

Roads to Patient Safety: Framework of Learning Goals for Patient Safety Competencies

A Recommendation by Aktionsbündnis Patientensicherheit e.V. (APS) for organisations and teaching staff in the education and training of health care professionals

Prepared by the APS Working Group for Education and Training

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Foreword

Patient safety is something that can be learned. That is the core message of this recommendation. Wherever people work, error does occur. In organisations where complex tasks are organized and managed, addressing the topic of safety is of utmost importance. This applies just as much in the healthcare sector as it does in the nuclear power industry and in aviation. For example, the aviation industry introduced simulation training at an early juncture, with checklists and other measures being used in order to improve flight safety. This highlights the fact that safety processes must focus on work environment and equipment, on the interaction between humans and machines, and on those between the individuals and the teams involved.

In the healthcare sector, interpersonal exchange is a key factor in two respects: firstly, it is their relationship with their patient and their patient's suffering that defines both the work and the engagement of doctors, nursing staff and other healthcare professionals. The human-machine-interface and standardised products are only secondary.

Secondly, with advancements in medicine and treatment options, demands regarding the work and cooperation of those involved increase. A wide range of professions and specialist groups are involved in the highly specialised and complex division of work, cutting across both organisational and sectoral boundaries. As a result, the principle of "Primum nil nocere" – first, do no harm – places far greater expectations on the performance and skills of all healthcare professionals than was the case back in the times when medicine and medical care were far less complex than they are today.

In many places, patient safety measures such as error reporting systems and surgery checklists are already well-established practices. However, the basis for their successful implementation and application in healthcare is still – we believe – to the patient safety competencies of health care professionals. Only through awareness of the risks of work-related organisation and communication, technology, drugs, medical products and individual staff and team actions, when those involved are able to deal with system-related and individual errors, and when causes are analysed, communicated and measures for improvement introduced, will we achieve a learning system and a learning culture that protects patients against preventable errors in the best possible way.

In the healthcare sector, one particular rule applies: nothing can be achieved without the people involved – both patients and professionals. Let us empower the health care professionals and make them competent. of the Framework of Learning Goals targets at contributing to this aim. We believe that the Framework will serve as a basis for teaching and training. Both the Framework as a whole and parts of it should find broad use in academic studies, in vocational and as well as further education and training. Ideally, this framework will be implemented in a multi-professional and team-oriented way – for example in joint courses for medical students and nurse students.

We look forward to hearing about your practical experience with the Framework of Learning Goals and welcome your comments and suggestions on how we can refine our recommendation.

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Introduction

The Aktionsbündnis Patientensicherheit (APS) Working Group on Education and Training hereby recommends a Framework of Learning Goals which was developed for the German healthcare sector and which APS believes contains fundamental patient safety knowledge and skills which all healthcare professions should learn about in both vocational and further education and training education. The long-term aim of this Framework of Learning Goals is to aid improvements in healthcare safety by empowering those who care for patients.

Healthcare is still not as safe as it could be, even in the 21st century. In both in-patient and out-patient care, patients are at risk from nosocomial infection, problems with medication safety and loss of information at the numerous interfaces involved in healthcare, and thus of experiencing an adverse event and being harmed as a result. Patient safety means freedom from preventable adverse events which could occur in the course of treatment and care. In addition, the term denotes activities which help to either prevent or reduce the impact of adverse events. It is not the sole responsibility of, for example, of legislative or regulative institutions to ensure safe healthcare by creating the necessary enabling conditions. Healthcare organisations and the healthcare staff have a responsibility to ensure patient safety, while either directly at the frontline or indirectly caring for patients.

In health care, doctors', nurses' and pharmacists' proficiency is of huge importance. But these technical competencies are not enough. Healthcare professionals are expected to be able to learn, adapt and perform at exceptionally high levels. Healthcare provision is becoming increasingly more complex and that in turn raises the demands placed on people's actions and behaviours in complex socio-technical systems. Against this background and given the challenges it entails, healthcare professionals must acquire patient safety knowledge, attitudes and skills. This requirement has already been recognized at EU level: in 2006

and 2009, the Council of Europe¹ and the Council of the European Union² issued a recommendation for patient safety to be included in vocational and further education and training for healthcare professionals. In 2011, that recommendation was then integrated into the Krakow Statement of the European Expert

Conference on Education in Quality Care and Patient Safety³ and recommended for all levels of the healthcare sector. At EU level, the Patient Safety and Quality of Care Working Group (PSQCWG) is currently working on a recommendation for the implementation of education and training in patient safety which is based on a pan-EU survey on promoting and obstructing factors. The topic is thus of great importance at this level.

This Framework of Learning Goals has been developed in response to these recommendations.^a It sets out the underlying topics for vocational and further education and training in patient safety in eight separate sections. A ninth section contains the key, known (2014) and established measures to improve patient safety. The structure and use of the Catalogue is explained by way of an introduction. An index at the end lists the key terms. A list of literature and other references is also included.

In terms of content, the Framework follows the principles identified in the European Network for Patient Safety,⁴ which are designed to guide vocational and further education and training in patient safety:

- 1. "Learning must take a patient centred approach recognising that the care of the patient is the central concern of any curriculum to support patient safety. (patient-centred).
- 2. Any environment where patient safety is a concern is a constituency for developing and continuously improving knowledge, skills and attitudes for patient safety. (applicable to all settings).
- 3. Healthcare is delivered by teams of healthcare workers (the team to include the patient themselves). Patient safety is everyone's business, and any curriculum must take into account the need to inform and educate every member of the community about the prime concerns of patient safety. (everyone's business).

- 4. Patient safety crosses professional boundaries and the curriculum is presented in a multidisciplinary and multi-professional way. (team oriented).
- 5. The development of competences for patient safety is concerned with behaviours as well as knowledge and skills. (multi-dimensional).
- 6. Learning interventions take as a premise the centrality and relevance of the workplace, recognising that patient safety is context specific, and therefore should include organisational responsibilities. (context specific).
- 7. The mental model of a healthcare professional concerned with patient safety is demonstrated by continuous learning and appropriate practice. Competences for Patient Safety must be developed before an individual enters the profession as part of higher education programmes and be sustained as part of continuous professional development. (a continuous professional activity)."

In the past five to seven years, a wide range of curricula and training concepts addressing specific healthcare professions have been developed worldwide. A number of more general, broader-based concepts have also been developed which address healthcare professions across the board. This Framework of Learning Goals ties into these international concepts of the various curricula (see also Literature, page 24). In contrary to older concepts, the Framework addresses patients' active involvement and integration as a key aspect of patient safety.

This Framework of Learning Goals has been designed explicitly for vocational and further education and training in all healthcare professions. It contains a brief overview of the competencies which are relevant to the daily work of healthcare professions irrespective of the employee's position and supplemental qualifications. In contrast to other curricula, it does not provide text book-like content or detailed instructions on communicating and teaching knowledge and skills. Instead, it offers trainers, teachers and others interested in education and training a point of reference regarding how to structure patient safety courses.

This Framework of Learning Goals was subjected to the broadest-possible testing process by means of a pre-test in various scenarios (different settings in healthcare provision, in vocational and further education and training, and for different healthcare professions) and then revised according to the experience gained by the teachers and trainers involved in the tests. This recommendation thus gives some advice for further development (see Future prospects, page 23).

Ideally, on the basis of a broadly-accepted Framework of Learning Goals, the topic of patient safety will become embedded in vocational education and training plans, and in healthcare professionals' education curricula. Aktionsbündnis Patientensicherheit will thus continue to work towards this goal.

^a In developing the Framework of Learning Goals, in 2012, the Working Group reviewed national and international curricula, further education and training concepts, etc. which were in place at the time and summarized the learning goals they contained (see Literature, page 24). These were then analysed to identify which knowledge and skills were relevant for all healthcare professions in Germany. Knowledge and skills were then operationalised as learning goals and concrete learning objectives. As a next step, the APS members commented on the draft, which was then adapted and subjected to a pre-test by 18 healthcare education and training organisations. The Framework of Learning Goals was then finally revised on the basis of the pre-test results.

Using the Framework of Learning Goals

The Framework of Learning Goals

- Describes the basic knowledge, attitudes and skills required for patient safety.
- Describes the skills for all members of **all** healthcare professions.
- Serves teachers and trainers as a basis on which to develop training events and seminars. Teachers and trainers must also possess specialist knowledge on patient safety as well as methodological expertise.
- Can be adapted regarding the intensity of learning (e.g. to the context of healthcare or a specific healthcare profession).
- Should ideally be integrated into existing educational and training programmes using an inter-professional approach .

The order in which the sections are presented suggests the order in which the competencies should be communicated and taught: first an overview (Section 1), followed by the main concepts (Sections 2 to 5) and finally the specific knowledge and skills (Sections 6 to 9).

Target Group

This recommendation addresses all those responsible for planning and conducting academic study programmes and vocational and further education and training for healthcare professionals. Because the knowledge and skills listed in the Framework of Learning Goals are communicated and taught in a range of healthcare profession contexts, the authors have refrained from going into substantial detail or describing methodological requirements. Thus, the Framework does not offer content such as that found in a text book on patient safety or which teaching material is able to provide. That means that to produce a teaching module, teachers and trainers must dispose of both specialist knowledge on patient safety and methodological expertise. Resources for use in developing specific teaching modules can be found, for example, in the World Health Organisation's Patient Safety Curriculum Guide (see Literature).

Target group for education and training in patient safety

Patient safety is a shared responsibility. It is not the specialist knowledge of a specific discipline and does not lie in the area of responsibility of individual healthcare professionals or specific healthcare institutions. Thus, the recommendation containing the list of competencies refers to all health care professionals who can regularly contribute to patient safety in the course of their everyday work.

This involves all professions which are directly involved in and also support the core process of patient care, as well as clinical and administrative leaders who manage or supervise patient care, either directly or indirectly. These include all healthcare professions, medical, nursing, therapeutic, social, technical and administrative professions in healthcare organisations (see chart, page 10).

At this point, it must be noted that the patient safety skills of those in management positions in healthcare organisations play a decisive role in ensuring patient safety i. And like students, apprentices and

employees in clinics, medical practices, pharmacies, care homes and so on, these managers must be integrated into education and training in patient safety.

Integration into existing teaching programmes with possible alignments

The Framework contains patient safety learning goals and learning objectives for which should ideally be integrated into both vocational education and training, and undergraduate studies for healthcare professionals. Thus, patient safety is not necessarily to be taught as a separate subject or in separate course units, but should instead be integrated into existing curricula or teaching programmes wherever possible and appropriate. For example, components relevant to general healthcare, such as communication and teamwork, could be taught in both academic study and vocational education and training using case studies from various topical areas without having to make 'safe communication' a separate subject.

The Framework of Learning Goals should serve as a basis in developing courses and training programmes, and also be used in vocational and further education and training. Therefore, it should serve as a basis for courses and training offered to people with different educational backgrounds and experience in a wide range of professions and specialist areas. Depending on the professions involved, the type of care given and the professional tasks performed by the participants, the learning goals and objectives should be aligned as appropriate, although here we recommend that the topics in all nine sections be addressed and, where necessary, adapted in terms of learning level and depth. The order in which the subsequent sections and the intensity with which they are taught can, of course, be varied when integrated into specific teaching programmes depending on the context and professions involved. We have refrained from recommending time spans, both for the separate sections and for the catalogue overall, because the depth of teaching in the various healthcare professions, the training levels and the types of care involved need to be aligned. It is thus left to teachers and trainers to decide the time frame in which the respective competencies are to be communicated and taught.

Education and training methods

As teachers and trainers are expected to dispose of methodological and didactic expertise, and also be versed in the fundamentals of learning psychology, these areas are not addressed. It must, however, be noted that as a general rule, participative, interactive methods and experienced-based learning are preferred. In particular, the learning goals on a skill's level will not be achieved if exclusively lecture-type teaching methods are used. From the vast range of interactive and participative forms of teaching available, approaches that allow the respective target group to actively acquire their new skills should preferably be applied. Lectures and e-learning formats are primarily suited to introducing a new topic and to communicating basic knowledge. Formats such as case studies, working in small groups, simulation, role play, group exercises, project-based work and similar ensure that both content and the learning process itself are linked to participants' everyday work experience in such a way that they can apply the learning objectives and find them of use.

Interdisciplinary and inter-professional teaching formats and courses are also recommended. Wherever possible, people from various professions and disciplines who work together in practice should also learn together and implement the learning objectives as a team.

The learning goals and outcomes can also be used as a basis to develop criteria to assess knowledge and skills. These must, however, be aligned to the respective professions and, where appropriate, to the educational level to be achieved.

ASSISTANT TECHNICIAN PROFESSIONS

- · Assistant Medical Technician
- Assistant Pharmaceutical Technical
- Assistant Operation Theatre Technician
- Assistant Anesthesiology Technician
- Assistant Surgical Technician

CARE PROFESSIONS

- General Healthcare Nurse
- Geriatric Nurse

...

HEALTHCARE

PROFESSIONS

- Children's Nurse (Pediatric Nurse)
- Remedial Therapist
- Midwife/Male Midwife

MEDICAL ASSISTANT PROFESSIONS

- Paramedic
- Emergency Paramedic
- Medical Assistant
- ...

MEDICAL PROFESSIONS

- Doctor/Physician
- Dentist
- Psychologist
- Pharmacist
- •••

THERAPEUTIC AND PSYCHO-SOCIAL PROFESSIONS

- Physiotherapist
- Hydrotherapist
- Ergotherapist
- Dietician
- Social Educationalist, Social Education Worker
- Visiting Services

Overview healthcare professions: The diagram cites most of the professions which are either directly or indirectly involved in healthcare. They all belong to the target group for training in patient safety using the Framework of Learning Goals.

Framework Structure

The order in which the sections are presented follows a system which first provides an overview of the topic (Patient Safety: Meaning and Importance). Next, the fundamental conditions and principles of patient safety are explained (Causes of Critical Incidents and Patient Harm, Systems Approach). These include patient involvement and their role in patient safety (Patient Involvement). This is followed by an analysis of the key influencing factors relevant to safe healthcare organisation. These topics – Safety Culture, Teamwork and Communication – are inextricably linked. Finally, the Framework explores the topic of Learning from Critical Incidents as a reactive measure to improve patient safety. This sequence also suggests the order to be used when designing basic teaching and training modules.

Each section of this recommendation follows a uniform format which is largely based on that of the WHO Curriculum Guide:

HEALTHCARE TRADES

- Optician
- Dental Technician
- Orthopaedic Technician

...

...

ADMINISTRATIVE/MANAGEMENT PROFESSIONS

- Health Services Officer
- Senior Healthcare and Welfare Clerk (Senior Expert)
- Commercial Employee (Pharmaceuticals)
- Pharmaceutical Economist
- Study Programme Management & Administration
- Other advanced qualifications (e.g. Care Home, Long-Term Care, Ambulance Services Management)

1. Topical relevance

This section gives a brief overview of why this topic is important in basic education and training for healthcare professionals and, where appropriate, reasons for different levels of learning intensity are given.

2. Learning goals

Section 2 provides a brief description of the learning goal, i.e. of what participants should know and be able to do after completing vocational or further education and training.

3. Learning objectives

This section specifies concrete objectives that help to achieve the overall goal of this section

Knowledge: Generally applicable knowledge which was available at the time the Framework of Learning Goals was developed and which must be brought into practice-related context. No distinction is made between 'knowlegde and 'comprehension to enable as simple a presentation and subsequent implementation as possible, and to accommodate a flexible teaching process.

Skills: Applied knowledge, i.e. learning content can be applied in an exercise and in daily practice.

4. Suggestions for further learning

This section contains additional topics which are ideally suited for use at the next learning level.

The Framework of Learning Goals also contains an Annex with a list of literature used, a glossary of terms and an index.

The index on page 26 can be used to search through the Catalogue. It can also be used to look up topics and keywords which the authors had to assign to certain sections to avoid unnecessary repetition even though they apply to other sections, too. Specific aspects, nonetheless, were mentioned repeatedly to emphasise the interrelationships between the different topics.

To aid an understanding of the various professions, clear and common terms are needed. These should also be used and taught in vocational and further education and training. See the APS Glossary (page 23).

Learning Goals

1. What is patient safety and why is it important?

1.1. Topical relevance

As the absence of adverse events, patient safety does not occur by itself. Instead, it can and must be learned. To make healthcare systems safer, healthcare professionals must learn how they and the organisations in which they work can contribute to improve the safety of patient care.

As an introduction to basic education and training on patient safety, it is necessary to first provide an overview of what patient safety, adverse events and other relevant terms actually mean. To provide a basis for the following content, a basic understanding of the problem and its scope must be achieved. The importance of patient safety must be emphasised in terms of reducing adverse events and preventing patient harm. The participants should understand why patient safety knowledge and skills are important for all healthcare professionals, and that patient safety is an ongoing responsibility in healthcare. While patient safety focuses on the patient, it is also important for healthcare professionals because they could be directly

affected by the negative effects of adverse events (second victim⁵).

1.2. Learning goal

Participants recognise both the importance of patient safety and the need to improve it in today's complex healthcare system. They are also aware of their role and their individual responsibility for their patient's safety.

1.3. Learning objectives

Knowledge

Participants have a basic knowledge of patient safety and clinical risk management:

- They know the particular risks involved in caring for patients and the vulnerability of patients.
- They know the main patient safety problems involved in in-patient and out-patient healthcare, and the frequency with which they occur.
- They are familiar with key patient safety terms and know the difference between preventable adverse events (PAEs), complications arising from a specific treatment and critical situations arising from illness.
- They understand the need for patient-centred healthcare and the responsibility of all healthcare professionals to ensure and provide for patient safety.
- They know that patient safety must be seen as a continuous learning process.
- They are familiar with national and international initiatives to improve patient safety.

Skills

Participants can apply basic terms and recognise the patient safety problems covered in their training in their respective fields of work.

1.4 Suggestions for further teaching

Other learning levels are addressed in the following section.

2. Causes of critical incidents and patient harm

2.1. Topical relevance

Knowledge of the causes of critical incidents and the harm that can arise from them is important in acquiring a basic knowledge of patient safety. Only by recognising the causes and associated interrelationships can proactive measures be developed to ensure that both patient safety and employee safety are improved as part of an ongoing, sustainable process.

The causes of critical incidents are often found in the limits of human capacity, perception and behaviour. Those limits are, however, largely defined by systemic factors and the respective healthcare management and organisation. Thus, those factors which cannot be attributed to the individual behaviour or the abilities of the healthcare professionals involved must also be understood and recognised.

2.2. Learning goal

Participants recognise the main causes of critical incidents and patient harm in their immediate work environment.

2.3. Learning objectives

Knowledge

Participants know the main causes of and contributing factors to adverse events:⁶

- Patient-based factors
- Task- and process-related factors
- Individual factors involving healthcare employees, especially the limits of human perception and behaviour (e.g. fatigue and exceptionally high workloads)
- Team-based factors
- Factors relating to the workplace
- Organisational and management factors
- Institutional factors

Participants understand that identifying the causes of critical incidents is the basis for the development of proactive measures to improve patient safety.

Skills

Participants can identify the above-cited factors in their own work environment as the cause of adverse events and potential harm, and can apply their knowledge in the event of an actual incident.

2.4. Suggestions for further teaching

• Risk analysis methodology (e.g. risk audits, failure mode and effects analysis, FMEA)

- Deeper knowledge of human factors
- Methods and tools with which to recognise potentially critical situations (e.g. the I'm Safe Checklist: Illness Medication Stress Alcohol Fatigue Eating)

3. System thinking

3.1. Topical relevance

Patient care must be seen as a complex system of interdependent factors. This applies both for health care provided in large university hospitals with their highly complex structures, and also for much smaller hospitals, medical practices, pharmacies and care homes. Mistakes, errors and critical incidents can occur in all such healthcare environments. Regarding their causes, two fundamentally different perspectives come into play. There is the person approach in which an attempt is made to identify the individual responsible, investigate the actual circumstances only and find those actually involved in the

incident (naming, blaming, shaming and training). systems approach or system thinking⁷ assumes that humans will always err and that man-managed processes are error-prone. (Healthcare) systems must thus be designed such that these errors and mistakes cannot result in harm or damage (resilience principle), and that people can and should learn from them.

System thinking is the basis of the notion contained in the "To err is human" report,⁸ which argues "it's not bad people, it's bad systems" why error occur. Adopting this perspective, recognising the system-related causes of errors and the factors that contribute to critical incidents is crucial to patient safety. Only then can adequate prevention be devised and implemented.

3.2. Learning goal

Participants are familiar with the systems approach. They perceive their own working environment and their own behaviour as integral parts of a complex, networked healthcare system which influences patient safety.

3.3. Learning objectives

Knowledge

Participants have a basic knowledge of the systems approach and of risk management:

- They know the difference between systems approachand the person approach.
- They are familiar with accident modelling (e.g. Rasmussen and Reason's Swiss Cheese model, Sidney Dekker's Drift into Failure, and Charles Perrow's Normal Accidents Theory).
- They are familiar with the terms system, safety, risk, human factors and organisation.
- They are familiar with the process-oriented approach used to integrate instruments and measures into the organisation and the associated risk management policy.
- They know that methods and tools are available to help detect risks, i.e. to identify, assess, cope with and control risks as instruments of system management.
- They are familiar with methods and tools that can improve safety (such as error reporting and learning systems, case analysis procedures, standards, quality management and safety management norms, medical guidelines, clinic-specific treatment paths, checklists, patient wristbands and identification bracelets, and simulation training).
- They are familiar with the relevant legal aspects, particularly liability, of clinical risk management

as well as aspects of patient rights and institutional liability.

Skills

Participants recognise themselves and their immediate and broader working environments as factors that can influence patient safety:

- In everyday practice, they recognise that all errors and critical incidents harbour an opportunity to learn both for the individual and for the organisation.
- They can describe their own workplace as part of a working system.
- They can apply available findings from the local risk management assessments in their place of work.

3.4. Suggestions for further teaching

- System-related risk analysis
- Safe and error-tolerant workplace design
- Models, methods and traits of high reliability organisations (HROs)⁹
- Simulation and role play in multidisciplinary teams

4. Patient Involvement

4.1. Topical relevance

In today's healthcare systems, patients are no longer passive recipients of care. They want to be and should be actively involved as competent partners. Their individual safety-related needs can vary to different degrees. Many people become worried about their safety when placing themselves in the hands of healthcare organisations. Patients should thus be informed that there are risks and preventable adverse events in healthcare, and they must know what healthcare professionals and organisations do to ensure their utmost safety. They should also be informed about how, given their personal circumstances, they can contribute to ensuring their own safety.

However, the 'what' and 'how' in involving patients and their immediate relatives (family, partners, etc.) must be learned. This calls for sensitivity to the patient perspective along with knowledge and skills that allow patients to play an active role. This does not, however, mean that healthcare professionals should hand over responsibility for safety to their patients, but rather empower them to take responsibility themselves.

A further important aspect involves communication with patients when an adverse event occurs – more precisely with those who are directly affected, and may also have suffered harm.

4.2. Learning goal

Participants understand that for safe healthcare, active involvement of patients is both necessary and helpful, and they encourage them to play an active role.

4.3. Learning objectives

Knowledge

Participants know the role of patients in healthcarein the area of conflict between vulnerability and autonomous action:

- They are aware of how adverse events can affect patients physically and mentally.
- They understand patients' fears regarding safety in healthcare and that there are both healthy patients (such as pregnant mothers and mothers in labour) and sick patients, who have differing needs when it comes to autonomy and safety.
- They understand the importance of involving patients (and their relatives) and their competence in diagnostics, treatment and prevention (shared decision-making), along with the need to take account of individual, religious and cultural differences.
- They are aware of the possibilities for shared decision-making and can describe the procedure. They are aware of the opportunities and limitations in involving patients in the care process.
- They understand the role of patients and their relatives in identifying and preventing adverse events.
- They know the importance of disclosure of adverse events.
- When adverse events occur, they know how to communicate in terms of the legal, liability and insurance aspects of disclosure of adverse events.
- They are aware of especially vulnerable patient groups (e.g. dementia patients and non-native speaking patients).

Skills

Participants can actively involve patients in their care:

- They can encourage patients to offer information freely and to ask questions if there is something they have not understood.
- They can inform patients about various steps in their treatment to ensure that they know what will happen next and what risks are involved. Where appropriate, they are able to support the patient in reaching a decision.
- They are able to initiate shared decision-making.
- They can listen attentively to patients and treat them with respect and openness.
- As the patient's first point of contact, they can adequately respond to complaints and worries in relation to an adverse event.

4.4. Suggestions for further teaching

- Communication with patients who have experienced an adverse event and also their family members (see the APS brochure Reden ist Gold¹⁰ (Speech is Gold)
- Supportive systems for patients (e.g. patients' advocate)

5. Safety Culture

5.1. Topical relevance

The culture of an organisation is of vital importance to the quality of the work performed by its management and staff. In the broadest sense, organisational culture describes the way people act towards each other. Culture determines the type of behaviour, for example in a hospital or a medical practice, deemed positive and acceptable, and that which is penalised. Safety culture is an important subarea of organisational culture which focuses on the safety aspects that are relevant to healthcare organisations. As a behavioural value, patient safety lies at the core of positive safety culture in the healthcare sector. The term 'error culture' is often used, placing priority on addressing the occurrence of errors and their management. APS prefers the term safety culture, because it goes beyond responding to errors and puts the spotlight on the issue of patient safety.

Safety culture is distinguished by

- the available knowledge, such as in a medical practice, on safety-related topics.
- the values deemed important and worthy of adhering to (such as trust rather than mistrust and cooperation versus competition between professional groups)
- The behaviour and symbolic actions that must be adopted, meaning how specific rules are expressed in daily work practice (e.g. management receptiveness, seating arrangements in meetings and communication style).

Individual attitude alone is not the crucial factor for patient safety – the organisational culture also influences whether rules and regulations are adhered to, and how the individual is allowed to act.

5.2. Learning goal

Participants are familiar with the concept of safety culture and know its importance for patient safety. They are able to recognise elements of safety culture in their own work.

5.3. Learning objectives

Knowledge

Participants are familiar with the concept of safety culture:

- They know the definition and concepts of safety culture.
- They know the concept of a learning organisation and the importance of learning in and by the organisation to ensure patient safety.¹¹
- They know which factors are largely responsible for a positive safety culture resources, leadership, formal and informal structures, and so on.
- They know healthcare safety standards and safety rules.
- They know the importance of adhering to and implementing statutory regulations to improve safety.

Skills

Participants are able to identify elements of safety culture in their own work environment:

• They can transfer safety-related rules to their own work environment.

- They can identify starting points to improve safety culture.
- They are able to reflect on the effects that their own attitudes and behaviour have on patient safety.

5.4. Suggestions for further teaching

- Contributions to promote a learning safety culture.
- Qualitative and quantitative processes to develop safety culture (e.g. the Manchester Patient Safety Framework (MaPSaF) or the Survey on Patient Safety Culture conducted by the US Agency for Health Care Research and Quality (AHRQ)).

6. Team work

5.1. Topical relevance

Exchange and coordination within a care team are vital for patient safety, for early detection of errors and – if errors reach the patient – effective management aiming at the mitigation of harm. Leadership and cooperative skills of team members are decisive in proactively contribute to safe patient care.

Dream teams are made, not born. Teamwork can and must be learned. Teams work in the area of conflict between individuals and organisations that enables those individuals to work. Knowledge of shared mental models, processes of shared reflection on the team's performance and team training for specific situations are key in efforts to effectively and strongly improve patient safety.

5.2. Learning goal

Participants know the factors of successful teamwork and are able to apply methods to support safe team work. Based on actual cases, they are able to develop solutions to help teams deal with conflict situations.

5.3. Learning objectives

Knowledge

Participants know the basics of teamwork and how they affect patient safety:

- The know team structures, functions and types.
- They understand the roles of the team leader and the team members.
- They know signs for good, effective teamwork and the factors that can lead to problems within a team.
- They know the factors that promote good teamwork and the barriers that prevent it.
- The know methods that support safe team work:
- Structuring team meetings
- The concept of shared mental models
- Models for structured decision-making within a team (e.g. the FOR-DEC checklist used in

aviation: Facts – Options – Risks and Benefits – Decision – Execution – Check)¹²

- Methods of team training (e.g. simulation and the concept of Crew Resource Management (CRM))
- Team assessment/coaching

Skills

Participants identify typical problems within their teams and are able to identify possible solutions.

5.4. Suggestions for further teaching

- Implementing methods for safe teamwork
- Forming and maintaining shared mental models
- Briefings and de-briefings
- Conflict management within a tem
- Team training using simulation exercises combined with debriefing
- Simulation and role play in multi-disciplinary teams

7. Communication

7.1. Topical relevance

Effectively communication is important for patient safety since diagnostics and treatments require communication processes – between health care professional and patient, and within the care team.

Scientific evidence on causes of error often unsurprisingly report communication problems as the key causal factorsince communication involves a range of information-related processes and relationships. Therefore, communication skills are considered as basic skills in the Framework of Learning Goals. Effective communication largely means providing information without loss, interpreting it adequately and

doing so treating each other with trust and respect.¹³

Effective communication is a prerequisite for safe care. The learning objectives aim at easily-explained, effective communication rules which must be practiced only a few times and that are associated with little emotional stress only.

In addition to this proactive aspects, patient safety-related communication also means reaction and communication as a response to near-miss incidents and adverse events. The way in which those involved are 'allowed' to talk to one another has a considerable impact on whether or not learning from critical incidents occurs.

7.2. Learning goal

Participants dispose of knowledge and communication skills which enable them to ensure patient safety, both within the team and when interacting with patients.

7.3. Learning objectives

Knowledge

Participants have a basic knowledge of communication processes and of effective, practical communication rules:

- They have a basic understanding of communication processes:
 - They know how communication works in terms of safety.
 - They understand the interactional and informational aspects of communication.
 - They are aware of communication models.
- They know simple communication rules which can be applied to ensure unequivocal information flow:
 - Within the team:
- Create redundancy
- Close communication loops/read back information
- Call-outs
- Name addressees
- Create and adhere to set language standards
- Plain language, question ambiguities
- Double challenge
 - With patients:
- Active, open requests, e.g. for patient identification (see the APS recommendations on preventing wrong-patient, wrong-site, wrong-procedure surgery)¹⁴
- Information on care procedures and risks
- They know the importance of shared mental models.
- They understand the role of *relationships* for safe communication.
- They know the meaning of and the rules for safe documentation in patient care.

Participants know the key rules of communication following an incident (e.g. Reden ist Gold¹⁰ (Speech is Gold), Wenn etwas schief läuft¹⁵ (When Something Goes Wrong) and Täter als Opfer¹⁶ (Offender and Victim):

- They know the patient's perspective when an adverse event occurs.
- They understand that healthcare organisations prepare for such events and must implement associated process rules. They know the rules in relation to their work environment.
- They know the meaning of and the rules for adequate communication within a team.

Skills

Participants identify the basic processes of communication in their work environment and are able to apply simple communication rules:

- They can explain and apply simple communication rules in specific care processes.
- They can identify and change vague or confusing communication processes.
- They are able to address concerns and doubts within their team (speaking up).

• They can apply the rules of safe communication to written communication (e.g. patient chart documentation).

7.4. Suggestions for further teaching

- Methods to develop shared mental models (e.g. SBAR: Situation Background Assessment Recommendation)¹⁷
- Open and trusting team communication (including feedback, raising concerns, forming shared mental models, respectful communication, culture of questioning and advising within a team, debriefing techniques and techniques of conflict resolution)
- Proactive communication concerning errors and incidents
- Methods of conflict management
- Characteristics of communication across hierarchical boundaries and communication styles in different (professional) cultures
- Characteristics of communicating with patients from different origins and cultures
- Safe communication during patient handover and transfer

8. Learning from Critical Incidents

8.1. Topical relevance

Knowledge derived from safety-related events can help to improve safety in healthcare organisations (such as hospitals, medical practices and pharmacies) and in the entire healthcare sector. It is thus necessary to learn from safety-related events. Learning from error not just applies to individual staff, but also to teams and to entire organisations. For example, lessons can be learned from systematic cause analyses and from reporting and learning systems. Findings from systematic identification and systematic analysis serve as crucial basis to develop reliable approaches and strategies to prevent further critical incidents and patient harm.

8.2. Learning goal

Participants recognise critical incidents as an opportunity to learn. They are aware of and use opportunities to systematically learn from critical incidents.

8.3. Learning objectives

Knowledge

Participants have basic knowledge of how to identify, analyse and reflect on critical incidents:

- They know the clinical risk management cycle and the PDCA cycle.
- They know the structures and functions, and also the advantages and disadvantages of reporting and learning systems (Critical Incident Reporting Systems, CIRS)
- They are aware of reporting and learning systems used in various sectors of healthcare.

- They know other methods and tools for use in identifying and analysing critical incidents (e.g. morbidity and mortality conferences, quality circle, Failure Mode and Effects Analysis (FMEA), hospital-associated infection surveillance system (KISS).
- They have a basic knowledge of systematic cause analysis.¹⁸

Skills

Participants use the available methods and tools to document critical incidents in their work environment:

- They are able to use team meetings on critical incidents.
- They can use reporting and learning systems (report submission and feedback to staff) and apply knowledge derived from the reported events.

8.4. Suggestions for further teaching

- Planning, implementing and administration of reporting and learning systems
- Analysing reports on near-miss incidents and adverse events, and deriving recommendations for action
- Systematic cause analysis as a tool for systematic learning
- implementation of measures from the findings of cause analyses

9. Patient Safety Measures

9.1. Topical relevance

This final section of the Framework of Learning Goals contains important measures are highly likely or proven to be appropriate to make healthcare safer. I. e. they serve early detection of errors and adverse events and/or the prevention of harm. Some are already established, while others have been evaluated yet. Some measures listed in this section have also been recommended by the WHO as so called patient

safety solutions¹⁹ to improve patient safety worldwide. Patient safety solutions will be specified below in the respective paragraph.

The issues and learning objectives cited in the previous sections are of a general nature and relevant to patient safety across the healthcare sector as a whole. This section, however, focuses on specific measures. These were selected because they are relevant in most areas of healthcare irrespective of inpatient or out-patient care or of care for acutely or chronically diseased patients. They are suited to preventing events which frequently occur and/or can have serious consequences for patients. They are thus an indispensible component of this Framework of Learning Goals and a selection of these measures should always be communicated and taught. The list is not exhaustive, therefore.

9.2. Learning goal

Participants know key patient safety measures and can identify areas of application in their work environment.

9.3. Learning objectives

Participants know the relevant measures to prevent adverse events and increase patient safety in their individual work environment:

- Preventing nosocomial infections:
 - Hand hygiene (WHO patient safety solution 9: Improved Hand Hygiene to Prevent Health Care-Associated Infections)^{19, 20}
 - Checklists/standards on the insertion and care of intravenous catheters to prevent catheterassociated infections^{21, 20}
 - Measures to prevent an outbreak of multiresistant pathogens²⁰
 - Interventions to reduce the use of urinary catheters²⁰
 - Medication safety:
 - Patient-related record of prescribed and taken medication in out-patient and in-patient care (medication plan and medication list)²²
 - Measures to prevent typical errors in prescribing, preparing and administering/taking medication (WHO patient safety solution 1: Look-Alike, Sound-Alike Medication Names)¹⁹
 - Avoiding the use of confusing or misleading abbreviations²⁰
 - Computerised physician ordering with decision support
 - Medication reconciliation: medication theapy safety at interfaces within in-patient care and between in-patient and out-patient care
- Perioperative care:
 - Safe Surgery Checklist²³ and Surgical Patient Safety System (SURPASS)^{24, 20}
 - Measures to avoid wrong-patient, wrong-site, wrong-procedure surgery (WHO patient safety solution 4: Performance of Correct Procedure at Correct Body Site)^{14, 19}
 - Measures to prevent inadvertently retained ²⁵ foreign bodies
- Bundle interventions for the prevention of ventilator-associated pneumonia (e.g. oral hygiene, sedation vacations, upper body elevation)²⁰
- Ultrasound-supported insertion of intravenous catheters²⁰
- Prophylaxis for thrombosis and lung-artery embolism²⁰
- Prophylaxis for decubitus²⁰ and falls²
- Preparing for emergencies
 - Basic life support
 - Resuscitation algorithms
 - Use of automated external defibrillators (AEDs)
- Prevention of adverse events when crossing sectoral boundaries (patient discharge management)
- Medical product safety, medical devices and information technology:
 - Legal requirements concerning the use of medical products, medical devices and information technology

- Methods to report defective medical products or information technology (e.g. Federal Institute for Drugs and Medical Devices (BfArM) reporting procedures)
- Measures to prevent errors with medical-technical equipment

Future prospects

This paper has been updated in May 2014.

The recommendation was subjected to pilot tests in 2013 at a total of 18 institutes of academic study and vocational and further education. The Framework of Learning Goals was then adapted to produce the version presented in this paper. As a next step, the Framework should be evaluated in practice as part of a research project.

Details of the work in progress and the results will be published on the Aktionsbündnis Patientensicherheit website (<u>www.aps-ev.de</u>).

Annex

Aktionbündnis Patient Safety Glossary²⁷

Patient Safety is defined as the 'absence of adverse events'. For a systematic interpretation of the term, see the following:

Adverse event: An injury that was caused by medical management or complication rather than by the underlying disease. It can be preventable or non-preventable.

Preventable adverse event: An adverse event that can be prevented.

Critical incident: An incident which could either lead to an adverse event or could increase its probability.

Error: An act or a failure to act based on a failure of a planned action to be completed as intended, on the use of a wrong inappropriate plan or of no plan at all. Whether or not the error results in harm is irrelevant in terms of its definition.

Near-miss: An error that does not result in harm, but could have resulted in harm.

The Aktionsbündnis Patientensicherheit website contains further recommendations and additional informational material (in Germany only):

http://www.aps-ev.de/handlungsempfehlungen/

Literature

The following curricula and concepts for academic study and vocational and further education were used in developing the Framework of Learning Goals:

Australian Council for Safety and Quality in Health Care (2005): National Patient Safety Edu- cation Framework. Available online at:

http://www.health.gov.au/internet/safety/publishing.nsf/Content/C06811AD746228E9CA2571 C600835DBB/\$File/framework0705.pdf

Behörde für Soziales, Familie, Gesundheit und Verbraucherschutz Hamburg (Ed.) (2010). Aus Fehlern lernen – Curriculumbausteine Patientensicherheit. Available online at: http://www.hamburg.de/contentblob/2670294/data/aus-fehlern-lernen.pdf

Bundesärztekammer (2009): Fortbildungskonzept "Patientensicherheit". Published by Bundesärztekammer. Available online at: http://www.forumpatientensicherheit.de/service/literatur/pdf/fbkonzept_patientensicherheit.pdf

Canadian Patient Safety Institute (2008): The Safety Competencies. Enhancing Patient Safe- ty Across the Health Professions. Published by the Canadian Patient Safety Insitute. Ottawa, Ontario. Available online at:

http://www.patientsafetyinstitute.ca/English/toolsResources/safetyCompetencies/Documents/ Safety%20Competencies.pdf

European Union Network for Patient Safety (2010): A general Guide for Education and Training in Patient Safety. Published by EUNetPaS. Online verfügbar unter http://www.eu-patient.eu/Documents/Projects/EUnetPaS/Guidelines final 22%2006%202010.pdf

Schweizerische Akademie der Medizinischen Wissenschaften (2007): Projekt «Zukunft Medizin Schweiz» – Phase III - Aus- und Weiterbildung in Patientensicherheit und Fehlerkultur. Unter Mitarbeit von Barbara Gassmann Jacques Haller Martin Täuber de Peter M. Suter.

Schweizerische Akademie der Medizinischen Wissenschaften

WHO (2011). Patient Safety Curriculum Guide Multi-Professional Edition. World Health Organization. 2011. Available online at: http://whqlibdoc.who.int/publications/2011/9789241501958_eng.pdf

WHO (2009): Who Patient Safety Curriculum Guide for Medical Schools. Published by the World Health Organization. Available online at: http://whqlibdoc.who.int/publications/2009/9789241598316_eng.pdf.

Other References

1 COUNCIL OF EUROPE, COMMITTEE OF MINISTERS (2006): Recommendation Rec(2006)7 of the Committee of Ministers to member states on management of patient safety and prevention of adverse events in health care. Available online at: https://wcd.coe.int/ViewDoc.jsp?id=1005439&Site=CM

2 Council of the European Union (2009): Council Recommendation of 9 June 2009 on patient safety, including the prevention and control of healthcare associated infections. Available online at: http://ec.europa.eu/health/patient_safety/docs/council_2009_en.pdf

3 Expert Conference on Education in Quality Care and Patient Safety (2011). Krakow Statement on Education in Quality Care and Patient Safety. http://ec.europa.eu/health/patient_safety/docs/ev_20111121_co04_en.pdf

4 European Union Network for Patient Safety (2010): A general Guide for Education and Training in Patient Safety. Hg. v. EUNetPaS. Available online at: http://www.eu-patient.eu/Documents/Projects/EUnetPaS/Guidelines_final_22%2006%202010.pdf

5 Wu AW (2000) Medical error: the second victim. The doctor who makes the mistake needs help too. BMJ. 320(7237):726-7

6 Vincent C, Taylor-Adams S, Stanhope N (1998). Framework for analysing risk and safety in clinical medicine BMJ;316:1154-1157

7 Reason J (2000) Human error: models and management. BMJ 320(7237):768-70

8 Kohn LT, Corrigan JM, Donaldson MS (Hg.) (1999) To err is human – Building a safer health system. Washington, DC. National Academy Press

9 St.Pierre M, Hofinger G, Buerschaper C (2011). Notfallmanagement. Human Factors in der Akutmedizin. 2. Erweiterte und überarbeitet Auflage Heidelberg u.a. Springer.

10 Aktionsbündnis Patientensicherheit (2011) Reden ist Gold – Kommunikation nach einem Zwischenfall.

11 National Advisory Group on the Safety of Patients in England (2013). A promise to learn – a commitment to act. Improving the Safety of Patients in England.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/226703/Berwick_Report.p df

12 Hörmann H.J. (1995) FOR-DEC. A prescriptive model for aeronautical decision-making. In: Fuller R, Johnston N, McDonald N (eds) Human factors in aviation operations. Proc of the 21st Conference of the European Association for Aviation psychology (EAAP), vol 3, Avebury Aviation, Aldershot Hampshire, S. 17–23

13 Hofinger, G. (2012). Kommunikation. In P. Badke-Schaub, G. Hofinger, K. Lauche (Eds.), Human Factors. Psychologie sicheren Handelns in Risikobranchen. Heidelberg, Springer S. 131-151.

14 Aktionsbündnis Patientensicherheit (2006). Empfehlung zur Vermeidung von Eingriffsverwechslungen in der Chirurgie.

15 Patientensicherheit Schweiz (2006). Schriftenreihe Nr. 1 - Kommunikation mit Patienten und Angehörigen - Wenn etwas schief geht. Ein Konsens-Dokument der Harvard Spitäler

16 Patientensicherheit Schweiz (2010). Schriftenreihe Nr. 3 - Täter als Opfer - Konstruktiver Umgang mit Fehlern in Gesundheitsorganisationen. Empfehlungen für Kader, Kollegen und Betroffene

17 SBAR Technique for Communication: A Situational Briefing Model. Available online at: http://www.ihi.org/knowledge/Pages/Tools/SBARTechniqueforCommunicationASituationalBriefingMod el.aspx

18 Vincent C, Taylor-Adams S (2007). Systemanalyse klinischer Zwischenfälle – das London-Protokoll. Stiftung für Patientensicherheit

19 WHO (2007) The Nine Patient Safety Solutions. Available online at: http://www.who.int/patientsafety/events/07/02 05 2007/en/index.html

20 Shekelle PG, Wachter RM, Pronovost PJ, Schoelles K, McDonald KM, Dy SM, Shojania K, Reston J, Berger Z, Johnsen B, Larkin JW, Lucas S, Martinez K, Motala A, Newberry SJ, Noble M, Pfoh E, Ranji SR, Rennke S, Schmidt E, Shanman R, Sullivan N, Sun F, Tipton K, Treadwell JR, Tsou A, Vaiana ME, Weaver SJ, Wilson R, Winters BD. Making Health Care Safer II: An Updated Critical Analysis of the Evidence for Patient Safety Practices. Comparative Effectiveness Review No. 211. (Prepared by the Southern California-RAND Evidence-based Practice Center under Contract No. 290-2007-10062-I.) AHRQ Publication No. 13-E001-EF. Rockville, MD: Agency for Healthcare Research and Quality. March 2013. www.ahrg.gov/research/findings/evidence-based-reports/ptsafetyuptp.html.

21 Pronovost P, Needham D, Berenholtz S et al (2006) An Intervention to Decrease Catheter-Related Bloodstream Infections in the ICU. N Engl J Med 355;

22 Aktionsbündnis Patientensicherheit (2007). Medikationsplan für Patienten.

23 Haynes AB, Weiser TG, Berry WR, Lipsitz SR, Breizat AH, Dellinger EP, Herbosa T, Joseph S, Kibatala PL, Lapitan MC, Merry AF, Moorthy K, Reznick RK, Taylor B, Gawande AA; Safe Surgery Saves Lives Study Group (2009) A surgical safety checklist to reduce morbidity and mortality in a global population. N Engl J Med 360(5):491-9

24 de Vries EN, Prins HA, Crolla RM, den Outer AJ, van Andel G, van Helden SH, Schlack WS, van Putten MA, Gouma DJ, Dijkgraaf MG, Smorenburg SM, Boermeester MA; SURPASS Collaborative Group (2010) Effect of a comprehensive surgical safety system on patient outcomes. N Engl J Med

363(20):1928-37.

25 Aktionsbündnis Patientensicherheit (2009). Jeder Tupfer zählt - Handlungsempfehlungen zur Vermeidung unbeabsichtigt belassener Fremdkörper im OP-Gebiet.

26 Aktionsbündnis Patientensicherheit (2013) Vermeidung von Stürzen älterer Patienten im Krankenhaus - Fakten und Erläuterungen

27 Aktionsbündnis Patientensicherheit. Glossary. Available online at: http://www.aps-ev.de/glossar/

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Feedback

Your feedback, ideas and critique are most welcome.

- Do you teach in vocational and further education, or are you a university lecturer for healthcare professions? Would you like to help evaluate the Framework of Learning Goals?
- > Do you have any comments or suggestions for improvement?
- > Have you had any practical experience with the Framework of Learning Goals?

Please note the following when submitting feedback:

Please state the context in which you used the Framework of Learning Goals (sector, professions, functions, etc.)

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I missed the following essential aspect in the text:

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I believe the following aspects of the recommendation text are inappropriate:

Please give your comments and ideas for review.

Please give your comments and suggestions on how the Framework Learning Goals can be implemented and used.

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