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ON QUALITY AND SAFETY IN FAMILY MEDICINE

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CONTENT

PART 1: GENERAL PART

INTRODUCTION

Zalika Klemenc-Ketis

Quality improvement (QI) is defined as the combined and unceasing efforts of healthcare professionals, patients and their families, researchers, payers, planners and educators to make changes that will lead to better patient outcomes, better system performance and better professional development. It is the basis of the work of family physicians nowadays. Also patient safety is increasingly important, especially in the times of an increased patients' demands and limited resources and time. Therefore, physicians need training in the competencies required for quality improvement and safe practice. Attempts to address the need for physician training in QI have, however, been uneven. An European study on teaching QI8 showed many differences in QI curricula between European countries and different organizations within individual countries. Currently, there isn't any common European curriculum in quality and safety.

In 2012, a Competency Framework for Quality Improvement in Family Medicine was developed. Competency models can enhance educational initiatives in multiple ways. A competency-based curriculum focuses attention on the outcomes of the instruction and how it improves the learner and the learners' work rather than focusing purely on acquiring knowledge (as is often the case with traditional instruction). A QI competency framework can provide the basis for a self-assessment tool to help individual family physicians identify their training needs. Just as quality improvement requires health care professionals to be clear about outcomes, family physicians also need to have clear and focused guidelines for choosing their educational goals. A competency framework can also provide an organising structure to guide the development and evaluation of educational programs.

In 2014, EQuiP decided to develop an educational agenda for quality and safety in general practice/family medicine based on the Competency Framework for Quality Improvement in Family Medicine. This is an educational framework for teaching the core competencies of quality and safety at the speciality training level. It is designed to serve as a basis for curriculum developers at the speciality training level to set the learning aims and methods, and the assessment aims and methods. It is not designed as a curriculum and it should not be seen that way.

We hope that this educational agenda will stimulate the discussions which will results in suggestions for amendments and, after some years, in a revised version.

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OVERVIEW OF DIFFERENT MODELS OF QUALITY COMPETENCIES IN FAMILY MEDICINE

Zalika Klemenc-Ketis, Ruth Kalda

Introduction

A competence is an observed ability of a health professional integrating multiple components such as knowledge, skills, values, and attitudes. The term "competent" means possessing the required abilities in all domains in a certain context at a defined stage of medical education or practice. Competence means that a physician is able to apply the abilities such as knowledge, skills, and attitudes in the clinical environment to achieve optimal results.

According to the International CMBE Collaborators, a competency-based medical education (CBME) is an outcomes-based approach to the design, implementation, assessment, and evaluation of a medical education program using an organising framework of competencies. CBME presents a shift from an old style of medical education focused on structure and process to the new approach which is competency based. A competency-based model of education is of a variable length but has well-defined outcomes. It promotes knowledge application, has multiple objective measures, is criterion referenced and puts the emphasis on formative assessment.

The implementation of CBME requires an organised and structured set of competencies presented in a form of a competency framework. In the field of quality and patient safety, several theoretical frameworks exist and will be described in the next chapters.

Healthcare competency frameworks associated with quality and patient safety

So far, six healthcare competency frameworks with at least partially inclusion of quality and patient safety issues have been developed. A model from the USA formulated six major aspects of quality of care: patient safety, effectiveness, patient centeredness, timeliness, efficiency and equity, which were incorporated into some medical curricula for QI.

The Canadian educational model for medical students (Can Meds), which was primarily developed for specialty residents and then adopted for undergraduate students, described six competencies: medical expert, communicator, collaborator, manager, health advocate, scholar and professional.

In the field of continuous medical education (CME), Greiner and co-authors defined five core competencies for health professionals: being able to provide patient-centred care, working in inter-professional teams, employing evidence-based practice, applying quality improvement and utilising informatics.

The Bellagio model put forward nine essential features for quality (chronic) care: leadership, public trust (accountability and transparency), population-oriented management, vertical and horizontal integration, networking of professionals, infrastructure, payment mix, standardized measurement and an active program of change.

Worth mentioning are also competencies for practising physicians developed by American Board of Medical Specialties (ABMS): patient care, medical knowledge, interpersonal and communication skills, professionalism, system-based practice and practice-based learning and improvement. The same competencies were developed also for undergraduate students.

A recently developed framework of QI competencies for European General Practitioners and Family Doctors is an example of a comprehensive and trans-disciplinary model which includes not only the specific competencies related to patient care provided in a health care system, but also a range of cross-cutting, interdisciplinary and social-interpersonal competencies such as negotiating for change, inter-professional teamwork, and social networking. This framework describes a role for GPs/FDs that is focused not only on clinical care of patients but also on organisational, ethical, and patient safety issues (Table 1).

Table 1: The overview of existing healthcare competency frameworks associated with quality and patient safety

Framework	Domains
• Quality improvement competency framework	• Patient care and safety • Equity and ethical practice • Effectiveness and efficiency • Methods and tools • Continuing Professional Development • Leadership and management
• IOM model	• Patient safety and patient centeredness • Efficiency and equity • Effectiveness and timeliness
• Bellagio model	• Population-oriented management • Public trust (accountability and transparency) • Active program of change • Vertical and horizontal integration and Standardized measurement • Networking of professionals • Leadership and infrastructure
• ABMS model and ACGME	• Patient care and interpersonal and Communication skills • Professionalism • System-based practice
• Can Meds	• Medical expert • Scholar and professional • Collaborator • Communicator • Health advocate • Manager
• Greiner et al	• Being able to provide patient-centred care • Employing evidence-based practice • Utilising informatics • Applying quality improvement • Working in inter-professional teams

Conclusions

Looking the existing different models we can see that although the differences exist between each of them, there are also some important similarities we can define as core principles and to be considered to include to the curricula. This is patient safety, patient centred care (communication and collaborator), leadership and management (named also as working in teams, networking) and continuing professional development (also as professionalism, evidence based practice, quality improvement strategies).

CBME necessitates also more complex assessment compared to traditional old style education. Usually it includes more active and reflective forms like as portfolios, experiential learning assessment in field of experience, role play, use of standardized patients or clients, etc.

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AIMS AND LEARNING OUTCOMES OF QUALITY AND SAFETY IMPROVEMENT EDUCATION

Andre Nguyen Van Nhieu, Francesco Carelli, Maria Bakola

Introduction

In QI education, the learners' needs and expectations must be assessed and considered as outcomes to deliver a tailored educational program. Specific tools and techniques are employed to improve quality, rather than intuition and consensus alone. As with any science, there is a need to train to apply these.

Extensive research evidence including literature review and professional opinions of QI and teaching experts suggest that teaching of QI should be an obligatory part of medical education. It should be integrated at all levels and aspects of medical education, rather than as a separate part. The proposed content of QI education should be divided according to learning outcomes identified: knowledge, skills and attitudes, each consisting of several areas that shall be covered during medical education.

QI requires health care professionals to be clear about outcomes, know what changes would lead to improvements, and know how to evaluate their efforts. In addition, a quality improvement approach requires workers to translate into practice evidence from their own efforts at improvement and those of others. Improved safety for patients and increased efficiency of service delivery is embedded in this competency.

In this chapter, a detailed description of overall QI educational aims and learning outcomes will be presented based on literature research.

Learning objectives

There are the following learning objections (Figure 1):

- Getting familiar with the most important content of Quality Improvement education
- Ability to list most important topics in Quality Improvement knowledge
- Ability to list most important skills in Quality Improvement
- Ability to define most important Quality Improvement attitudes
- Developing innovative ideas to contribute to QI education at regional, provincial, national and global forums

Figure 1: Learning Objectives

QI educational aims and learning outcomes

At the end of the training, the learner will be able to (Figure 2):

- define QI
- describe the basic principles of QI
- describe the methods and tools used in QI
- know the principles in ethics and legislation on QI
- identify the national organisations and programmes on QI
- identify and list the sources of information on QI
- approach doctors' health topic

Learning outcomes

The following learning aims are determined (Figure 3):

Knowledge:

- Definition of QI (medical students/GP trainees)
- Basic principles (measurement, audit, feedback, risk manage ment, patient safety)
- Methods & tools
- Ethics/legislation
- National organisations/programmes
- Sources of information
- Information, Technologic and Communication
- Doctors health
- Dealing with uncertainty
- Doctors and leadership

Skills:

- Assess own performance in the practice (clinical review, interpersonal skills e.g. Patient satisfaction questionnaire)
- Interpret feedback from others on performance
- Develop/design/implement an improvement plan
- Critically evaluate literature
- Create a strategy to incorporate new knowledge & procedures into practice
- Manage to work and communicate effectively in a multidisciplinary team
- Create a system for patient safety
- Analyse critical incidents
- Involve patients in QI
- Participate in quality circles/peer review groups

Attitudes:

- Awareness of knowledge gaps
- Commitment to lifelong learning in QI/CME
- Commitment to continuous QI

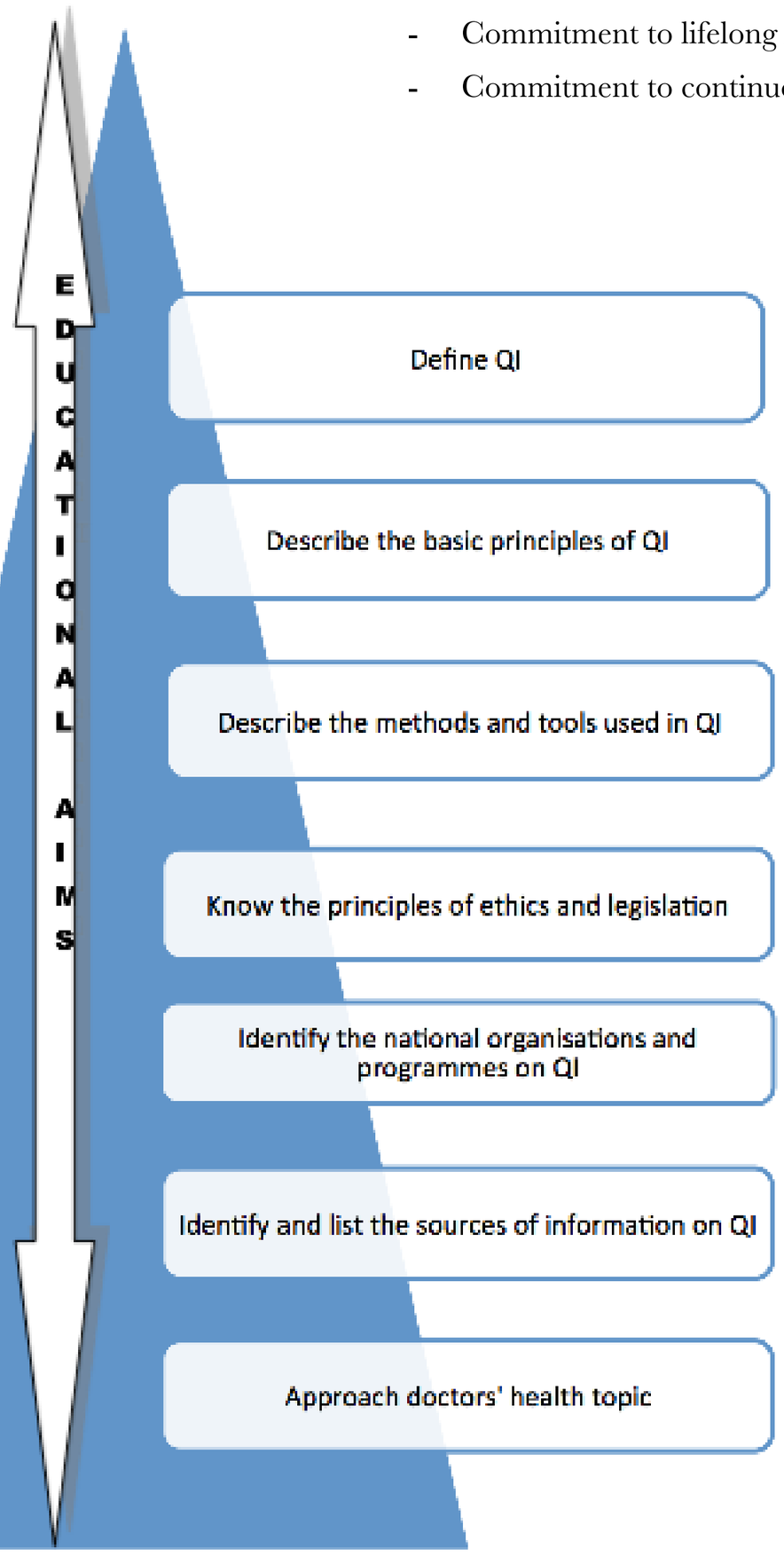

Figure 2: Educational aims

Conclusions

The aims and learning outcomes listed in this chapter should be a part of any family medicine education at different levels of the education. They should help the educators in setting up a curriculum to include all important concepts of quality and safety. We believe that this is the key to improve family medicine education and thus to improve systems of care, decrease health care incongruities and
ameliorate patient outcomes.

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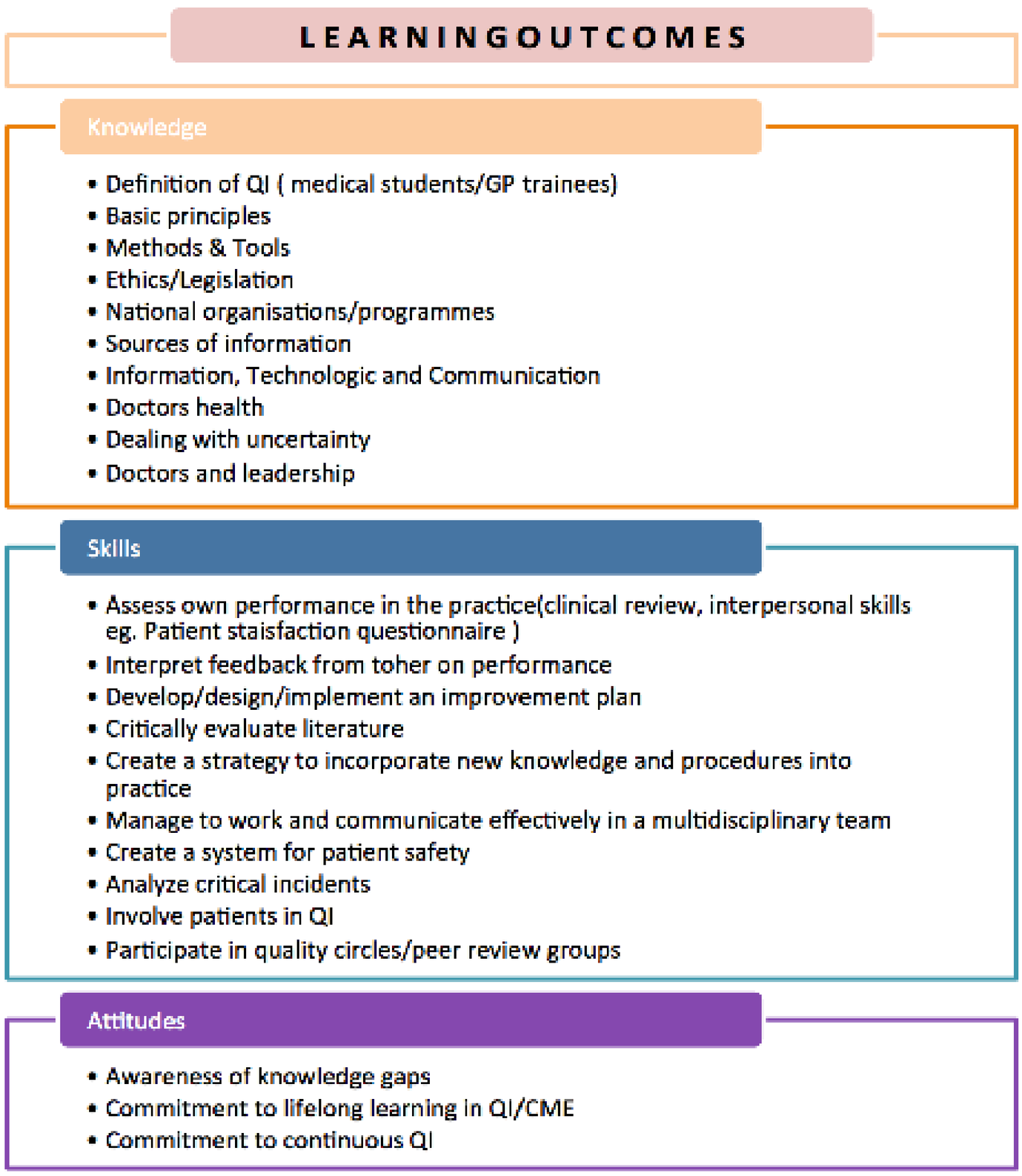

Figure 3: Learning outcomes

TOOLS AND METHODS OF QUALITY AND SAFETY IMPROVEMENT EDUCATION

Zlata Ozvacic Adzic, Piet Vanden Bussche, Venija Cerovecki

1: Introduction

There is a growing imperative to teach quality improvement (QI) and patient safety (PS) in medical education in the recent years. QI and PS need to be taught at all levels of medical education and in all aspects of medical care. The Association of American Medical Colleges (AAMC) and the Association of Faculties of Medicine in Canada support introduction of QI and PS topics early in undergraduate medical education. At postgraduate level, Accreditation Council for Graduate Medical Education (ACGME) and CanMEDS competency framework define essential physician competencies that relate to QI and PS. Physicians and other healthcare professionals are expected to acquire core QI and PS competencies in order to promote changes in the health care system necessary to improve health outcomes and provide safe patient care.

Adult learning techniques have been identified as key factors for success in delivering curricula in QI and PS, demonstrating improvement in learner's knowledge or confidence to perform QI. Current recommendations from Boonyasai's systematic review for effective teaching of QI include teaching collaborative skills, facilitating experiential learning with incremental change from trial and error, and providing learners with opportunities to work closely with colleagues from other disciplines. In order to enhance the clinical effectiveness of teaching QI, learners should be provided with access to resources that facilitate QI activities, including performance data and process improvement tools.

Although the effect of educational curricula on processes and outcomes of care has not unanimously been supported by research, recent studies have demonstrated that learners' participation in QI and PS curricula can lead to meaningful improvements in clinical processes. Key characteristics of successful QI curricula include interface of educational and clinical systems, careful selection of QI assignments for the trainees/learners and appropriately trained faculty members.

The aim of this chapter is to provide the overview (description and characteristics) of the tools and methods used in teaching QI and PS.

2: Tools and Methods

According to Wong, learners encounter QI and PS through three main categories of education: 1. formal curricula that teach principles, concepts and methods of QI and PS; 2. educational activities that develop specific skills related to QI or PS, without necessarily emphasizing the theoretical concepts of QI and PS that drive these skills; 3. real-life QI initiatives that involve trainees as active or passive participants.

Formal QI and PS curricula in medical schools and postgraduate programmes teach underlying principles, concepts and methods of QI and PS. Since clinical experience represents a prerequisite for appreciating the importance and relevance of QI and PS topics, optimal timing for introducing these curricula as well as ideal formats for delivery need to be carefully considered. Medical students tend to find QI and PS topics engaging, yet less important than clinical content; an alternative approach is to incorporate QI and PS principles into case-based teaching, connecting these concepts with the clinical context.

Formal curricula in QI and PS usually include three main types of educational designs:

1. primarily didactic (lectures occasionally combined with small group sessions);
2. mixed didactic and experiential learning (lectures accompanied by a QI project / audit);
3. web-based curricula

The chosen format will depend on the learning impact a programme expects to achieve. Curricula based primarily on lectures and web-based modules are appropriate if the expected goal is providing basic knowledge in QI and PS, while behavioural change requires experiential learning. Most of the current curricula combine didactic end experiential learning, which is regarded as the optimal format, following the principles of adult learning.

Table 1. Tools and methods used in teaching QI and PS

Method	Subtype	Advantages	Challenges
Large-group teaching methods	• Lectures • Plenary sessions	• Suited for teaching basic concepts and principles of QI and PS to many learners • Stimulating learners' interest, directing further learning • Cost-effective	• Passive learning • Limited evidence regarding impact on current practice (behavioural change)
Small-group teaching methods	• Small group discussions • Case discussions • PBL • Role playing • Blended learning	• Participants actively involved • Developing skills in decision-making, increasing tolerance for complexity and uncertainty • Encouraging communication skills, teamwork and collaborative work	• Resource intensive (faculty experts, time) • Some evidence regarding impact on current practice
Experiential learning methods	• QI projects • Audit projects • Reflective practice/ • observation • Exercises using QI and PS tools • Practice-based learning	• Engages learners in actual practice of QI and PS • Potentially improves clinical processes of care	• Resource intensive (faculty experts, availability of clinical data, time) • Feasibility issues
Web-based methods	• Web-based modules (including videos, interactive learning exercises) • Web-based audit and feedback tools	• Suited for teaching basic concepts and principles of QI and PS • Promoting self-directed learning at a time convenient for the learner • Easy and broad dissemination	• Passive learning (mostly) • Limited evidence regarding impact on current practice (behavioural change) • Costly to develop, requires technical expertise

In May 2017, a web-based informative survey was conducted among EQuiP and EURACT delegates to collect data regarding tools and methods used in teaching quality and patient safety in their respective institutions. We received 26 responses from 18 countries: Belgium, Croatia (2), Czech Republic, Estonia, Finland, Hungary, Lithuania, the Netherlands, Norway (3), Poland, Portugal (3), Republic of Moldova, Slovak Republic, Slovenia (2), Spain, Sweden (2), Switzerland and Ukraine (2).

Respondents from 10 out of 18 countries were representatives of an academic department of general practice/family medicine, respondents from 4 out of 18 countries were representatives of professional society of GP/college of GP, and respondents from 4 out of 18 countries were representing both academic department of GP and professional society of GP/college of GP. In majority of the represented countries (16 of 18) quality and safety is being taught at the respondent's institution, mostly as a part of specialty training and continuing medical education (6 of 18), but also at all levels of medical education (undergraduate, specialty training, CME; 6 of 18), speciality training alone (3 of 18), CME alone (2 of 18), and in undergraduate and specialty training (1 of 18). List of the tools and methods used in teaching QI and PS in the respective programs is presented in Table 2.

Table 2. Tools and methods used in teaching QI and PS – EQuiP/EURACT survey, May 2017.

Method	Subtype
Large-group teaching methods	• Lectures • Plenary sessions
Small-group teaching methods	• Group work / seminars / small group work • Educational groups with tutors • Personal tutoring • Consultation with simulated patient • Video of a consultation + feedback • Video regarding medical errors • case analysis • practice audit • analysis of performance • analysis of critical incidents, patient complaints • quality circles
Experiential	• quality improvement project

3: Conclusions

Adult learning techniques have been identified as key factors for success in delivering curricula in QI and PS. No direct comparison of different teaching methods exists to establish superiority of any specific educational approach. Most of the current curricula combine didactic end experiential learning, which is regarded as the optimal format.

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ASSESMENT TOOLS AND METHODS OF QUALITY AND SAFETY IMPROVEMENT

Venija Cerovecki, Zlata Ožvačić Adžić

1: Introduction

Improving quality and safety of patient care has been advocated as one of the fundamental activities of the health care system. Health professionals are expected to have acquired core competencies in quality improvement (QI) and patient safety (PS) in order to apply them in their daily practice. The Accreditation Council for Graduate Medical Education (ACGME) requires residents to learn and demonstrate proficiency in practice improvement. Consequently, principles of QI and PS need to be broadly taught to students and trainees, and QI and PS competencies and performance need to be assessed in order to assure that educational outcomes have been achieved.

Assessment is acknowledged to be essential to the educational process, both in terms of providing feedback and informing students about their performance (formative assessment) as well as decision-making for certification purposes (summative assessment). It is generally accepted that a variety of carefully selected instruments is needed in order to obtain a complete picture of a learner's competence and performance. In designing assessment, it is recommended to refer to Miller's pyramid for categorizing levels of assessment: knowledge (knows) at the lowest level, followed by competence (knows how), performance (shows how) and action (does) at the highest level. Knowledge of QI and PS concepts can easily be tested, but testing skills and assessing QI and PS performance represents a more complex and demanding process.

The aim of this chapter is to provide the overview / description and characteristics / of the assessment tools and methods currently used in teaching QI and PS.

2: Assessment tools and methods

According to the existing literature, the optimal format for assessing the competence of students and residents in performing quality improvement and patient safety activities remains yet unclear, and is generally characterized by the lack of adequate tools. The Wong's systematic review assessed the learning outcomes of published curricula in QI or PS directed at medical students or trainees using Kickpatrick's model, which includes impact on learners' satisfaction, changes in learners' attitudes, measures of learners' knowledge and skills, changes in learners' behavior, changes to clinical processes and benefits to patients (Table 1). Similar structure was used in the assessment of QI curriculum educational objectives by Windish et al).

Table 1. Learning outcomes of published curricula in QI or PS using Kirkpatrick's model (adapted from Wong et al. 2012, Windish DM 2009)

Learning outcome	Evaluation method	Main findings
Learner satisfaction • learners views on the learning experience	• quantitative methods (surveys) • qualitative methods (interviews, focus groups)	• majority of learners satisfied • most curricula rated as relevant and useful
Learner attitudes • changes in learners' perceptions or attitudes • confidence in learner's knowledge and self-assessed proficiency in defining the aim, identifying measures and performing QI activities	• self-reported measures of change in attitudes	• minimal impact on learner attitudes, due to positive attitudes towards QI and PS prior to exposure to curricula • favourable results in most evaluated measures

Knowledge acquisition
• improved knowledge of QI definitions, concepts, and principles
	• self–reported and/or tested knowledge
	  • self-designed questionnaires
	  • Quality Improvement Knowledge Application Tool (QIKAT)
		• improvement in both self-reported and tested learner knowledge

Behaviour change • transfer of learning to learners' actions	• self-reported measures of change in behaviour • chart review	• minimal impact on behaviour change
Clinical process change • changes in the delivery of care	• assessment of impact on clinical processes by auditing practices before and after the intervention • chart review	• measurable improvements in clinical processes related to most curricula
Benefits to patients • clinical outcomes	• patient chart audit before and after the educational intervention	• benefits to patients in terms of improved intermediate clinical outcomes

Curricula targeting medical students primarily measured knowledge, while curricula for residents more frequently measured outcomes related to changes in clinical practice: improvements in process of care and/or benefits to patients.

Using standardized assessment tools to measure whether QI and PS learning objectives have been met represents a challenge, given the lack of validated tools in this area. Currently, Quality Improvement Knowledge Application Tool (QIKAT) developed by Ogrinc et al. represents a standardized and validated tool for assessing knowledge application in practice–based learning and quality improvement. The QIKAT includes three hypothetical clinical scenarios in which a QI intervention is needed; residents are expected to formulate the aim of the improvement, intervention that is needed and QI measures to deter¬mine wheather the aim has been met. Another instrument designed to assess QI knowledge, skills and self efficiacy ratings is Systems Quality Improvement Training and Assessement Tool (SQI TAT).

Both instruments, QIKAT and SQI TAT assess certain aspects of QI and PS competencies, but do not assess learners' QI projects. Available instruments related to QI projects are Mayo Evaluation of Reflection on Improvement Tool (MERIT), which measures critial appraisal of QI opportunities, and Quality Improvement Project Assessment Tool (QIPAT), providing assessment of QI proposal. The Multi Domain Assessment of Quality Improvement Projects (MAQIP) instrument assesses implementation of a QI project, can be used for formative and summative evaluation at all levels of medical education. Some authors recommend objective structured clinical exam (OSCE) and portfolios for assessment of QI and PS competencies.

In May 2017, a web-based informative survey was conducted among EQuiP and EURACT delegates to collect data regarding assessment tools and methods used in teaching QI and PS. 26 responses from 18 countries had been received: Belgium, Croatia (2), Czech Republic, Estonia, Finland, Hungary, Lithuania, the Netherlands, Norway (3), Poland, Portugal (3), Republic of Moldova, Slovak Republic, Slovenia (2), Spain, Sweden (2), Switzerland and Ukraine (2). Respondents from 10 out of 18 countries were representatives of an academic department of general practice/family medicine, respondents from 4 out of 18 countries were representatives of professional society of GP/college of GP, and respondents from 4 out of 18 countries were representing both academic department of GP and professional society of GP/college of GP.

In majority of the represented countries (16 of 18) quality and safety is being taught at the respondent's institution, mostly as a part of specialty training and continuing medical education (6 of 18), but also at all levels of medical education (undergraduate, specialty training, CME; 6 of 18), specialty training alone (3 of 18), CME alone (2 of 18), and in undergraduate and specialty training (1 of 18). List of the tools and methods used in assessment of QI and PS competencies and performance in the respective programs is presented in Box 1. Interestingly, some institutions provide education, but do not perform assessment of their learners QI and PS competencies.

Box 1. Tools and methods used in the assessment of QI and PS competencies – EquiP/EURACT survey, May 2017.

- written exam / MCQ
- oral exam
- QI project
- QI project + presentation of project in the group of peers
- communication skills: feedback on a video of consultation with simulated patient
- presentation of a practice audit
- internal and external supervision
- a quality system assessed by practice audit and discussion (CME/CPD level)
- formative assessment in general: feedback during training
- peer evaluation in PDSA quality/safety cycle

The outcome of the educational process is improved learner's knowledge, skills and attitudes; the outcome of the clinical process is improved patient care and system performance. Due to expected effect of QI and PS education on the process of health care delivery, changes in clinical processes and patient outcomes may more often be used as measures in the assessment of QI and PS education. Future curricula may be evaluated based on the improvement in learner's knowledge, skills and attitudes and particularly, if these are being associated with clinical outcomes.

However, since large-scale QI projects often fail to demonstrate improvement in clinical outcomes and methodologically it is even more difficult to attribute changes in clinical outcomes to educational process, a more feasible aim represents assessing impact on behaviour change and clinical processes. Novel research has demonstrated that residents' participation in QI and PS curricula can result in meaningful improvements in learners' knowledge, perceived QI skills as well as clinical processes.

3: Conclusions

The optimal format for assessing the learners' QI and PS competencies is yet unclear. In the evaluation of QI and PS competencies both in-training, formative assessment and end-of-training, certification assessment are needed. Future work should address development of instruments adequate for assessment of learners' QI and PS competencies.

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PART 2: QUALITY AND SAFETY COMPETENCIES

EQUITY AND ETHICAL PRACTICE

Alexandre Gouveia

1: Introduction

Equity in health is defined as "absence of systematic disparities in health, or its social determinants, between more and less advantaged social groups." It is strongly linked to the way that healthcare systems are structured and how do they provide care, e.g. if access to healthcare by poor patients is free of user-charges or if translation services are available for immigrants that have language barriers.

Primary care has an important role in promoting and supporting health equity, due to its main features, such as accessibility, longitudinality, comprehensiveness and coordination of care. General practitioners are at the forefront of healthcare systems all throughout the world, and therefore need to understand the importance of equity and to foster ethical practice in their daily work.

Equity is also an important driver of quality improvement. In the recent EQuiP consensus statement published in 2017, equity is recognized as an essential dimension of quality of health care, as well as effectiveness, efficiency, safety, timeliness, and patient centeredness.

In this context, understanding the role of the social determinants of health, providing community-oriented care, dealing with cultural diversity, and working in an interprofessional and collaborative environment are of utmost importance. This chapter proposes a learning framework for equity and ethical practice in primary care.

2: Learning objectives

Learning objectives of equity and ethical practice include the ability:

1. To analyse the equity of practice performance and take action when necessary
2. To respect patients' autonomy
3. To respect patients' personal rights
4. To manage all patient data safely and ethically
5. To understand intercultural patient concerns
6. To recognize, understand, and address ethical dilemmas
7. To understand social contexts in general practice
8. To prioritize quality improvement activity and understand its effect on patient care

3: Analyse the equity of practice performance and take action when necessary

3.1 Educational aims

At the end of the training, the learner will be able to analyse the equity of practice performance and take action when necessary. In order to achieve these aims, the learner should be able to:

a) Explain equity in medicine
b) Explain practice performance
c) Perform the analysis
d) Take appropriate actions when necesarry
e) Value equity in practice performance

3.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Literature review
b) Lectures
c) Peer review
d) Seminar work
e) Patient observation
f) Family interviewing
g) Medical records analysis
h) Practice audit
i) The European Practice Assessment tool (EPA)
j) The Maturity Matrix tool

3.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Project assignment
b) Written test
c) Self-assessment

4: To respect patients' autonomy

4.1 Educational aims

At the end of the training, the learner will be able to understand patient autonomy and to promote it in clinical practice. In order to achieve these aims, the learner should be able to:

a) Define the ethical principles of autonomy, nonmaleficience, beneficience and justice
b) Define patients' autonomy
c) Discuss the existing limitations in the ethical principles
d) Recognize the role of the general practitioner in promoting patients' autonomy
e) Identify the skills needed to promote patients' autonomy
f) Value patients' autonomy in patient-doctors' relationship

4.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Literature review
b) Lectures
c) Group work
d) Case analysis
e) Clinical cases solving
f) Problem-based learning

5: To respect patients' personal rights

5.1 Educational aims

At the end of the training, the learner will be able to:

a) Explain the patients' rights according to the local jurisdiction
b) Understand the prevailing cultural and social norms in the practice setting
c) Explain to citizens what their rights as patients are
d) Promote the respect of patients' personal rights in his/her practice
e) Apply quality improvement strategies to assess and ameliorate the respect of patients' personal rights in his/her practice

5.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Lectures
b) Video visualization

5.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Self-assessment
b) Practice audit
c) Peer visit
d) Satisfaction inquiries
e) The Maturity Matrix

6: To manage all patient data safely and ethically

6.1 Educational aims

At the end of the training, the learner will be able to:

a) Define patient data
b) Explain the relevance of patient data for healthcare
c) Discuss the importance of patient data safety
d) Describe the methods that assure patient data safety
e) Discuss the ethics in patient data access and management
f) Assess the safety of patient data in his/her own practice
g) Apply improvement measures to increase patient data safety

6.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Literature review
b) Lectures
c) Case analysis
d) Group work
e) Problem-based learning

6.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Self-assessment
b) Practice audit
c) Patient record analysis

7: To understand intercultural patient concerns

7.1 Educational aims

At the end of the training, the learner will be able to:

a) Recognize beliefs and health practices in a community
b) Collect a cultural, social and medical history of a patient
c) Identify intercultural patient's concerns in the medical interview
d) Respect patient's cultural and health beliefs
e) Value the importance of cultural diversity in healthcare
f) Acknowledge the impact of physician cross-cultural competencies in healthcare

7.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Literature review
b) Video visualization
c) Role play
d) Group work
e) Family interviewing
f) Case discussion

7.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Written exam
b) Self-assessment
c) Clinical observation
d) Case presentation

8: To recognize, understand, and address ethical dilemmas

8.1 Educational aims

At the end of the training, the learner will be able to:

a) Explain the ethical principles of autonomy, nonmaleficience, beneficience and justice
b) Discuss the existing limitations in the ethical principles
c) Recognize the potential conflicts among ethical principles in person-centred care
d) Understand the impact of good communication when handling ethical issues
e) Acknowledge the role of the primary care team in solving ethical dilemmas
f) Value the importance of professionalism when addressing ethical dilemmas

8.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Literature review
b) Problem-based learning
c) Case discussion
d) Group work

8.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Written exam
b) Case presentation
c) Clinical observation

9: To understand social contexts in general practice

9.1 Educational aims

At the end of the training, the learner will be able to:

a) Define social context and social determinants of health
b) Describe different social contexts that might exist in communities
c) Identify the role of social context in individual's health behaviours
d) Recognize the impact of social determinants in the health of individuals
e) Value the importance of adapting health services to individuals with different social contexts

9.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Literature review
b) Video visualization
c) Observation
d) Family interview
e) Study visit
f) Role play
g) Case discussion
h) Group work

9.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Written exam
b) Case supervision
c) Case discussion

10: To prioritize quality improvement activity and understand its effect on patient care

10.1 Educational aims

At the end of the training, the learner will be able to:

a) Define quality improvement
b) Describe the principles of quality improvement projects in primary care
c) Design a primary care quality improvement project
d) Understand the value of quality assessment
e) Recognize the importance of quality improvement activities in general practice and its impact on patient outcomes

10.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Lecture
b) Audit
c) Self-assessment
d) Problem-based learning
e) Group work
f) Quality improvement project in own practice
g) Analysis of patients' care outcomes in own practice

10.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Written exam
b) Project presentation
c) Competency Framework in Quality Improvement for Family Doctors in Europe
d) Quality Improvement Knowledge Assessment Tool

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EFFECTIVENESS AND EFFICIENCY

Zalika Klemenc-Ketis, Jo Buchanan

1: Introduction

Effectiveness and efficiency are two concepts that add an economic dimension to healthcare. Effectiveness is the relationship between the level of resources invested and the level of results or improvements in health. Efficiency is the relationship between the level of resources invested in the healthcare systems and the volume of services, or, what amounts to the same thing, improvements in health achieved. The purpose of efficiency is to maximise results effectively. Healthcare is effective when it provides services based in scientific knowledge to all who could benefit, and refrain from providing services to those not likely to benefit. Healthcare is efficient when it avoids waits and sometimes harmful delays for both those who received and those who give care. According to the Institute of Medicine (IOM), both areas are necessary outcomes of a quality healthcare.

Studies have found a significant gap between optimal primary care services and actual practice in terms of efficiency and effectiveness and this can have serious health consequences, for example death from medical errors, poor vaccination uptake or increased complications in poorly monitored chronic diseases. Suboptimal care can have significant impacts on a patient's quality of life, and can have financial consequences, for instance, from situations such as increased hospital admissions due to medication errors and outbreaks of infectious diseases in unimmunized children.

Effectiveness and efficiency are important drivers and enablers of quality improvement changes in primary healthcare. The proper use of these drivers can also increase access to care, improve healthcare outcomes, and reduce spending.

The Effectiveness and Efficiency competence includes the concepts of standardisation, timeliness, practice performance, evidence-based guidelines, data quality, continuous quality improvement, and sustainability. Standardisation is the systematic process by which tangible or intangible subjects are reduced to a desired degree of order by the joint efforts of the interested parties. Timeliness in healthcare is the system's capacity to provide care quickly after a need is recognised. According to IOM, it is one of the six dimensions of quality.

Performance measurement assesses the degree to which primary care services achieve desired outcomes. It is useful to support planning, and management or quality improvement. Performance measures focus on desired outcomes or processes of care and are referred to as performance indicators. Evidence-based medicine refers to managing patients according to scientific findings. It also includes managing patients according to guidelines.

Data quality is defined as the totality of features and characteristics of a data set that bear on its ability to satisfy the needs that result from the intended use of the data. Continuous quality improvement is about providing person centred, safe, and effective care while managing healthcare resources more efficiently. Sustainability is a basic concept of quality improvement. Changes that improve the quality of healthcare should be sustained. Otherwise, the performance could fall back in quality and can even worsen.

Nationally set performance targets inevitably have their limits and will not address many aspects of healthcare, which need to be improved. Failure to meet targets can result in staff being blamed, a sense created that the targets are more important than patients and a culture of fear can result which means that staff begin to lose their focus on patient care. A top down system will not produce the change in culture that is needed to improve patient care. Learners need to understand and recognise the limitations of standardisation and a requirement to meet targets. They need to able to foster a culture in their workplaces which also focuses on learning and improvement.

2: Introduction

Learning objectives of effectiveness and efficiency include the ability to

1. Understand the role of standardized service delivery where possible to improve timeliness of primary care.
2. Measure personal and practice performance and competence according to national and EU standards.
3. Understand what is required to implement evidence-based medicine guidelines.
4. Understand the role of data quality in ensuring the delivery of effective health care.
5. Managing resources efficiently in order to increase the efficiency of service delivery.
6. Promote methods of continuous improvement.
7. Standardise quality improvement efforts to make the process more efficient and sustainable.

3: Understand the role of standardized service delivery where possible to improve timeliness of primary care.

3.1 Educational aims

At the end of the training, the learner will

a) Define the meaning of standardisation
b) Describe the purpose and methods of standardisation
c) Differentiate between guidelines and standards
d) Recognise the limitations and risks of standardisation in medical care
e) Recognise timeliness as one of the dimension of quality care

3.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Literature review
b) Lectures
c) Seminar work
d) Distance learning modules

3.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Written test
b) Self-assessment
c) Peer assessment

4: Measure personal and practice performance and competence according to national and EU standards

4.1 Educational aims

At the end of the training, the learner will

a) Define practice performance
b) Describe the meaning of quality improvement
c) Describe the meaning of quality indicators, quality measurements, and quality standards
d) Describe the methods of practice performance measurement
e) Explain the purpose of performance measurement
f) Discuss the advantages and disadvantages of performance measurement
g) Measure the performance of his/her own practice according to national and EU standards

4.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Literature review
b) Lectures
c) Seminar work
d) Quality circle
e) Peer review with records analysis
f) The European Practice assessment tool [EPA]
g) The Maturity Matrix tool
h) Distance learning modules

4.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Quality improvement project
b) Self-assessment
c) Peer assessment
d) Written test

5: Understand what is required to implement evidence-based medicine guidelines

5.1 Educational aims

At the end of the training, the learner will

a) Demonstrate an understanding of what is meant by the term ‘evidence-based medicine’
b) Value the importance of evidence-based medicine
c) Understand the use of guidelines for delivering evidence based care
d) Be able to discuss the limitations of guidelines
e) Explain the process of the development of new guidelines
f) Differentiate between evidence-based medicine and research
g) Be able to work in partnership with patients supporting them to make decisions informed by guidelines which take into account the patient’s needs

5.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Literature review
b) Lectures
c) Seminar work
d) Quality improvement project
e) Research project
f) Quality circle
g) Peer review with records analysis
h) Distance learning modules

5.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Peer assessment
b) Written assignments
c) Self-assessment
d) Research report
e) Quality improvement project

6: Understand the role of data quality in ensuring the delivery of effective health care

6.1 Educational aims

At the end of the training, the learner will

a) Discuss the importance of data quality in healthcare
b) Describe the components of data quality
c) Discuss the limitations in data quality assurance
d) Review data quality in his/her practice
e) Apply measures for data quality improvement in his/her practice

6.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Literature review
b) Lectures
c) Quality circle
d) Peer review with records analysis
e) Data analysis

6.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Quality improvement project
b) Self-assessment
c) Peer assessment
d) Data quality analysis and report

7: Managing resources efficiently in order to increase the efficiency of service delivery

7.1 Educational aims

At the end of the training, the learner will

a) Recognise the importance of efficiency in health care
b) Differentiate between efficiency and effectiveness of health care
c) Describe the methods to increase the efficiency of service delivery in primary care
d) Describe the methods for resources' management

7.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Literature review
b) Lectures
c) Seminar work
d) Quality circle

7.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Self-assessment
b) Data quality analysis
c) Written assignments
d) Case report

8: Promote methods of continuous improvement

8.1 Educational aims

At the end of the training, the learner will

a) List the methods of quality improvement
b) Recognise barriers to implement quality improvement

8.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Quality circle
b) Peer review with records analysis
c) Quality improvement project in own practice
d) Distance learning modules

8.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Quality improvement project
b) Self-assessment
c) Peer assessment
d) Personal development plan

9: Standardise quality improvement efforts to make the process more efficient and sustainable

9.1 Educational aims

At the end of the training, the learner will

a) Understand the role of quality improvement methodology in improving the efficiency and effectiveness of healthcare
b) Define the meaning of efficiency and effectiveness in health care
c) Describe the methods to increase the efficiency of service delivery in primary care
d) Recognise sustainability as a key component of continuous quality improvement
This final objective is a more advanced one which can be explored after specialty training in continuing medical education.

9.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Literature review
b) Lectures
c) Seminar work
d) Quality circle
e) Quality improvement project in own practice
f) Distance learning modules

9.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Quality improvement project
b) Self-assessment
c) Data quality analysis
d) Discussion paper

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CONTINUING PROFESSIONAL DEVELOPMENT

Ruth Kalda

1: Introduction

Medical education forms one developing process, of which continuing education is the longest part.
CPD is defined as any learning outside of undergraduate education or postgraduate training that helps maintain and improve the performance. Continuing professional development involves not only educational activities to enhance medical competence in medical knowledge and skills, but also in management, team building, professionalism, interpersonal communication, technology, teaching, and accountability. It is found by systematic reviews that traditional methods of continuing education do not adequately meet the lifelong learning and professional development needs of health care professionals and are not always successful in affecting practice behaviour and improving patient outcomes. CPD, which is based on sound principles and adopts educational strategies that have been shown to be effective, offers the quality improvement elements to the traditional system of continuing education.

Emphasis on CPD has been growing due to several factors:

- Physicians are leading longer professional lives
- Globally increasing mobility of both patients and healthcare professionals
- Accelerated proliferation of new knowledge, new technology, and techniques
- Society's increased expectations of the medical profession
- Public healthcare systems concerns
- Complex healthcare working environments where doctors are constantly challenged to develop and master multidisciplinary teamwork among peers, allied healthcare personnel, employers, regulators, and healthcare systems authorities
- Increasing requirements of CPD activities' measure of performance

Effective CPD helps to anticipate and respond to the changing demands of the health care. It enables to keep up to date and fit to practice. In Euract-EQuiP common policy document is stated that "Professional development, continuously striving to enhance the competence necessary to meet the needs of patients and societies served, is a legal and ethical obligation. CPD should be based on the learners' experiences. Effective CPD starts from perceived needs of the professional. The doctor should be seen as a self-directed learner".

Responsibility and self-directness of the family doctors/general practitioners in their continuing learning process was stated already in 1980 by Leeuwenhorst European working party: "general practitioners should have the basic responsibility at this stage for seeking their own education; for identifying their own deficiencies; for helping to plan, organise and contribute to the training of their fellows". Leeuwenhost working party tells also, that "The content must relate to the setting in which the general practitioner works, the range of problems he faces, the knowledge, skills and attitudes which he brings to their solution, and what he does and is as a person.

In general, CPD has two main purposes: 1) to improve the safety and quality of care provided to patients and the public 2) to improve the standards of the teams and the services in the work

The basic principles of CPD are as following:

1) This is a planned process
2) Doctors are responsible for determining what they need to learn, and for managing and undertaking their own CPD activity
3) Managers are responsible for encouraging and supporting staff, providing feedback, as appropriate
4) Professional development is a continuing process of assessment, analysis, action and review
5) Learning objectives should be based on clearly identified outcomes, and serve organization as well as individual goals

2: Learning objectives

Learning objectives of the continuing professional development include the ability to:

1. Understand and use self-assessment
2. Develop and maintain individual continuing learning
3. Pursue systematic practice-based learning and improvement
4. Understand the gap between prevailing/current performance and local/national accepted standards
5. Engage in inter-professional learning where appropriate

3: Understand and use self-assessment

3.1 Educational aims

At the end of the training, the learner will be able:

a) To understand the meaning of self-reflection
b) To understand its purpose in continuing professional development
c) To use the self-assessment in own professional development

3.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Literature review
b) Lectures
c) Personal development plan
d) Peer review
e) Reflective paper

3.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Observation
b) Written assignments
c) Discussion
d) Self-assessment
e) Peer assesment

4: Develop and maintain individual continuing learning

4.1 Educational aims

At the end of the training, the learner will be able:

a) To identify what to learn (to review and reflect own learning needs)
b) To plan how to learn (to select appropriate learning methods)
c) To assess the effectiveness of the learning (critical self-reflection of the progress)

4.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Personal learning plan
b) Literature review
c) Lectures
d) Seminar work
e) Self-reflection

4.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Personal learning plan which corresponds to the practice learning needs
b) Critical self-reflection
c) Self-assessment

5: Pursue systematic practice-based learning and improvement

5.1 Educational aims

At the end of the training, the learner will be able to:

a) gather evidence to support systematic improvement of practice work
b) use this evidence in developing personal learning plan
c) reflect on actual learning outcomes and apply to work practice
d) assess impact in practice level
e) identify further learning needs

5.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Personal learning plan
b) Self-assessment
c) Seminar work
d) Case analysis
e) Peer review

5.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Personal learning plan which corresponds to the practice learning needs
b) Critical self-reflection of educational objectives
c) Case report

6: Understand the gap between prevailing/current performance and local/national accepted standards

6.1 Educational aims

At the end of training, the learner will be able to:

a) Define own and practice performance
b) Define local or national standards of performance
c) Perform analysis (comparison)
d) Take action (improvement in the area where this is needed)

6.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Literature review
b) Lectures
c) Seminar work
d) Data analysis
e) Self- assessment
f) Quality circle
g) Peer review

6.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Analysis of correspondence of practice performance to local guidelines or standards (in one selected field)
b) Written assignments
c) Discussion
d) Case report

7: Engage in inter-professional learning where appropriate

7.1 Educational aims

At the end of the training, the learner will be able to:

a) Understand the interdependence of interprofessional learning and interprofessional collaborative practice
b) Describe individual roles and responsibilities and demonstrate consensus building within a team
c) Understand the roles and responsibilities in inter-professional practice
d) Understand of the role of each profession in a team-based approach

7.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Literature review
b) Survey
c) Peer visit
d) Role play
e) Reflective self-assessment
f) Critical analysis
g) Interprofessional training/project work

7.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Critical self-reflection
b) Observation
c) Peer assessment
d) Self-assessment

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METHODS AND TOOLS

Bohumil Seifert

1: Introduction

Ensuring quality and safety in primary care is a fundamental policy priority in all countries. The background structure for quality and safety is ensured by a number of systematic measures and regulations provided by authorities. However, under these regulations, care is provided under uneven conditions, at different levels of practice organization and clinical competence of primary health care professionals. GPs in some countries have a long experience in using health care quality improvement methods and tools while in others GPs may consider formal quality measures only as an administrative exercise and a tool of pay-for-performance.

The tools and methods for quality and safety improvement should allow an individual practitioner to choose the currently needed and relevant simple tool or method for improvement of GPs practice. Further multiplying and combined use of these methods and tools can gradually lead to systems providing support and quality development.
The competence in use of methods and tools for quality and safety improvement corresponds with the organizational level of the practice and with level of continuous professional development of individual health care professional. It is principally based on the perception of the need to take care of quality and safety actively in practice and on understanding of basic quality concepts, methods and tools.

Traditional healthcare evaluation methods are evaluation of structure, of process, and of outcomes. There are also some other quality improvement evaluation methods: audit and improvement cycles, analysis of barriers and facilitators to improvement, change management, transformation methods, and measurement for change. Most of the literature on the quality and safety tools in primary care addresses the themes of medication errors followed by safety climate and adverse event reporting. Less themes include informatics, patient role and general measures to correct errors. Many of the tools have yet to be used in quality improvement strategies and cycles such as PDCA so there is a dearth of evidence.

There are various tools and methods for a practice-level quality improvement in primary care such as audit and feedback, computerised advice, point-of-care reminders, practice facilitation, educational outreach and processes for patient review and follow-up that demonstrated evidence of a quality improvement effect. There are also varying quality improvement strategies involving structured process that include assessment, refinement, evaluation, and adoption of process used by individuals, teams, an organisation or a health system, with the aim to enhance some aspects of quality and safety and achieve measurable improvement. These can include simple tools (flow charts, frameworks), more complex tools (such as re-engineering), and frameworks (such as PDCA cycle). There is increasing evidence that QI initiatives that are locally owned and delivered, team-focused, formative and flexible and involve interorganisational collaboration and networking are more sustainable and yield better outcome.

This chapter is focused more general on quality cycle, change management, measurement, benchmarking and use of audit techniques. The agenda for education on methods and tools of quality improvement as well as agenda for tools and methods of assessment of quality improvement fill separate chapters of this book.

The quality cycle (PDCA) represents the basic method and is used to plan and implement the proposed changes, monitor the response to the interventions and review and act on results. Depending on the specific circumstances there may be one or more PDCA cycle. A PDCA cycle consists of four steps:

1. PLAN (setting objectives, analysing problems, preparing an improvement plan)
2. DO (implementing changes)
3. CHECK (measuring the effect, comparing against the expected results)
4. ACT (acting based on previous experiences, fixed changes)

Change management is usually based on educational approaches and quality cycle and helps in changing work processes. Measuring the performance is a part of quality cycle. Collected data allow practices to identify problem areas in practice management and practice organization and to take measures for improvement. Audit techniques help professionals to identify problems, to use benchmarking feedback and set up targets for improvement. The quality cycle usually continues to the the Stewhart cycle which enables the continuous quality improvement.

2: Learning objectives

Learning objectives of this chapter on methods and tools include the ability

1. to recognize methods and tools for quality and safety improvement in primary care
2. to understand and use the quality cycle (PDCA)
3. to understand the steps in quality cycle adopted to primary care
4. to learn how to use to understand change management and the consequences of change in terms of PDCA cycle
5. to measure performance and use data for improvement
6. to understand and use measurements for accountability
7. to use benchmarking feedback and audit techniques to measure and improve quality in the context of the practice and region

3: Recognizing methods and tools for quality and safety improvement in primary care

3.1 Educational aims

At the end of the training, the learner will

a) list the methods for quality and safety improvement in primary care (focused in practice-level)
b) list the tools for quality and safety improvement in primary care (focused on practice-level)
c) describe a fishbone diagram
d) describe process mapping
e) describe value stream mapping
f) describe driver diagram
g) describe run charts
h) describe clinical audit
i) describe significant event analysis
j) describe a PDCA cycle

3.2 Methods and tools

The following methods and tools can be used to achieve the educational aims:

a) Literature review
b) Lectures
c) Distant e-learning
d) Small group sessions
e) Project work

3.3 Assessment methods and tools

The following methods and tools can be used to assess the knowledge, skills and attitudes:

a) Essay
b) Written test
c) Quality improvement project
d) Project presentation
e) Peer review
f) Portfolio

4: Understanding and use the PDCA quality cycle

4.1 Educational aims

At the end of the training, the learner will

1. to recognize methods and tools for quality and safety improvement in primary care
2. to understand and use the quality cycle (PDCA)
3. to understand the steps in quality cycle adopted to primary care
4. to learn how to use to understand change management and the consequences of change in terms of PDCA cycle
5. to measure performance and use data for improvement
6. to understand and use measurements for accountability
7. to use benchmarking feedback and audit techniques to measure and improve quality in the context of the practice and region

4.2 Methods and tools

The following methods and tools can be used to achieve the educational aims:

a) Literature review
b) Lectures
c) Distant e-learning
d) Social media
e) Peer practice visits
f) Small group sessions
g) Quality circle
h) Practice best examples discussions
i) Project work

4.3 Assessment methods and tools

The following methods and tools can be used to assess the knowledge, skills and attitudes:

a) Quantitative (surveys) and qualitative methods (interviews and focus groups)
b) Self-reported measures of change in attitudes
c) Narratives from practice
d) Practice based quality improvement project presentation
e) Ability to perform practice assessment incl. comparison with standards and guidelines
f) Examples of improvement plans
g) Data quality analysis
h) Essay

5: Understanding the steps in quality cycle adopted to primary care

5.1 Educational aims

At the end of the training, the learner will understand the steps in quality circle adopted to primary care. In order to achieve this it is necessary to

- Identify the steps in quality cycle with special emphasis on primary care
- Explain the step Plan
- Explain the step Do
- Explain the step Check
- Explain the step Act
- Describe a practical example of a quality cycle in primary care
- Explain the PDSA model (Plan-Do-Study-Act)

5.2 Methods and tools

The following methods and tools can be used to achieve the educational aims:

- Literature review
- Lectures
- Distant e-learning
- Social media
- Peer practice visits
- Small group sessions
- Quality circle
- Practice best examples discussions
- Project work

5.3 Assessment methods and tools

The following methods and tools can be used to assess the knowledge, skills and attitudes:

i) Quantitative (surveys) and qualitative methods (interviews and focus groups)
j) Self-reported measures of change in attitudes
k) Narratives from practice
l) Practice based quality improvement project presentation
m) Ability to perform practice assessment incl. comparison with standards and guidelines
n) Examples of improvement plans
o) Data quality analysis
p) Essay

6: Understand change management and the consequences of change in terms of the PDCA cycle

6.1 Educational aims

At the end of the training, the learner will

a) Understand prerequisites for a change
b) Explain a planned-change approach
c) List what improvement plan includes
d) Explain how to implement an improvement plan
e) Supervise the process of change
f) Assess changes

6.2 Methods and tools

The following methods and tools can be used to achieve the educational aims:

a) Literature review
b) Lectures
c) Distant e-learning
d) Social media
e) Small group sessions
f) Quality circle
g) Practice best examples
h) Peer practice visits
i) Project work

6.3 Assessment methods and tools

The following methods and tools can be used to assess the knowledge, skills and attitudes:

a) Quantitative (surveys) and qualitative methods (interviews and focus groups)
b) Self-reported measures of change in attitudes
c) Narratives from practice
d) Change management project presentations
e) Ability to perform practice assessment
f) Examples of change-management plans
g) Data quality analysis
h) Observation
i) Essay

7: Measure performance and use data for improvement

7.1 Educational aims

At the end of the training, the learner will

a) Explain the meaning of performance
b) Understand the importance of data collection
c) Explain the importance of the use of data for improvement
d) Describe the methods of data collection and measuring performance
e) Discuss about sampling types
f) Use data for improvement

7.2 Methods and tools

The following methods and tools can be used to achieve the educational aims:

a) Literature review
b) Lectures
c) Distant e-learning
d) Social media
e) Small group sessions
f) Quality circle
g) Practice best examples
h) Peer practice visits
i) Project work
j) Research

7.3 Assessment methods and tools

The following methods and tools can be used to assess the knowledge, skills and attitudes:

a) Quantitative (surveys) and qualitative methods (interviews and focus groups)
b) Narratives from practice
c) Examples of data collection
d) Project presentations
e) Data quality analysis
f) Observation
g) Portfolio

8: Understand and use measurements for accountability

8.1 Educational aims

At the end of the training, the learner will

a) to understand what is accountability
b) to explain the importance of measuring accountability
c) to explain the accountability models (regulatory, legal, professional, etc.)
d) to understand and explain accountability measurements
e) to demonstrate the accountability

8.2 Methods and tools

The following methods and tools can be used to achieve the educational aims:

a) Literature review
b) Lectures
c) Distant e-learning
d) Social media
e) Small group sessions
f) Quality circle
g) Practice best examples
h) Project work

8.3 Assessment methods and tools

The following methods and tools can be used to assess the knowledge, skills and attitudes:

a) Quantitative (surveys) and qualitative methods (interviews and focus groups)
b) Practice reports
c) Examples of accountability measurements
d) Presentations of accountability demonstration plans
e) Peer group assessment
f) Essay

9: Use benchmarking feedback and audit techniques to measure and improve quality in the context of your practice or region

9.1 Educational aims

At the end of the training, the learner will

a) Explain what benchmarking is
b) Explain what audit is
c) List audit techniques to measure and improve quality
d) Interpret benchmarking feedback
e) Use benchmarking feedback to improve quality in the context of practice or region

9.2 Methods and tools

The following methods and tools can be used to achieve the educational aims:

a) Literature review
b) Lectures
c) Distant e-learning
d) Social media
e) Small group sessions
f) Quality circle
g) Practice best examples

9.3 Assessment methods and tools

The following methods and tools can be used to assess the knowledge, skills and attitudes:

a) Project presentations
b) Case discussion
c) Practice reports
d) Practice visits
e) Data analysis
f) Peer group assessment
g) Essay

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LEADERSHIP AND MANAGEMENT

Francesco Carelli, Gkamiri Vasiliki

1: Introduction

Leadership and management are two core competencies considered essential in modern family medicine curricula. Leadership is essential for the family medicine team to realise that the change is necessary. Quality improvement cannot take place without implementing changes and here, a good team leader is of the utmost importance. Only a person with a good leadership and management abilities can challenge the team to attain a better quality of its work.

Management refers to the skills of controlling and decision-making, organizing and coordinating activities and directing people and material resources towards the achievement of present goals, mandated by an organizations' policy. Leadership is one step further. Leaders are the visionaries, the key-persons who set the values, the strategic direction and the goals of an organization, form teams and motivate and inspire people to work towards common goals. Not all good managers are leaders; yet, all leaders possess management skills. Missing leadership, every agreement could be formal and fragile also because probably imposed up-down, without real better Quality vision and prospective.

In Family Medicine context, leaders must be chosen according to curriculum and attitudes and having real experience in treating patients on the ground with Quality vision (Medical Leadership Competency). It is the role of achieving change for Quality that distinguishes management from leadership. Both leaders and good managers are vital to the success of the healthcare system as a whole and of General Practice as a part of this system. Regarding the latter, leadership and management skills (inherent to the role of General Practice) become more and more crucial to General Practitioners as

- Primary Health Care is becoming more and more complex
- At the same time, in most parts of Europe there is a pending transfer of care delivery from secondary to primary care or (at least) a mandated closer cooperation towards a more integrated and effective patient-centred care
- Quality improvement is a cornerstone in healthcare provision. There is plenty of evidence that population health out comes are best where there is strong primary care, and general practitioners do need to step forward as leaders of primary care teams so to drive forward positive change
- Innovations in healthcare provide new possibilities for teaching, learning and practicing medicine
- Patient care is directed towards a multidisciplinary, patient-centred approach where each member of the healthcare team might be called to lead (or follow), not anymore individualistically in a fractioned system. The part not to be lost : the holistic approach; all the core competences as in the European Definition of Family Medicine and in EURACT Educational Agenda drive to leadership and management with Quality, as specifically in Family Medicine
- General practitioners (GPs) need to address the needs of not only people but communities as well, working hand in hand with other stakeholders and keeping in mind that resources are limited. With its holistic, continuous and longitudinal approach, working on prevention and rehabilitation, Family Medicine has to be the leader on managing good Quality and, at the same time, controlling costs and improving outcomes.
- The crisis in healthcare systems calls for a more effective management and a better leadership that could help by facilitating new ideas and practical responses. New skills based around commissioning, networking, learning, management, facilitation and negotiation will be needed to provide local services that are responsive to user needs in a variety of primary care, hospital and community settings.
- General practice has yet many obstacles to overcome in order to establish it among other, more "prestigious" disciplines. Yet, evidence shows that a strong primary care is related to better (and much needed) health outcomes for the population. It may be time for General Practitioners to actively seek the role of leaders in primary care teams so that positive change can take place.

In a more enhanced role of General Practice, the GP could be called to fulfil a coordinating role between the patient and the interdisciplinary team, bringing together aspects of primary and secondary care, social care and health promotion. In this concept, the doctor-patient relationship must also be seen in the light of other emerging relationships such as (Giordano R.W.):

- The relationship between the GP and members of interdisciplinary health care teams (including secondary care)
- The relationship between the GP and health care systems and the community (including local authorities and social care)
- The relationship between the GP and management professionals, such as financial directors
- The relationship between the GP and local or regional policy professionals.

These relationships are already known to GPs but they are not a big part of everyday practice as of today. An enhanced role of General Practice, though, would ask for a deep self-knowledge of the practitioners' own strengths and limitations and an increasing awareness of the role that values (both personal and professional) play in the decision-making process.

2: Learning objectives

The learning objectives of leadership and management include the ability

1. To work in partnership with all stakeholders of the practice population
2. To work as an interprofessional team in a practice, in a network and in the community
3. To understand how to take or delegate leadership for quality improvement
4. To negotiate for change with staff and with clients

3: Work in partnership with all stakeholders of the practice population

3.1 Educational aims

At the end of the training, the learner will

a) Identify various stakeholders
b) Know practice population
c) Build and sustain partnerships
d) Work in teams
e) Define the needs of the practice population
f) Prioritize the needs and set goals
g) Plan interventions and processes
h) Assess the outcomes and plan further quality improvement interventions (quality cycle)

3.2 Tools and methods

The following tools and methods can be used to achieve the educational aim:

a) Literature review
b) Lectures
c) Experiential learning (role-playing)
d) Project-case assignment (in groups or individually)

3.3 Assessment tools and methods

The following tools and methods can be used to assess the competence regarding the educational aims:

a) Written test
b) Project-case assignment (in groups or individually)
c) MCQ test
d) Oral test

4: Work as an interprofessional team in a practice, in a network and in the community

4.1 Educational aims

At the end of the training, the learner will

a) Define different teams and their members
b) Explain group dynamics
c) Identify possible allies
d) Build and sustain a team
e) Work in teams towards common goals
f) Identify and solve possible problems in teamwork
g) Act both as a leader and as a follower, depending on circumstances

4.2 Tools and methods

The following tools and methods can be used to achieve the educational aim:

a) Literature review
b) Lectures-seminars
c) Experiential learning (role-playing)
d) Project-case assignment (in groups or individually)

4.3 Assessment tools and methods

The following tools and methods can be used to assess the competence regarding the educational aims

a) Written test
b) Project-case assignment (in groups or individually)
c) MCQ test
d) Oral test
e) Self-assessment

5: To understand how to take or delegate leadership for quality improvement

5.1 Educational aims

At the end of the training, the learner will

a) Explain his/her own strengths and weaknesses
b) Value the strengths and weaknesses of other team members
c) Define the leadership and management skills
d) Explain the group dynamics
e) Explain the quality improvement cycle

5.2 Tools and methods

The following tools and methods can be used to achieve the educational aim:

a) Literature review
b) Lectures-seminars
c) Experiential learning (role-playing)
d) Project-case assignment (in groups or individually)

5.3 Assessment tools and methods

The following tools and methods can be used to assess the competence regarding the educational aims

a) Written test
b) Project-case assignment (in groups or individually)
c) MCQ test
d) Oral test
e) Self-assessment

6: Negotiate for change with staff and with clients

6.1 Educational aims

At the end of the training, the learner will

a) Define the change management
b) Define the change leadership
c) Explain the group dynamics
d) Communicate the necessity of change
e) Inspire the need for change
f) Prioritize the needs and set goals
g) Plan interventions and processes
h) Assess the outcomes and plan further interventions

6.2 Tools and methods

The following tools and methods can be used to achieve the educational aim:

a) Literature review
b) Lectures-seminars
c) Experiential learning (role-playing)
d) Project-case assignment (in groups or individually)

6.3 Assessment tools and methods

The following tools and methods can be used to assess the competence regarding the educational aims

a) Written test
b) Project-case assignment (in groups or individually)
c) MCQ test
d) Oral test
e) Self-assessment

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PATIENT CARE AND SAFETY

Erika Zelko, Zlata Ozvacic Adzic, Goranka Petricek

1: Introduction

Patient care and safety represent an important area of everyday primary care practice. According to WONCA definition, the discipline of family medicine aims to provide continuing and comprehensive health care stemming from lasting relationships with patients and their families, centred on patient and the context. Family physicians combine physical, psychological, social and cultural factors to the benefit of the patient, aiming to develop individual health care plans tailored to the needs and safe for their patients. Safe patient care is becoming increasingly recognized as a crucial component of optimal patient outcome. Although primary care represents setting with low risk of major harm in most patient contacts and procedures, majority of patients' health problems are managed in this setting and incidents with serious consequences occasionally occur. According to IOM, providing safe care represents one of the six dimensions of quality and is largely responsibility of a health care system.

The Patient Care and Safety competence includes the concepts of patient-centred medicine, critical incident and medical error, infection prevention and control, medication safety, system-based organisational approach to patient safety, effective communication to improve patient safety and involvement, error disclosure to patients, and individual health care plans.
Patient-centred care is health care that encourages partnerships between medical practitioners, patients and their families to ensure that care providers and system provide care according to the needs, values and preferences of patients. It is based on the principle of reciprocity, the division of power and includes a focus on patients. It has been associated with positive outcomes: reduction of malpractice complaints; improvements in physician satisfaction, consultation time, medication adherence and patients' emotional state; increased patient satisfaction and empowerment as well as reduced symptom severity, use of health care resources and health care costs.

A patient safety incident represents an event or circumstance that could have resulted, or did result, in unnecessary harm to a patient. An error is a failure to carry out a planned action as intended, or application of an incorrect plan. Errors are, by definition, unintentional; they manifest by doing the wrong thing (commission) or by failing to do the right thing (omission). The majority of patient safety incidents in primary care can be categorised into four main areas which cover diagnosis, drug prescribing, communication between healthcare providers and patients, and organisational factors.

Minimizing the occurrence of healthcare associated infections (HCAIs) represents a priority for assuring safe care. Hand hygiene; protective glove use; injections and blood sampling; disinfection of reusable equipment; and waste segregation are the most important infection protection and control tools on primary health care.

A medication error (ME) is an unintended failure in the pharmacotherapy process that leads (or potential) significant harm to the patient. Medication error has been shown to be one of the most frequent forms of medical error and it is associated with significant medical harm. The three top ranked problems leading to medication errors were according to a British study a incomplete reconciliation of medication during patient 'hand-overs', inadequate patient education about how to take their medications and poor discharge summaries. Identified areas for medication safety risks include also protocol complexity, medication ordering, and the processes for packaging, storage, and dispensing investigational medications.

Reducing risk and ensuring safety requires system actions to prevent and mitigate errors. By applying systems thinking to errors, the entire system of care is being examined to find out what happened, rather than who did it. Strategies to improve patient safety include adverse incident reporting, routine collected data and patient-reported measures. An incident reporting system represents a fundamental component of an organization's ability to learn from error.

Effective doctor-patient communication represents a central clinical function and is regarded as the heart of the art of medicine. Physician's communication and interpersonal skills involve the ability to obtain information to facilitate the precise diagnosis, counsel suitably, give therapeutic instructions, and establish a compassionate relationship with the patients. Basic communication skills underlie a successful doctor-patient relationship, which essentially consists of shared knowledge, perceptions, and feelings regarding the nature of the disease, goals of treatment, and psychosocial support. The three main goals of doctor-patient communication include creating a good interpersonal relationship, facilitating the exchange of information, and including patients in decision-making.

Disclosure of medical errors to patients and families is an important part of patient-centred medical care and essential requirement for maintaining trust. Systems concepts, the patient-provider partnership, and overall quality of care can be enhanced using a system of disclosure that provides education about the systems nature of error, fulfils the delivery system philosophy of mutual respect, and integrates the patient and his/her family as a partner in the error reduction enterprise. Such a system can result using clear disclosure policies and procedures sensitive to patient and family needs, open communications with concerned, committed, and compassionate system representatives, and use of mediation methods that foster communication, allow for venting, and are flexible in their approach to resolving conflict, including using apology.

2: Learning objectives

Learning objectives of patient care and safety include the ability to

1. Practice patient-centred medicine by understanding the patient's experience and then reflecting on care.
2. Deal effectively with critical incidents and medical error.
3. Practice infection prevention and control.
4. Practice medication safety.
5. Apply a systems-based organizational approach to patient safety in the practice.
6. Incorporate effective communication to improve patient safety and involvement.
7. Provide appropriate disclosure to patients when errors occur.
8. Develop and monitor individualized health care plan with the patient.

3: Practice patient-centred medicine by understanding the patient's experience and then reflecting on care

3.1 Educational aims

At the end of the training, the learner will

a) Define the patient-centred medicine
b) Describe principles and dimensions of patient-centred medicine
c) Describe the outcomes of patient-centred medicine
d) Describe the tools and methods of learning and teaching the patient-centred medicine
e) Recognise importance of medical practice that beside diagnosis and treatment of disease also consider patients perspectives of the illness experience and the social context in which patients live their lives

3.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Didactic lecture
b) Didactic seminars
    a. using the Patient-centred case presentation
c) Roleplaying
    a. demonstrations of skills by faculty
    b. the student presenting the patient by role-playing the patient
    c. the standardized patients playing a role
d) Use of video clips
    a. a short video clip of an interview with a patient
e) Interviews
    a. standardized patient interviews
    b. extended discussions with patients
    c. screening exercise with real patients
    d. observed interviews with real patients followed by constructive feedback
    e. evidence based discussion
f) Self-reflection
g) Literature review

3.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Project assignment
b) Written test
c) Self-assessment
d) OSCE
e) Case based discussion (CbD)

4: Deal effectively with critical incidents and medical error

4.1 Educational aims

At the end of the training, the learner will

a) Define rates and types of patient safety incidents in healthcare
b) Understand the nature of error and how health-care providers can learn from errors to improve patient safety
c) Understand the multiple factors involved in errors
d) Demonstrate the ability to deal with error, report and learn from error, support others involved in error
e) Avoid blaming when an error occurs
f) Recognize the role of patient safety in safe healthcare delivery
g) Apply patient safety thinking in all clinical activities
h) Make patient safety a priority in clinical practice

4.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Lectures
b) Small-group discussion
c) Quality circle
d) Case discussion
e) Role play
f) Standardized patients
g) Procedure simulations
h) Root cause analysis / significant event analysis (SEA)
i) Chart-simulated recall
j) Web- based/videotape scenarios
k) Improvement projects

4.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Project assignment
b) Written test (modified essay question MEQ, multiple choice question MCQ)
c) Self-assessment
d) Essay
e) OSCE
f) mini CEX / MSF
g) Case-based discussion (CbD)
h) Portfolio

5: Practice infection prevention and control

5.1 Educational aims

At the end of the training, the learner will

a) Define the standard principles of infection prevention and control
b) Describe the objectives of hand decontamination, the use of personal protective equipment, and the safe use and disposal of sharps.
c) Describe the components of benefits of effective hand decontamination for patients and carers
d) Describe the methods and tools of infection prevention and control in primary health care

5.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Literature review
b) Lectures
c) Seminar work
d) Quality circle
e) Workshops

5.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Project assignment
b) OSCE station
c) Self-assessment

6: Practice medication safety

6.1 Educational aims

At the end of the training, the learner will

a) Define the meaning of medication errors.
b) Describe the objectives of medication safety
c) Recognise the importance of interprofessional collaboration between general practitioner and pharmacists for improving the medication safety
d) Describe the methods and tools for optimization at medication safety

6.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Literature review
b) Lectures
c) Seminar work
d) Quality circle
e) Peer review of recommendation of medication provided by pharmacist
f) Preparing medication list and reconciliation documentation

6.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Quality improvement of medication documentation of prepared examples
b) Data quality analysis
c) Self-assessment

7: Apply a systems-based organizational approach to patient safety in the practice

7.1 Educational aims

At the end of the training, the learner will

a) Understand systems and the impact of complexity on patient care
b) understand the harm caused by health-care errors and system failures
c) Analyse patient safety incidents to enhance systems of care
d) Define threats to patient's safety and their underlying causes
e) Value the importance of a culture that promotes patient safety
f) Adopt strategies that promote patient safety, including human and system factors

7.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Literature review
b) Lectures
c) Small-group discussion
d) Quality circle
e) Case discussion
f) Root cause analysis / significant event analysis (SEA)
g) patient record reviews
h) Maturity Matrix

7.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Project assignment
b) Written test
c) Self-assessment
d) Essay
e) OSCE
f) mini CEX / MSF
g) Case-based discussion (CbD)

8: Incorporate effective communication to improve patient safety and involvement.

8.1 Educational aims

At the end of the training, the learner will

a) Identify and acknowledge the importance of communication between health professionals and patients.
b) Increase understanding of the effective communication to improve patient safety and involvement.
c) Identify, know and apply elements of good communication.
d) In communication with patients be able to:
    a. identify hidden agendas
    b. address the patients perspective
    c. recognize psychosocial issues
    d. demonstrate listening skills with probing and clarifying
    e. work with comorbid patients, angry patients, and somatisizing patients.
e) In communication with colleagues be able to:
    a. make concise, accurate, and well-organized clinical notes and oral presentations
    b. write prescriptions
f) Be able to actively participate in the group work, to summarize and argue their conclusions, accept criticism, and show tolerance towards the opinions of others
g) Recognize the need for continuous improvement of acquired skills during study and medical practice.

8.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Didactic lecture
b) Didactic seminars
c) Roleplaying
d) Use of video clips
e) Interviews
    a. standardized patient interviews
    b. extended discussions with patients
    c. observed interviews with real patients followed by constructive feedback
    d. evidence based discussion
f) Self-reflection
g) Literature review

8.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Project assignment
b) Written test
c) Self-assessment
d) OSCE
e) Case based discussion

9: Provide appropriate disclosure to patients when errors occur

9.1 Educational aims

At the end of the training, the learner will

a) Identify and acknowledge that quality promotion requires a system of disclosure that provides information to providers and patients on the systems nature of outcomes in health care.
b) Identify, know and apply elements of good error disclosure system.
c) Increase understanding of the trained error disclosure teams importance because communication of difficult issues requires significant skill.
d) Identify that the last person to treat the patient should not participate in the error disclosure, at least initially. A patient care liaison should be available who is part of the error disclosure team.
e) Recognize that the theme for all disclosure communications is objectivity - a description of activities and events rather than conclusions and/or blame issuance is essential to reflect the systems nature of error and outcomes.
f) Identify that the patients/families subject to an adverse event should be offered the opportunity to be part of the corrective action process. Patients/families should be offered mediation to avoid the high costs of litigation.

9.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Didactic lecture
b) Didactic seminars
c) Roleplaying
d) Use of video clips
e) Interviews
f) Self-reflection
g) Literature review

9.3 Assessment tools and methods

a) Project assignment
b) Written test
c) Self-assessment
d) OSCE
e) Case based discussion

10: Develop and monitor individualized health care plan with the patient

10.1 Educational aims

At the end of the training, the learner will

a) Identify and acknowledge the importance of creating IHCP and being able to individualize each IHCP to meet the needs of the patient
b) Increase understanding of minimum standards of care each IHCP should be consistent with.
c) Identify, know and apply components of an Individualized Health Care Plan
d) Recognize importance of each IHCP addressing medical equipment, medication administration, and medical services
e) Recognize importance of providing written orders for medical treatments by medical providers (physicians, nurse practitioners, physician assistants)
f) Provide Emergency Care Plan (ECP) when a chronic condition has the potential to result in a medical emergency.
g) Recognize the need for updating the IHP as appropriate and revising at least every six months or after significant changes occur in the patient's health status or care changes.

10.2 Tools and methods

The following tools and methods can be used to achieve the educational aims:

a) Didactic lecture
b) Didactic seminars
c) Use of video clips
d) Interviews
e) Literature review

10.3 Assessment tools and methods

The following tools and methods can be used to assess the knowledge, skills and attitudes:

a) Project assignment
b) Written test
c) Self-assessment
d) OSCE
e) Case based discussion

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GLOSARRY OF TERMS

Jáchym Bednář

A:

ABMS: American Board of Medical Specialties

ABMS MOC: American Board of Medical Specialties Recertification programs of continuous professional development – ABMS Maintenance of Certification. Process is designed to document that physician specialists, certified by one of the ABMS member boards, engage in lifelong learning and demonstrate the necessary competencies essential to providing quality and safe patient care

ABMS Evidence Library (http://www.abms.org/evidencelibrary/) is designed to highlight "research studies and articles supporting the value of Board Certification and Maintenance of Certification. It reflects an effort to systematically present the empirical evidence in the current peer-reviewed literature."

Academic detailing: is defined as structured visits by trained personnel to health care practices for the purpose of delivering tailored training and technical assistance to health care providers to help them use best practices. It is sometimes called educational outreach, educational detailing, or educational visiting. Academic detailing has typically been delivered face-to-face, but Web-based and other technologies are being explored as alternative channels.

ACCME: The **Accreditation Council for Continuing Medical Education** (**ACCME**) sets and enforces standards in physician continuing education (or 'lifelong learning') within the United States.

Accountability: is about taking responsibility for your actions, always ensuring you are competent to do the activity you've been asked to perform. Doctors and health professionals are accountable before the law, the Hippocratic Oath, peers, patients, and grant-giving agencies (if they do research), to the public, insurance carriers, and government agencies.

Accountability measures: are quality measures that meet criteria designed to identify measures that produce the greatest positive impact on patient outcomes when healthcare providers demonstrate improvement

Accountability models (professional, economic, political, etc.): different models of accountability stress different domains, evaluative criteria and procedures. Three dominant models of accountability: 1) the professional model 2) the economic model 3) the political model. No single model of accountability is appropriate to health care

Adverse drug events (ADEs): is an injury resulting from medical intervention related to a drug. This includes medication errors, adverse drug reactions, allergic reactions, and overdoses.

Assessment: is acknowledged to be essential to the educational process, both in terms of providing feedback and informing students about their performance (formative assessment) as well as decision-making for certification purposes (summative assessment)

Assessment tools and methods: traditional healthcare evaluation methods are evaluation of structure, of process, and of outcomes. Methods: audit and improvement cycles, analysis of barriers and facilitators to improvement, change management, transformation methods, and measurement for change attitudes. Quality and safety tools in primary care addresses the themes of medication errors followed by safety climate and adverse event reporting, include informatics, patient role and general measures to correct errors, f.e.: surveys, interviews, focus groups, Self-reported measures of change in attitudes, narratives from practice, Practice based quality improvement project presentation, Ability to perform practice assessment, Examples of improvement plans, Data quality analysis, essays

Audit: is a process that has been defined as "a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the implementation of change". An audit assesses if a certain aspect of health care is attaining a recognized standard. This lets care providers and patients know where their service is doing well, and where there could be improvements. The aim is to achieve quality improvement and improve outcomes for patients.

Audit techniques: help professionals to identify problems, to use benchmarking feedback and set up targets for improvement

B:

Benchmark: A criterion of quality or service in health care, usually expressed as a measurable standard. 2. A reference standard or basis for comparison that serves as a definition of a norm.

Benchmarking: A method of comparing a particular process and its outcomes in one organisation with another organisation, which facilitates improvements in those processes. Benchmarking is used to define standards of excellence, best practice and competencies based on various criteria.

BME (Basic medical education): undergraduate medical education

C:

Case based discussion (CbD): CbD is a structured interview conducted by a supervisor and a trainee in a focussed manner around the actual written case records a trainee presents. It is not a comfortable chat nor is it a formal examination. It is a process which has both a grading element and a feedback function . Generally the trainee will select some cases and should give you the necessary records prior to the case discussion. The trainee should be guided to choose cases in which uncertainty or where a conflict of decision making has arisen.

Case presentation: is a formal communication between health care professionals regarding a patient's clinical information

Change ideas: These are the ideas that your team would like to test, in order to help move towards the aim. All change ideas should have an effect on at least one

Change management: is usually based on educational approaches and quality cycle and helps in changing work processes. Managing change is about handling the complexity of the process. It is about evaluating, planning and implementing operations, tactics and strategies and making sure that the change is worthwhile and relevant. Effective change has been characterized as unfreezing old behaviours, introducing new ones, and re-freezing them. Change may be continuous, sporadic, occasional, or rare.

Chart-simulated recall: (CSR) is a workplace-based assessment method that complements chart audit with an interview based on the students' notes. It allows evaluation of the students' knowledge and heuristics while providing opportunities for feedback and self-reflection. CSR uses charts as a basis for discussion to explore learner's clinical reasoning skills, documentation skills, application of knowledge with actual patients, Best used as a formative learning tool

Clinical audit: see audit

Clinical observation: is used by skilled clinicians, doctors, and therapists in order to glean information about their patients or clients. They are observations of behavior from the clients that are used in order to determine a diagnosis and treatment plan. Typically notes are taken during the interaction with the clients or in some cases immediately after. Clinical observations are the basis of therapy and treatment and are the means at which a professional can learn about their client.

Collaborative skills: the definition of collaboration is "laboring together".This translation should bring about a vision of collegiality and working and learning together to achieve a goal. Together we stand, divided we fall. Skill: the ability to do something well, here: to collaborate

Competence: is an observed ability of a health professional integrating multiple components such as knowledge, skills, values, and attitudes. Competencies for practising physicians developed by American Board of Medical Specialties (ABMS): patient care, medical knowledge, interpersonal and communication skills, professionalism, system-based practice and practice-based learning and improvement.

Competency Framework for Quality Improvement in Family Medicine: consists of a list of 35 competencies organized into the following domains: Patient Care & Safety, Effectiveness & Efficiency, Equity & Ethical Practice, Methods & Tools, Leadership & Management, and Continuing Professional Education. the framework can serve as a useful tool for identifying gaps in knowledge and skills and guiding the development of CPD and CME curricula for GPs/FDs not only in Europe but also in other regions, including the United States and Canada, on the assumption that many of the core tasks of quality improvement would be relevant across multiple contexts.

Competency-based medical education (**CBME):** is an outcomes-based approach to the design, implementation, assessment, and evaluation of a medical education program using an organising framework of competencies "competent" means possessing the required abilities in all domains in a certain context at a defined stage of medical education or practice. Competence means that a physician is able to apply the abilities such as knowledge, skills, and attitudes in the clinical environment to achieve optimal results.

CME (**continuous medical education):** consists of educational activities which serve to maintain, develop, or increase the knowledge, skills, and professional performance and relationships that a physician uses to provide services for patients, the public, or the profession.

Continuous quality improvement: is about providing person centred, safe, and effective care while managing healthcare resources more efficiently

CPD (**Continued professional development**)**:**is defined as any learning outside of undergraduate education or postgraduate training that helps maintain and improve the performance. Continuing professional developmentinvolves not only educational activities to enhance medical competence in medical knowledge and skills, but also in management, team building, professionalism, interpersonal communication, technology, teaching, and accountability

Cross-cultural competencies: refers to the knowledge, skills, and affect/motivation that enable individuals to adapt effectively in cross-cultural environments.

cross-cutting, interdisciplinary and social-interpersonal competencies such as negotiating for change, inter-professional teamwork, and social networking. This framework describes a role for GPs/FDs that is focused not only on clinical care of patients but also on organisational, ethical, and patient safety issues

Curriculum: is broadly defined as the totality of student experiences that occur in the educational process. The term often refers specifically to a planned sequence of instruction, or to a view of the student's experiences in terms of the educator's or school's instructional goals.

D:

Data quality: is defined as the totality of features and characteristics of a data set that bear on its ability to satisfy the needs that result from the intended use of the data . The quality of data is determined by factors such as accuracy, completeness, reliability, relevance and how up to date it is. As data has become more intricately linked with the operations of organizations, the emphasis on data quality has gained greater attention

Data quality assurance: Data are considered reliable if the methods by which they are collected and analyzed remain stable over time. Describes routine measures to assure dataquality. Illustrates that data possess 5 key high quality attributes : validity, reliability precision, integrity, timeliness

Decision-making process: a cognitive process for selecting a course of action, in the context of health or medical diagnosis and treatment. Diagnostic errors are responsible for a significant number of adverse events. Good decision-making skills are key factors in reducing such errors.

Deming W. Edwards: is considered by many to be the father of modern quality control

DEN (doctors educational needs): Changing the established practice of physicians is one of the biggest challenges that face educationalists . It is not unusual that in the clinical work needs from a patient cannot be met. Some of these Patient Unmet Needs (PUN) are due to insufficient knowledge or skills. Identifying these gaps in knowledge and skills leads to a definition of educational needs by the doctor

Didactic program: designed or intended program to teach

Distance learning modules: is the 'traditional' self-study course, also known as a 'correspondence course'. Materials and learning resources are sent to students via post or email and students must complete the set tasks according to the course schedule.

Driver diagram: is an immensely powerful tool that helps you to translate a high level improvement goal into a logical set of underpinning goals and projects (primary, secondary drivers). It captures an entire change programme in a single diagram and also provides a measurement framework for monitoring progress. A driver diagram illustrates a 'theory of change', that can be used to plan improvement project activities. This technique provides a way of systematically laying out aspects of an improvement project so they can be discussed and agreed on collaboratively by the project team. In essence, it is a visual strategy for tackling a complex problem.

E:

ECP (**Emergency Care Plan):** plan, whicch provides concise, relevant, rapidly accessible clinical recommendations for use in an emergency

Educational aims: This is what you want to achieve, and it must be measurable. It cannot simply be "to improve" or "to reduce" The aim should be meaningful to You/ your patients / service users /stakeholders. Aims are concerned with purpose

Educational need: See DEN (doctors educational needs)

Educational needs assessment: See Learning needs assessment

Educational program: is a program written by the institution, which determines the learning progress of each subject in all the stages of formal education.

Effectiveness: is the relationship between the level of resources invested and the level ofresults or improvements in health

Efficiency: is the relationship between the level of resources invested in the healthcare systems and the volume of services, or, what amounts to the same thing, improvements in health achieved. The purpose of efficiency is to maximise results effectively

EHR (**An electronic health record):** is a digital medical record that either originates from an electronic format or is converted from paper or hard copy to an online version. An EHR includes information about a specific patient

EPA (**The European Practice assessment tool):** is an externally led assessment of a general practice organisation. It consists of questionnaires for the doctors and staff that ask about working con-ditions, education and training, and work satisfaction. In addition, an observer visits the practice and uses a checklist to assess aspects of physical infrastructure such as facilities for disabled patients, the presence of patient leaflets, the examination space and the doc-tors' bags. On the same day, the observer interviews the practice manager or lead general practitioner (GP) to ask about accessibility and availability, staff policies, job satisfaction, medical equipment, information man-agement, quality and safety, and health promotion activities.

Equity: Health equity ensures that each person has what they need to access resources. Equity is absence of systematic disparities in health, or its social determinants, between more and less advantaged social groups, main features are accessibility, longitudinality, comprehensiveness and coordination of care

Equality: Health equality promotes everyone receiving the same resources

Ethical dilemmas: involves the need to choose from among two or more morally acceptable options or between equally unacceptable courses of action, when one choice prevents selection of the other

EBM (**Evidence-based medicine):** is an approach to medical practice intended to optimize decision-making by emphasizing the use of evidence from well-designed and well-conducted research. Although all medicine based on science has some degree of empirical support, EBM goes further, classifying evidence by its epistemologic strength and requiring that only the strongest types (coming from meta-analyses, systematic reviews, and randomized controlled trials) can yield strong recommendations; weaker types (such as from case-control studies) can yield only weak recommendations.

Experiential learning methods: is the process of learning through experience, and is more specifically defined as "learning through reflection on doing in order to increase knowledge, develop skills, clarify values

Expert : professional who has acquired knowledge and skills through study and practice over the years, in a particular field or subject, to the extent that his or her opinion may be helpful in fact finding, problem solving, or understanding of a situation

External auditing: is performed by state institutions. It can be proffessional, financial, administrative auditing, or an inspection

F:

Family interviewing: Interviewing families is an essential skill for family physicians. Family history and other family information are commonly collected, and family issues are often discussed in office visits. Physicians use a wide range of family interviewing approaches with individual patients, with family members who accompany patients to office visits

Feedback: information about reactions to a person's performance of a task, which is used as a basis for improvement. Giving feedback should remember that it should be balanced, descriptive, objective and constructive. It is helpful to say 'you are good with patients but you don't always keep good notes and you should work on this'

Fishbone diagram: also called a cause and effect diagram or Ishikawa diagram, is a visualization tool for categorizing the potential causes of a problem in order to identify its root causes. Understanding the contributing factors or causes of a system failure can help develop actions that sustain the correction. A cause and effect diagramcan help in brainstorming to identify possible causes of a problem and in sorting ideas into useful categories

Five core competencies for health professionals: being able to provide patient-centred care, working in inter-professional teams, employing evidence-based practice, applying quality improvement and utilising informatics.

Formative assessment: The goal of formative assessment is to monitor student learning to provide ongoing feedback that can be used by instructors to improve their teaching and by students to improve their learning. More specifically, formative assessments: help students identify their strengths and weaknesses and target areas that need work, help teachers recognize where students are struggling and address problems immediately, formative assessments are generally low stakes, which means that they have low or no point value

G:

Guidelines: Guideline is a statement by which to determine a course of action. A guideline aims to streamline particular processes according to a set routine or sound practice. By definition, following a guideline is never mandatory. Guidelines are not binding and are not enforced

H:

Healthcare associated infections (**HCAIs**) represents a priority for assuring safe care. Hand hygiene; protective glove use; injections and blood sampling; disinfection of reusable equipment; and waste segregation are the most important infection protection and control tools on primary health care.

I:

IHCP: Individualized health care plan is the management plan that allows the provider to enhancethe care given to each individual in their practice at the level of care that is needed for the patient, at the patient's preferred mechanism for receiving the care. The ability to tailor a plan of medical care for a specific patient, treat with medications or therapy that is patient specific (pharmacogenomics) and interact with the patient through the Internet, social media, and secure messaging, allows for potential to have individualized patient-specific treatment

Improvement projects: See Quality improvement project

IPC (Infection prevention and control): designed to prevent harm caused by infection to patients and health workers. It is grounded in infectious diseases, epidemiology, social science and health system strengthening. IPC occupies a unique position in the field of patient safety and quality universal health coverage since it is relevant to health workers and patients at every single health-care encounter.

Interactive education: actively engages the students in wrestling with the material. It reinvigorates the classroom for both students and faculty. Lectures are changed into discussions, and students and teachers become partners in the journey of knowledge acquisition.

Interactive methods: audit/feedback, academic detailing, interactive education, and reminders

Internal auditing: is conducted by professionals, i.e. colleagues within the health institution, it provides a unique opportunity to recognise non-compliance and eliminate it before undesired effects have occured

K:

Kirkpatrick's model: is probably the best known model for analyzing and evaluating the results of training and educational programs. It takes into account any style of training, both informal or formal, to determine aptitude based on four levels criteria. Level 1: Reaction measures how participants react to the training . Level 2 Learning analyzes if they truly understood the training (e.g., increase in knowledge, skills or experience). Level 3 Behavior looks at if they are utilizing what they learned at work (e.g., change in behaviors), and Level 4 Results determines if the material had a positive impact on the business / organization.
Knowledge: understanding of or information about a subject that you get by experience or study

L:

Leaders are the visionaries, the key-persons who set the values, the strategic direction and the goals of an organization, form teams and motivate and inspire people to work towards common goals
Leadership: is the art of motivating a group of people to act towards achieving a common goal.
Learning needs: See DEN (doctor´s educational needs)
Learning needs Assessment: Assessing your learning needs is a vital first step on your learning journey. There are many methods of assessment, which range from keeping a diary of knowledge gaps, to assessing your practice risks, to formal patient satisfaction surveys. You can use them to assess your own needs or those of your practice. Most busy clinicians will want to choose from a more limited list of tools to assess their learning needs.
Learning objectives: See Objectives
Learning outcomes: learning outcomes are statements that describe significant and essential learning that learners have achieved, and can reliably demonstrate at the end of a course or program. In other words, learning outcomes identify what the learner will know and be able to do by the end of a course or program
Large-group teaching: the range of methods used to teach large groups, usually over thirty or forty students. ... Large group teaching methods might include the traditional lecture format, a combination of large group interaction with facilitated small group work, blended or online teaching using collaborative technology.
Literature review: A literature review is a paper, which includes the current knowledge including substantive findings, as well as theoretical and methodological contributions to a particular topic. Literature reviews are secondary sources, and do not report new or original experimental work. Most often associated with academic-oriented literature, such reviews are found in academic journals

M:

Management: refers to the skills of controlling and decision-making, organizing and coordinating activities and directing people and material resources towards the achievement of present goals, mandated by an organizations' policy

Maturity Matrix: is a group-based formative self-evaluation tool aimed at assessing the degree of organisational development in general practice and providing a starting point for local quality improvement. It is a self-assessment measure of organisational development designed to be used by practice teams with the aid of a trained facilitator.The purpose of the Maturity Matrix is to help teams identify those areas where they can improve the quality of organisation supporting the delivery of health care. Eleven areas, known as dimensions are covered by the Maturity Matrix. Each dimension consist of 8 stages that describe a progression from very basic practice to more developer arrangements.

Measurement of the performance is a part of quality cycle. Collecteddata allow practices to identify problem areas in practice management and practice organization and to take measures for improvement.

Medication error (**ME**) is an unintended failure in the pharmacotherapy process that leads (or potential) significant harm to the patient. Medication error has been shown to be one of the most frequent forms of medical error and it is associated with significant medical harm The three top ranked problems leading to medication errors :1. incomplete reconciliation of medication during patient 'hand-overs', 2. inadequate patient education about how to take their medications and 3. poor discharge summaries

Medication list: list of all medications, patient is taking

Medication reconciliation: is the process of comparing a patient's medication orders to all of the medications that the patient has been taking. This reconciliation is done to avoid medication errors such as omissions, duplications, dosing errors, or drug interaction

MEQs: modified essay questions are a sequence of questions based on a case study and designed to test higher order thinking. Students are usually presented with a scenario, and then given a series of questions based on it that they answer with a short text.

Methods for a practice-level quality improvement in primary care: audit and feedback, computerised advice, point-of-care reminders, practice, facilitation, educational outreach and processes for patient review and follow-up that, demonstrated evidence of a quality improvement effect

MCQ test: is a form of an objective assessment in which respondents are asked to select only correct answers from the choices offered as a list. It can assess „knows" level

mini CEX: mini Clinical Evaluation Exercise is a 15 – 20 minutes, observed, real-life, interaction between a trainee and a patient and/or doctor. The observer provides the trainee with immediate feedback on this interaction, focussing on the clinical skills, attitudes and behaviours of expected of the trainee.

Model for Improvement: asks usually three questions: What are we trying to accomplish? How will we know change is an improvement? What changes can we make that will result in the improvements that we seek?

multiple-exposure CME: Despite the broad range of continuing medical education (CME) offerings aimed at educating practicing physicians through the provision of up-to-date clinical information, physicians commonly overuse, under-use, and misuse therapeutic and diagnostic interventions. CME appears, multiple exposures beeing used are more effective than a single exposure at the acquisition and retention of knowledge, attitudes, skills, behaviors and clinical outcomes

N:

Nine essential features for quality (**chronic**) **care:** leadership, public trust (accountability and transparency), population-oriented management, vertical and horizontal integration, networking of professionals, infrastructure, payment mix, standardized measurement and an active program of change

O:

Objectives: usually an educational objective relates to gaining an ability, a skill, some knowledge, a new attitude etc. rather than having merely completed a given task are concerned with achievement whereas aims are concerned with purpose

Objective structured clinical exam (**OSCE):** is a modern type of examination often used in health sciences. Usually comprises a circuit of short (the usual is 5–10 minutes although some use up to 15 minute) stations, in which each candidate is examined on a one-to-one basis with one or two impartial examiner(s) and either real or simulated (actors or electronic patient simulators) patients. Each station has a different examiner, as opposed to the traditional method of clinical examinations where a candidate would be assigned to an examiner for the entire examination. Candidates rotate through the stations, completing all the stations on their circuit. In this way, all candidates take the same stations. It can assess the 'shows how' leve

Opinion leader: Influential member of a community, group, or society to whom others turn for advice, opinions, and views

P:

Patient autonomy: The right of patients to make decisions about their medical care without their health care provider trying to influence the decision. Patient autonomy does allow for health care providers to educate the patient but does not allow the health care provider to make the decision for the patient.

Patient Care and Safety competence: Includes the concepts of patient-centred medicine, critical incident and medical error, infection prevention and control, medication safety, system-based organisational approach to patient safety, effective communication to improve patient safety and involvement, error disclosure to patients, and individual health care plans

Patient-centred care: is health care that encourages partnerships between medical practitioners, patients and their families to ensure that care providers and system provide care according to the needs, values and preferences of patients. It is based on the principle of reciprocity, the division of power and includes a focus on patients. It has been associated with positive outcomes: reduction of malpractice complaints; improvements in physician satisfaction, consultation time, medication adherence and patients' emotional state; increased patient satisfaction and empowerment as well as reduced symptom severity, use of health care resources and health care costs.

Patient safety incident: represents an event or circumstance that could have resulted, or did result, in unnecessary harm to a patient. An error is a failure to carry out a planned action as intended, or application of an incorrect plan. Errors are, by definition, unintentional; they manifest by doing the wrong thing (commission) or by failing to do the right thing (omission). The majority of patient safety incidents in primary care can be categorised into four main areas which cover diagnosis, drug prescribing, communication between healthcare providers and patients, and organisational factors

Patient safety: The prevention of errors and adverse effects to patients associated with health care

PUN (patient unmet needs): It is not unusual that in the clinical work needs from a patient cannot be met. Some of these patient unmet needs are due to insufficient knowledge or skills. Identifying these gaps in knowledge and skills leads to a definition of educational needs by the doctor Doctors Educational Needs (DEN) – See the headword

PDCA cycle: Plan-Do-Check -Act (see quality cycle)

Peer: a person who is the same age or has the same social position or the same abilities as other people in a group

Peer assessment: is an educational activity in which colleagues judge the performance of their peers and it can take different forms depending on the characteristics of its implementation

Peer review (in quality groups): is an important tool for evaluating quality of care and clinical systems and processes. It is the evaluation of work by one or more people with similar competences as the producers of the work (peers). It functions as a form of self-regulation by qualified members of a profession within the relevant field. Peer review methods are used to maintain quality standards, improve performance, and provide credibility

PDP (**Personal development plan**)**:** A personal development plan guides doctors in their career, helps doctors become more self aware, enabling them to understand how to improve performance and develop new skills. All doctors should engage in this process, as it is now a key component of appraisals and revalidation. When starting a PDP doctors should reflect on their learning and performance so that they can identify their developmental priorities. They should then plan how to deal with these needs for their current role as well as future aspirations. After undertaking a range of planned learning activities doctors must show that they have achieved their goals and reflect on how this benefits them and others.

PDP cycle: See PDP , it consisit of 4 steps: : 1. Review: where Am I and what are my learning needs for the future, 2. Prepare for action: working out whta to do to met my learning needs, 3. Action: undertaking a range of learning activities, 4. Outcome: showing how and what You have achieved, what benefits You and other

POCT (**Point-of-care techniques**)**:** is defined as medical diagnostic testing at or near the point of care, that is, at the time and place of patient care.This contrasts with the historical pattern in which testing was wholly or mostly confined to the medical laboratory

Portfolio: is a compilation of academic work and other forms of educational evidence assembled for the purpose of (1) evaluating coursework quality, learning progress, and academic achievement; (2) determining whether student has met learning standards or other academic requirements for courses, grade-level promotion, and graduation; (3) helping student reflect on their academic goals and progress as learner; a**nd (4) creating a lasting archive of academic work products, accomplishments, and other documentation.**

PMP: The Patient Management Problem . Device used for assessment of medical competence. Attempts to put the student or physician (the "test-taker") figuratively into a setting recognizable as belonging to real life, and within that setting (where specified resources are available) presents a clinical problem for solution or management. Given a clearly stated problem in a defined setting, the test-taker is asked to choose among a variety of alternatives for action, some of which may be appropriate, others either not appropriate or even contraindicated . It can assess 'knows how' level

Practice audit: See audit

Practice-based learning: is understood in contrast to 'classroom-' or 'theory-based' learning. "Practice-based" is what residents do in their clinical practice, so "practice-based learning" is what they learn through their clinical practice.

practice performance measurement: methods and tools to measure quality and performance in health care are regarded as a fundamental component of improving health services. Measurement is guided by objective measures of quality – quality indicators

Professionalism: is the physician´s professional work, which is presented in the methods of establishing and maintaining relationships with the people s/he encounters at work, which enable that individuals and the society believe that the job will be done properly; the combination of all the qualities that are connected with and expected of trained and skilled people at work.

Problem-based learning: is a student-centered pedagogy in which students learn about a subject through the experience of solving an open-ended problem

Process mapping: structural analysis of a process flow by distinguishing how work is actually done from how it should be done, and what functions a system should perform from how the system is built to perform those functions.

Q:

Quality assurance (**QA):** is a way of preventing mistakes and avoiding problems when delivering solutions or services to customers. Quality assurance comprises administrative and procedural activities implemented in a quality system so that requirements and goals for a product, service or activity will be fulfilled.

Quality control: is a process by which entities review the quality of all factors involved in aktivity of the entity

Quality cycle (**PDCA**) represents the basic method and is used to plan and implement the
proposed changes, monitor the response to the interventions and review and act on results.
Depending on the specific circumstances there may be one or more PDCA cycle. A PDCA cycle. It consists of four steps: PLAN (setting objectives, analysing problems, preparing an improvement plan), DO (implementing changes), CHECK (measuring the effect, comparing against the expected results), ACT (acting based on previous experiences, fixed changes)

Quality improvement (**QI**) is defined as the combined and unceasing efforts of healthcare professionals, patients and their families, researchers, payers, planners and educators to make changes that will lead to better patient outcomes, better system performance and better professional development."

Quality Improvement Knowledge Application Tool (**QIKAT**) developed by Ogrinc et al. represents a standardized and validated tool for assessing knowledge application in practice– based learning and quality improvement.

Quality improvement project: a project aimed at improving in a certain area , 4 steps (PDCA):
1.Plan and prepare for change . To Identify a gap in care and establish an aim statement defining the goals for improving performance by a certain percentage over a defined time period. Carry out the plan over the defined time period.2. Continue the process long enough to determine the impact of the implemented plan. 3. Monitor progress over time. Set aside time to analyze the data and study the results. Compare findings to the original aim statement. 4. Determine if improvement was achieved. Based on findings, either adopt the change, modify it, or abandon it. Continue monitoring progress with regular PDCA cycling.

Quality improvement strategies involving structured process that include assessment, refinement,evaluation, and adoption of process used by individuals, teams, an organisation or a healthsystem, with the aim to enhance some aspects of quality and safety and achieve measurableimprovement.

QI (quality indicator): An indicator is a measurable item of care, which focuses upon some aspect of structure, process (inter-personal or clinical) or outcome.

Quality management: ensures that an organization, product or service is consistent. It has four main components: quality planning, quality assurance, quality control and quality improvement.

Quality of work: compliance with expectations, regulations, guidelines (standards), agreements, customs, good practice and reputation

Quality standard: is a detail of the requirements, specifications, the various guidelines and characteristics to be able to meet its quality by the product in order to meet the purpose of the product, process or the service

R:

Re-certification: the process through which registered health professionals demonstrate periodically that their knowledge is up-to-date and their continuing fitness-to-practise. It may be a prerequisite for re-licensing and re-registration, and can be tied to professional appraisals

Reflective paper: is an essay of your thoughts about something that could be a book, incident, etc. To put it simply, it is a paper on what you think about something.

Re-licensing: the process to to license (someone or something) again based on demonstration of CPD/CME activities

Re-validation: Every licensed doctor who practises medicine must revalidate. Revalidation supports you to develop your practice, drives improvements in clinical governance and gives your patients confidence that you're up to date

Role play: is a technique that allows students to explore realistic situations by interacting with other people in a managed way in order to develop experience and trial different strategies in a supported environment.

Rvun charts: is used to study collected data for trends or patterns over a specific period of time. A run chart will help you: Monitor data over time to detect trends, shifts, or cycles. Compare a measure before and after the implementation of solution to measure impact

S:

Self-appraisal: the evaluation of one's own strengths and weaknesses. Self-appraisal is potentially useful. This will require serious and honest self appraisal.

Self-assessment: of knowledge and accuracy of skill performance is essential to the practice of medicine and self-directed life-long learning. The emphasis on life-long learning is important. In medicine, as in many other professions, individuals are now responsible for determining their own continuing professional development (CPD) and a successful CPD programme demands awareness of remediable weaknesses through continual self-appraisal

Self-reflection: underpins all of our learning, active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends Reflection is being considered an essential aspect of lifelong self–learning, activities aimed at promoting reflection are becoming part of the curriculum at all levels of medical education

Significant event analysis: is a way of formally analysing incidents that may have implications for patient care. Learning from what went wrong or right should help improve your practice

Simulation methods: are ways to imitate of the operation of real-world systems. It first requires that a model be developed representing characteristics, behaviors and functions of the selected system or process.

Small group teaching: A typical view of a 'small group' is around eight to 12 learners facilitated by a teacher. 'The purist view of small group teaching is that it must be learner-centred, with all students joining in free discussion of a particular topic' Six major aspects of quality of care: patient safety, effectiveness, patient centeredness, timeliness, efficiency and equity, which were incorporated into some medical curricula for QI.

Six competencies: medical expert, communicator, collaborator, manager, health advocate, scholar and professional.

Skills: the ability to do something well; expertise

Specialty training: After completing medical school, physicians usually further their medical education in a specific specialty of medicine by completing a multiple year residency to become a medical specialist

Standardisation: is the systematic process by which tangible or intangible subjects are reduced to a desired degree of order by the joint efforts of the interested parties

Standardized patient: is someone who has been trained to portray, in a consistent, standardized manner, a patient in a medical situation.

Stewhart cycle: see quality cycle (PDCA) , which enables the continuous quality improvement

Summative assessment: the goal of summative assessment is to evaluate student learning at the end of an instructional unit by comparing it against some standard or benchmark. Summative assessments are often high stakes, which means that they have a high point value. Examples of summative assessments include: a midterm exam, a final project, a paper. Information from summative assessments can be used formatively when students or faculty use it to guide their efforts and activities in subsequent courses.

Supervision: is a positive and enabling process that offers the opportunity to bring an employee and a skilled supervisor together to reflect on work practice. It is the process by which a worker can review and evaluate their work through discussion, report and observation with another worker. Supervision aims to identify solutions to problems, improve practice and increase understanding of professional and clinical issues.

Survey: is a list of questions aimed at extracting specific data from a particular group of people. Surveys are used to increase knowledge

Sustainability is a basic concept of quality improvement. Changes that improve the quality of healthcare should be sustained. Otherwise, the performance could fall back in quality and can even worsen

SQI TAT (Systems Quality Improvement Training and Assessement Tool): is an instrument designed to assess QI knowledge, skills and self efficiacy ratings. It consists of a questionnaire and a coding system for scoring open-ended responses. The tool addresses the following domains: application skills, self-efficacy (confidence), and knowledge. The questionnaire contains 2 parts. Part A is the application component and is completed first. Part B contains the efficacy and knowledge components.

T:

Timeliness in healthcare is the system's capacity to provide care quickly after a need is recognised. it is one of the six dimensions of quality.

V:

Value stream mapping: is a method for analyzing the current state and designing a future state for the series of events that take a product or service from its beginning through to the customer with reduced lean wastes as compared to current map

W:

WBA (workplace based assessment): refers to the assessment of working practices based on what doctors actually do in the workplace, and is predominantly carried out in the workplace itself.

Workplace-based assessment: particularly the Mini-Clinical Evaluation, exercise (mini-CEX), casebased discussions (CBDs), multi-source feedback (MSF) and directly observed procedural skills (DOPS)