of the quiz and open the first screen, showing three fields of quality improvement (each field with 4 questions). The questions have an associated score range from 100 (easy question) to 400 points (difficult question). You will prepare a table on the flipchart, and write the number of points collected by each group. The groups, one after another, choose a question and answer it. After an answer is given, you should show the right answer with the reference. The sum of all the points collected by each group is calculated, and the winner of the quiz is the group with the most points. At the end you can give a prize to the winners.

CASE-BASED DISCUSSION

The participants will work in three groups. You should provide the templates (short case studies). The groups will discuss QI training at one of the following educational levels: (1) undergraduate, (2) postgraduate and (3) CME. Each group will be expected to produce a flip chart of their results and define the aims, content, educational methods and time schedule of the QI training. There will be no more than 5 minutes for each group to feed back to the plenary.
Module 4 - Evaluation Form

Please evaluate the module and return the form to one of the organisers. The form should be completed by marking with a circle the figure which most accurately illustrates your opinion; 5 indicates the best relevance and quality, and 0 the least relevance and quality. We would also be very interested in any comments you wish to make on what went well and what could be improved; please write in the space provided.

Your feedback is important in revising and improving the course.

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What went well:

What improvements might be made:

Thank you for your help.
Module 5

Assessment of quality improvement skills and knowledge

J. Kersnik
Module 5 - Description of the module

CONTENT

<table>
<thead>
<tr>
<th>Module</th>
<th>Title</th>
<th>Type</th>
<th>Time – 3h 30min</th>
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<tbody>
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<td>M 5.1</td>
<td>Assessment of QI skills and knowledge</td>
<td>Presentation with buzz groups</td>
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<td>M 5.2</td>
<td>Discussion</td>
<td>Questions and discussion</td>
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<td>Coffee break</td>
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<td>M 5.3</td>
<td>Designing assessment for teaching QI</td>
<td>Small group</td>
<td>60’</td>
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<td>M 5.4</td>
<td>Review of group work</td>
<td>Plenary reports / Concluding remarks</td>
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*QI – quality improvement

AIMS

At the end of this module participants will:
1. Know assessment methods useful in assessment of QI skills and knowledge
2. Be able to develop assessment of assessment of QI skills and knowledge
3. Understand the strengths and limitations of assessment methods used in assessment of QI skills and knowledge
4. Value assessment of QI skills and knowledge

METHODS

» Interactive and participatory workshop
» Presentation
» Buzz groups
» Small group work
» Plenary presentation

DESCRIPTION

This module will start with a lecture about useful assessment methods in assessment of QI skills and knowledge. The lecture will consist of the presentation of some assessment methods used in assessment of QI skills and knowledge. Their strengths and limitations will be presented and discussed. During the presentation, there will be two short buzz group exercises in which participants will firstly list, discuss strengths and limitations methods for the assessment of QI skills and knowledge and secondly the feasibility of them. This will be followed by questions and discussion. Coffee break will be followed by a by small groups work in which participants will reflect on assessment of QI skills and knowledge and develop plan for the assessment QI on different levels of education / practice. Small group work will be followed by a plenary review of group work in which each group’s representative will shortly report about its group work. Module leader will present concluding remarks on assessment of QI skills and knowledge.
EVALUATION

- Course evaluation form
- Reflection

REFERENCES


RECOMMENDATIONS FOR FURTHER READING


HANDOUTS

On the resource-CD/internet file
- Copy slides
- Description of group work
- One large room for plenary session equipped with a computer, data projector and Internet connection (if required)
- Chairs arranged in a circle with clear area in the centre
- Break out rooms for groups
By the end of this session, the participants will:

- Know the assessment methods useful in the assessment of QI skills and knowledge
- Be able to develop the assessment of QI skills and knowledge
- Understand the strengths and limitations of the assessment methods used in the assessment of QI skills and knowledge
- Value assessment of QI skills and knowledge

Session plan

- Introduction
- Your current knowledge of assessment methods
- Your experience of assessment methods
- An overview of methods and their application in QI
- Group work
Session plan

60’ Assessment of QI skills and knowledge
30’ Discussion
30’ Coffee break
60’ Designing assessment for teaching QI
30’ Review of group work

Presentation with buzz groups
Questions and discussion
Small group work
Plenary reports / Concluding remarks

Classic methods of assessment

» MCQ
» Essays & written work
» OSCE
» Consulting skills assessment
» Oral exams
» Critical reading
» Self assessment
» Role play
» Group task
» Audit
» Research projects
» Direct observation and feedback
» WBA

Buzz group activity 1

» Recall from Module 2 which assessment methods you already know
» Record on a flip chart – rate 1-9 – which ones can be valid methods in the assessment of QI knowledge, skills and attitudes
» Poster style discussion
The words

» Valid
» Reliable

Validity

» Face/content
» Construct
» Criterion
» Predictive
» Consensual

Dilemmas

» Knowledge – skills – performance?
» Undergraduate, specialty training, CPD?
» Learner, tutor, trainer?
» Teaching the teachers?
» Assessing the assessors?
» What are the aims of the assessment?
Evaluate assessment processes to consider whether they are:

- **Fair**: Are all learners treated equally?
- **Positive**: Do the learners have a positive experience?
- **Consistent**: Is there standardised practice across the organisation?
- **Rigorous**: Do they provide a true picture of learners’ skills, knowledge and development needs?
- **Documented**: Are records generated which are easy to use and understand – for all staff and learners?
- **Linked**: Does the assessment contribute to a dynamic ILP which informs the learner’s development and is continually reviewed and updated? Is the assessment an integral part of teaching and learning at all stages of the learner journey?
- **Understood**: Do all staff understand the processes and their role within them?
**Types of written test items**

- Construct-response or supply-type test items: the examinee must **construct** the perceived correct response
  - Essay
  - Modified essay questions (MEQ)
- Select-response test items: the examinee must **select** the perceived best answer
  - Multiple-choice test items (MCQ)
  - Extended matching questions (EMQ)
  - True-false test items

**Reliability**

- Inter-observer
  - Statistical co-efficients
- Test - retest
- Split test
- Iterative review

**Buzz group activity 2**

- Recall from Module 2 which assessment methods you already know
- Select two methods
- Record on a flip chart – rate 1-9 – discuss the reliability or the method in assessment of QI knowledge, skills or attitudes
- Poster style discussion
Use of MCQ testing

- MCQs are appropriate for assessing students’ mastery of details and specific knowledge.
- MCQs can be used to measure both simple knowledge and complex concepts.
- The application of that knowledge can also be tested.

Item Shape

- **Stem (text):** A MCQ item stem should contain all the relevant facts and may be relatively long with short options. Stem may need to be long but keep it as short as possible.
- **Lead-in:** Asks the question
  - A. Short Option
  - B. Short Option
  - C. Short Option
  - D. Short Option
  - E. Short Option

Parts of an MCQ test item

- **Directions to guide the examinee**
- **Stem**
  - **Text** (sometimes broader introduction to stem)
  - **Lead-in** (a question or incomplete statement)
- **Alternatives or Options**
  - **Distracters** or Foils
  - **Correct response** or Key
- **Graphics may optionally support the item**
Writing an MCQ Item

» Step 1. Select the MCQ Format
» Step 2. Write the MCQ stem (text)
» Step 3. Draft the Lead-in
» Step 4. Compose the Options
» Step 5. Edit to avoid MCQ flaws

Stem

» The full stem (text – lead-in) is not usually used in factual recall questions. Only the lead-in part of stem is used in such cases. It is needed in questions testing application and evaluation. Question (interrogative) format is superior to incomplete statement format
» Express the full problem in the stem
» Invest in the stem: Ask a clear question!
» Put all relevant material in the stem
» Keep the stem short but descriptive enough
» Omit unnecessary information. No more teaching in the exam!

Advantages of MCQ testing

» Breadth of students’ learning
» Variety of levels of learning (recall, comprehension & problem solving skills)
» Students can complete between one and two “simple” MCQ items per minute
» Less time for scoring
» Easy to administer in large groups
» Can be automatically scored by computer
Disadvantages of MCQ testing

» Good test items are difficult to create
» Time taken to write them: Most professional item writers can only manage three to four per day
» Goal – three to five items each week
» Ensuring validity, difficulty, pass rules and discrimination power

OSCE

» Increases the range of skills on which trainees are tested
» Increases the number of examiners by whom trainees are assessed
» Marked against explicit criteria
» Standardized challenge for candidates
» Should be used for skills, knowledge or attitudes which cannot be assessed by other assessment tools which are less time consuming and labour intensive

Disadvantages of OSCE testing

» OSCE item is difficult to develop
» OSCE circus is difficult to develop and difficult to administer
» Require resources and expertise
Advantages of OSCEs

» A standardized assessment method
» Allows large numbers of students to be tested on the same clinical problem
» Variables of the examiner and the patient are removed
» Suited to situations where a pass/fail decision has to be taken
» Cost-effective when many candidates are examined at once

There are six major issues to consider when developing an OSCE:

» Skills to be assessed
» The case mix of situations to be developed
» Check list
» The OSCE team
» Recruitment and training of patient simulators
» Logistics of the examination process

OSCE circus format

» Series - circus of “stations”
» Time allocated
» No. of candidates
» Preparation of a task for a station
» Setting/scenario
» Checklists
» Marking and scoring
» Setting up of a station
» “Manager” of an OSCE circus
» OSCE team
» Decisions on no. of stations, time, scoring, etc.
» Try-out!
Work based assessment

It is expected that WBA will:

» Provide feedback on areas of strength and development needs
» Identify trainees in difficulty
» Drive learning in important areas of competency
» Determine fitness to progress to the next stage of the trainee’s career

(Ref. RCGP)

Work based assessment

» The full spectrum from formative assessment
  • using daily supervision and feedback
  • use of daily clinical situations in GP training
» to summative assessment
  • using WBA in a standardized way

Relationship of assessment with QI curriculum

» The intended aims and objectives, content, experiences, outcomes and processes of a programme.
» A description of the structure and expected methods of learning, teaching, feedback and supervision.
» The knowledge, skills, attitudes and behaviours the learner will achieve.
What phase of learning?

THE ASSESSMENT JOURNEY:

BME VT Early years Established GP

The assessment journey:

Knowledge
Applied knowledge
Skills
Communication
Problem solving
Management

Competent practice

Professional practice

Novice → Proficient → Competent → Expert

Which step in QI?

Cycle of Quality

Preceptor Education
Materials Development
Student Education

CQI & Project Overview
Students in collaboration with Preceptors choose project

Data analyzed and returned
Post-intervention chart audit done

Intervention implemented

Random population sample developed

20-25 charts audited

Data analyzed and returned
Tool kits distributed
Advisor assigned

Vocational Education and Training in Quality Improvement Course
Which phase of professional development?

![Diagram showing professional development phases: Working, Learning, Competence, Performance, Does, Shows how, Knows how, Knows.]

A resource tool: QI learning assessment matrix

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<tr>
<th>ASSESSMENT METHOD</th>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>ATTITUDES</th>
<th>COMPETENCE</th>
<th>PERFORMANCE</th>
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Group task

Develop a plan for the assessment of different steps of QI knowledge, skills and attitudes at different levels of education/practice

1. Purpose
2. Competences to be assessed
3. Process of evidence collection
4. Content
5. Standard: Pass/fail criteria
6. Validation
Time for questions
Module 5 - Group facilitators’ instruction

During this module there will be two interactive sessions.

**BUZZ GROUPS**

The participants will be asked to work in buzz groups in which they will be asked to list and then discuss the strengths and limitations of the methods of the assessment of QI skills and knowledge, as well as their feasibility.

You have no formal role in this session but if a group near you is struggling with what a buzz group does then please assist.

**GROUP WORK 1**

This will be your only session with your group and it will last for an hour. As reporting from group work will take place after this session, you should select a person who will report and it is recommended that you do this as soon as possible. You should advise him/her to take notes. There will be no more than 5 minutes for each group to feed back to the plenary, and this will be strictly enforced.

During this group work, the participants are expected to reflect on the assessment of QI skills and knowledge and to develop a plan for the assessment of QI at different levels of education/practice. The participants can continue their work on a flip chart from Module 2 on the assessment methods of knowledge and skills of QI. You should devote no more than 20 minutes to this task. At the end, you should ask the person who will report at the plenary to summarize the findings and help him/her if needed.

You should also try to summarise the whole QI course.
Module 5 - Evaluation Form

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What went well:

What improvements might be made:

Thank you for your help.
Course Overview

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What was particularly good:

What improvements might be made:

Thank you for your help.