

Medical students' perception of patient safety – and what they learn about it

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Katharina Nilsen MK-10
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Supervisors: Kristoffer Lassen, *MD and PhD*
Michael Bretthauer, *MD and PhD*
Jo-Inge Myhre, *MD and Regional Coordinator for Continental Europe, IHI Open Schools for Health Professions*

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Abstract

In the thesis “Medical students’ perception of patient safety - and what they learn about it” the hypothesis has been that most medical students have experienced breaches in patient safety during their clinical training, but that this is not covered in the medical school curricula. To investigate this further, a survey was distributed to medical students at the four Norwegian medical schools, as well as to a cohort of interns (turnusleger) evaluating their perceptions of medical errors. In addition a review of the curriculum at the four Norwegian Medical Schools was performed to investigate what they teach on this subject. Furthermore, a literature search in PubMed was performed to obtain examples on how different medical schools have implemented patient safety into their curriculum and how they have evaluated it.

We found that over half of the Norwegian medical students and interns who participated in the study had witnessed an error in the treatment of a patient. Almost half of the participants reported that they had changed their view of the practice of medicine due to their experiences with health care. The low response rate of 16% makes it difficult to confirm our hypothesis that the majority have experience with medical errors.

A lack of education in patient safety was identified at three out of four Norwegian medical faculties, with the exception being the University of Oslo which has a patient safety curriculum integrated in six out of 12 semesters, with some mandatory assignments.

Based on the literature, there are many novel approaches to the implementation of patient safety topics into undergraduate medical education, but it is hard to evaluate the effect of the interventions. The World Health Organization (WHO) has developed a curriculum guide for medical schools, aiming to aid in the implementation and this provides a framework for educators looking for inspiration of how this can be done.

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Introduction

The Institute of Medicine (IOM), the health arm of the American National Academy of Sciences, authored the landmark report, “To Err is Human,” in 1999(1). In this report, they outlined the growing body of evidence supporting the commonality of systematic errors and safety hazards in modern medicine. This report increased the awareness of patient safety and health systems improvement and is recognized as an important contributor to the increasing focus on these issues all over the world. The numbers from the report were, and are still debated; however in 2015 there is an emerging understanding that medical errors do happen, that they represent a serious problem and that this should be addressed.

As stated by Thomson, Lewalle and co-workers “Patient safety is the freedom for a patient from unnecessary harm or potential harm associated with healthcare”(2). The term “Patient safety” has become a buzzword the last couple of years, and is frequently used by politicians, in the media and among the healthcare workforce worldwide. In Norway, the patient safety campaign “In safe hands 24/7” started in 2011, and is continuing through 2018 as the Norwegian Patient Safety Program. In 2005 the Norwegian Directorate for Health and Social Affairs launched a 10-year strategy for quality in healthcare: “...Og bedre skal det bli!”(3), where they in effect translated the six aims from “To err is human” and stated: “*Kjennetegn ved god kvalitet er at tjenestene er virkningsfulle, trygge og sikre, involverer brukerne, er samordnet og preget av kontinuitet, utnytter ressursene på en god måte og er tilgjengelige og rettferdig fordelt.*”

The World Health Organisation (WHO) published a Patient Safety Curriculum Guide for medical students in 2009(4), and in 2011 this was joined by a multi-professional equivalent (5). The aim was to encourage and facilitate the teaching of patient safety topics to medical students, believing that medical students should acquire knowledge and skills to improve patient safety in their workplace. The report also acknowledges that patient safety science is unfamiliar territory for many medical educators, and that it is unclear whether and how such skills can be taught and how to integrate it into the existing undergraduate training.

The curriculum guide covers 11 different topics (4):

Topic 1 - “What is patient safety?”

Topic 2 - “What is human factors and why is it important to patient safety?”

Topic 3 - “Understanding systems and the impact of complexity on patient care “

Topic 4 - “Being an effective team player”

Topic 5 - “Understanding and learning from errors”

Topic 6 - “Understanding and managing clinical risk”

Topic 7 - “Introduction to quality improvement methods”

Topic 8 - “Engaging with patients and carers”

Topic 9 - “Minimizing infection through improved infection control”

Topic 10 - “Patient safety and invasive procedures”

Topic 11 - “ Improving medication safety”

On the 7th of December 2012, the Norwegian government published a report (6), which highlights the need for patient safety and quality improvement in the education of health care professionals. In a recent report (7), the Directorate of Health suggested that patient safety should be a mandatory part in the postgraduate training for all Norwegian physicians.

The increasing focus on patient safety in the health care services is thus evident, but is this reflected in undergraduate medical education? Even though there is a presumed correlation between acquiring knowledge and skills in patient safety and creating safer health care systems, it is difficult to prove this scientifically. However, both the WHO and the Norwegian government, along with many others, have stated that it is desired for undergraduate health professional students to undergo teaching in patient safety. Our thesis aims to provide an overview of the status of patient safety education in Norway and compare this with international education initiatives. An additional aim is to investigate how final year medical students and interns perceive patient safety issues.

This lead to the two main questions of this thesis:

- 1.) What does the Norwegian medical schools cover with regards to patient safety in their curriculum?
- 2.) Are medical students and young doctors aware of breaches in patient safety? And if so, how do they react on them?

Methods

A literature search in PubMed was performed to obtain examples on how different medical schools have implemented patient safety into their curriculum and how they have evaluated it. Furthermore, we did a review of the curriculum at the four Norwegian Medical Schools to investigate what they teach on this subject. We also distributed a questionnaire to medical students at the four Norwegian medical schools, as well as to a cohort of interns (turnusleger) evaluating their perceptions of medical errors.

The literature review

For the literature review a search in PubMed was conducted with the search strings: “*Medical students AND patient safety AND program evaluation OR program development OR curriculum*”, and “*Medical students AND “patient safety” AND (“program evaluation” OR “program development” OR curriculum)*”. The search was conducted on February 13th 2015 for eligible papers in English. We also hand searched the bibliographies of some of the included studies to identify additional relevant articles. PubMed was chosen as the sole database, due to the scope of this thesis. Papers that did not include medical students were excluded, and so were papers where there hadn’t been any form of evaluation.

Curriculum review

In the process of identifying patient safety curriculum at the Norwegian Medical Schools we searched through the faculties’ homepages. It was not always clear from the information on the webpages whom to contact in order to get the correct answers to this question. At the University of Oslo patient safety is covered by a stand-alone course (KLoK), which have information on their webpage (8). For the other medical faculties we wrote a personal mail to the faculty administration with information on the thesis and inquiring what they cover regarding patient safety in their curriculum. Two sixth year students from the respective faculties were also asked whether they remembered any patient safety-specific content from their undergraduate training. The students were chosen due to their interest in patient safety and faculty curriculum, which we believed made them more aware of the patient safety content. One student at each faculty was a member of the patient safety initiative “ForBedring” and one was engaged in the respective faculty curriculum through other extracurricular activity. Where the medical school timetable was available this was also reviewed. In the cases where the faculty administration, the medical students, or timetable review suggested courses that might cover patient safety topics, we also sent mail to the respective course coordinators. At the University of Tromsø we had the opportunity to hand search every lecture. There are of course possibilities that there exist more patient safety curriculum, and this could be included in some of the clinical courses. A summary of what we did find is summarized in table 1 and the respective students verify this. It is important to mention that all the medical curricula is currently undergoing revisions and the current students might undergo a different training, however as the revisions are currently under implementation, we focused on the curriculum of the current 6th year

students. The inclusion criteria were therefore the medical curriculum that medical students in 6th grade were following.

The questionnaire

The questionnaire we used was developed by Lakshman Swamy, then a medical student at Boonhoft School of Medicine, Dayton Ohio, and his co-workers This questionnaire seeks to examine students' experiences in perceiving, understanding, communicating, investigating, or improving issues in safety and quality along the six quality dimensions from the IOM report "Crossing the Quality Chasm" (9), efficiency, equitability, effectiveness, timeliness, patient-centeredness, and safety. It is not formally validated, but it was used among medical students for a similar purpose and it was chosen with the intention of being able to compare results among the American and the Norwegian students. The fourth year of medical school in the US is similar to the Norwegian internship (turnustjeneste) with regards to the amount of clinical exposure, and that is the reason for the inclusion of interns (turnusleger) in our cohort of respondents. The questionnaire was distributed to the sixth year medical students at the four Norwegian medical schools, as well as one cohort of interns, currently undertaking their family medicine rotation of the internship.

The sixth year medical students had the opportunity of answering the survey on paper or electronically, whereas the interns only had the opportunity to answer electronically.

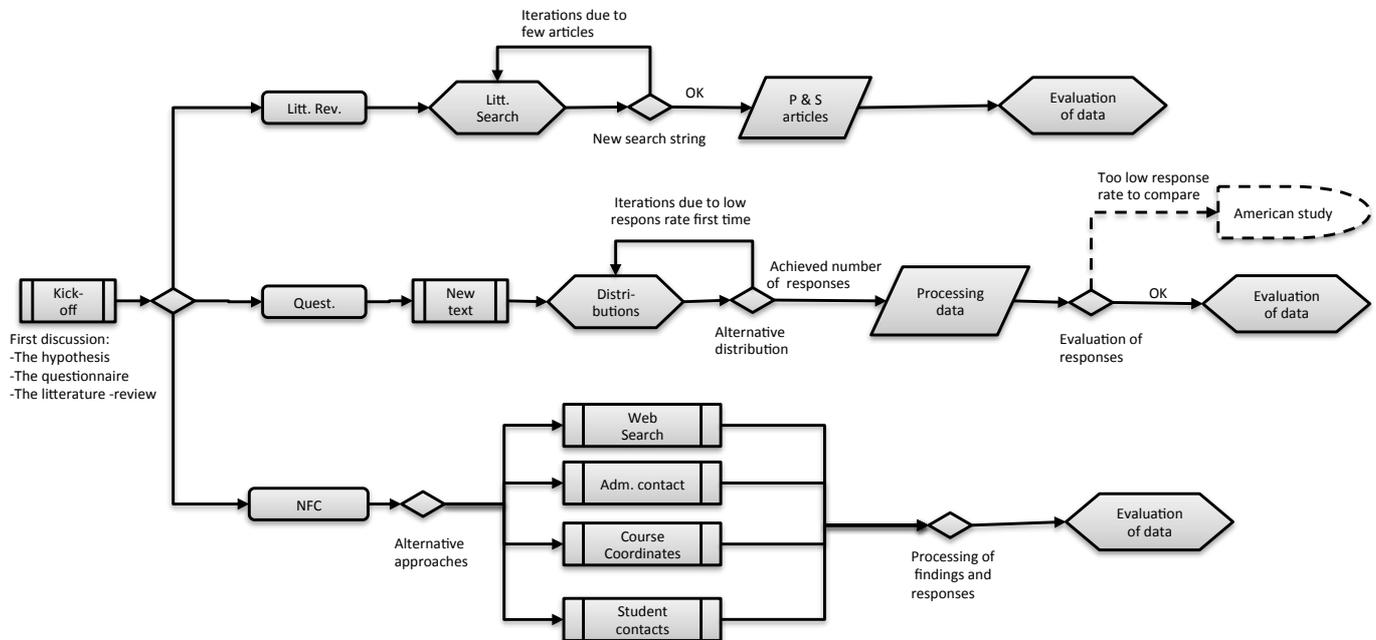
The initial idea was for the survey to be administered as a questback survey only, however due to a very low response rate, four students were asked to distribute paper copies of the survey in their respective classes. The information given was that the survey was a part of a thesis of a fellow student, and that they were given the opportunity of responding on paper. These students did not provide any additional information on patient safety they merely distributed the survey.

The survey was distributed to final year medical students the spring of 2014, and the winter of 2014/2015. It was also distributed to the interns doing their family medicine rotation in the spring of 2015. The electronic version was distributed throughout the respective medical school listservers. To distribute the survey to the interns the intern coordinators in each of the Norwegian counties were contacted by e-mail with an inquiry to distribute the survey to all the interns currently undertaking their family medicine rotation. All the coordinators were positive and they confirmed when the survey had been distributed by e-mail. There were no reminders sent to the interns or the medical students.

The survey consisted of 9 different questions. In every question the student had three options: YES, NO or OTHER, with an option to give examples in a textbox. The survey questions were in English, but the respondents had the opportunity to respond in Norwegian. The initial idea was to have the survey professionally translated into Norwegian, however this would make it harder to compare the answers with the American cohort. Where jargon was present (attending, resident) a Norwegian translation was provided in a parenthesis, and examples were also given to clarify the various questions. The survey was not tested prior to distribution. Given

the low response rate, it is not unthinkable that not understanding the full meaning of the questions might have been a limitation.

The work process



A flow chart showing the flow of the project. NFC: Norwegian medical faculties curriculum. The Norwegian Medical Association did the processing of data from QuestBack, using SPSS. My supervisors helped finding search-strings for the literature review.

A summary of the work process:

- 2- 3 weeks to find an interesting subject and make a protocol
- 4 weeks for the literature search
- 2- 3 weeks for the questionnaire
- 2-3 weeks for searching the Norwegian medical faculties curriculum
- 5 weeks writing
- 5 weeks editing

Continuous discussions with my supervisors with a 3-4 weeks period between

Results

The literature review

The first search string yielded 17 articles, of which 12 were excluded using the exclusion criteria as described under methods. The other string yielded 210 articles, of which 55 were included after reading the abstract and 23 were included after reading the full articles. One article (10) was excluded due to difficulty finding the whole text. There were also difficulties finding any contact information. The articles identified in the first search string were not among these 23. The majority of the eligible studies came from the United States (n=17), with the rest from the United Kingdom (n=4), Korea (n=2), Netherlands (n=1), Ireland (n=1), Singapore (n=1), Brazil (n=1) and China (n=1). The results are summarized below in table 1.

There were several papers advocating the need for patient safety measures in the undergraduate medical curriculum and addressing the issue of this being a challenge worldwide. Of the papers included, there was a great variety in how patient safety was taught, both with regards to content, amount, scope and form. The amount taught varied from single lectures to electives implemented over several years. The number of participants varied from a few medical students to entire classes. The courses had mandatory participation at four sites (Icahn School of Medicine, Loma Linda University and the University of Missouri-Columbia (MU) in the US and Inje University College of Medicine in Korea). The level, in which the patient safety courses were implemented, varied from first year to final year students.

The University of Miami (11) arranged a mandatory 5- day patient safety course for preclinical third year medical students. The curriculum contained different forms of simulation, one of them being “room of horrors”. In “room of horrors” the students were shown a room containing a patient simulator, full of potential patient safety errors. The students’ job was to identify and document those possible errors. Another exercise provided to the students during the same course, was solving a 48-piece puzzle, with images that appeared different when viewed from different angles. The role of this exercise was communication and teamwork. This exercise did however only focus on medical students.

The University of Leicester provided their final year medical students with a 1-day patient safety workshop during their clerkship, which was based on teamwork (12). Some medical students got the opportunity to work in interprofessional teams, while others got teamed up with medical students due to lack of students from other disciplines in some of the district general hospitals. Although students working unprofessionally stated that they felt more comfortable and secure during the work process, those who worked in interprofessional teams reported that they gained added value from this interactions.

Madigosky et al (13) evaluated one course for second year medical students prior to, immediately after and one year after the implementation of a patient safety and human fallibility course through a self-report questionnaire. The course of 10,5 contact hours consisted of lectures, panel discussions and roleplaying. The evaluation after one year showed varying results compared with the assessment done immediately after the course. One parameter the authors looked at was the students’ attitude towards disclosure of errors. The study showed that

76% of students reported observing an error in between assessments. 71% of these disclosed an error to their peers, 56% to a resident, and 46% to faculty. Only 7% reported an error using the existing electronic error reporting system. The authors did discuss different reasons for the lost gains from the course, and are mentioning the informal or hidden curricula of clinical practice. This was the only publication with a longitudinal evaluation of an educational intervention on patient safety.

Table 1 – Patient safety education found in literature, using our search strings

Article	Setting	Learners	Curriculum design	Teaching methods	Assessment methods	Key findings
Development and Assessment of Quality Improved Education for Medical Students at The Ohio State University Medical Center (14)	United States	32 students. First and second year medical students, some students from pharmacy, nursing and public health (recruited through OSUMC IHI Open School Chapter)	Average total of 5 hr over 1-2 months.	Online program preparations, a 2.5 hour orientation (with multimedia simulation and role-playing) followed by three observation of the Surgical Safety Checklist in the operating room, using a audit tool	Pre-postparticipation questionnaire, using a 5-pt Likert- Scale	Participant scores on the QI knowledge section improved by 18%.
An interprofessional communication training using simulation to enhance safe care for deteriorating patient (15)	Singapore	92 third year undergraduate nursing students (integrated into their module) and 33 fourth year medical students (conducted outside the curriculum hours)	Single 3-hour simulation	Simulation scenarios of deteriorating patients.	Pre-postparticipation questionnaire, and a satisfaction questionnaire	Significant improvement in self-confidence (p<0.001) and perception (p<0.001) in post-test scores compared with pre-test scores.
A study of innovative patient safety education (16)	Ireland	20 final year medical students	Single simulation (number of hours are not specified)	Simulation scenarios with common day-to-day challenges by newly graduated doctors	Self-reported post-feedback using a 7-pt Likert scale	18/20 students agreed or strongly agreed that the session was valuable
Patient safety education to change medical students' attitudes and sense of responsibility (17)	Korea	103 third year medical students	Three-day patient safety curriculum, all together 20 hrs	Interactive lectures with demonstrations, case discussions, role-playing and video clips.	Pre- post questionnaires using a 5-pt Likert scale and case vignettes	Student attitudes shifted towards systems-based thinking and increased their sense of collective responsibility

Development and evaluation of a 3-day patient safety curriculum to advance knowledge, self-efficacy and system thinking among medical students (18)	United States	120 second year medical students (as part of their required second year curriculum)	Three-(half)day patient safety curriculum.	Full class sessions, which covered key topics, followed by 90 min breakout sessions, introducing the students to main harm mechanisms and skills to practice safely.	Pre- post intercession evaluation and a satisfaction survey	Statistically significant increase in mean knowledge scores and self-efficacy ratings for 9/9 assessed skills. 92% found the intercession quality "good"/"excellent"
Medical students benefit from learning about patient safety in an interprofessional team (12)	United Kingdom	199 final year medical students (nine events over 2 years).	1- day workshop.	Watching and discussing a DVD following a patient through emergency, either uni- or interprofessional	Pre/post questionnaires, using a 5-pt Likert scale. A post-course questionnaire about the course-design, using a 5-pt Likert scale. Focus groups after each workshop.	All students increased their knowledge across all eight learning outcomes (p=0.001). The students with interprofessional groups gained added value.
A Patient Safety and Transitions of Care Curriculum for Third Year Medical Students (19)	United States	276 third year medical students over 2 years. Mandatory participation.	180 min didactic sessions followed by a post-discharge visit (99 min average)	Lectures and a post-discharge visit to a patient the student cared for in the hospital.	Pre-and posttest, a multiple-choice knowledge questions and a satisfaction survey.	Students agreed or strongly agreed that they gained skills that they plan to apply to future patient care experiences (96%)
A new method for the assessment of patient safety competencies during a medical school clerkship using an objective structured clinical examination (20)	Brazil	95 fifth year medical students	Number of hours are not specified	Lectures followed by discussion of real cases the students had witnessed or participated in.	Clinical examination (patient safety was one of 5 10 min stations).	Students' performance at the clinical examination in the medical error domain was significantly lower than their performance on patient-physician relationship and humanistic issues.
Reflective learning in a patient safety course for final-year medical students (21)	Netherlands	53 final year medical students (two events the same year)	Number of hours are not specified	A interactive lecture followed by a discussion, preparation and presentation of a patient safety topic in pairs, and completion of incident report cards for three incidents involving patient safety based on their own personal experience	Course evaluation questionnaire, using a 5-pt Likert scale and focus groups	The students believed that the course was instructive overall (M 1/4 7.7, SD 1/4 0.7; 1–10 scale), and that the knowledge gained during the course had resulted in a change in their attitudes.
Can teaching medical students to investigate medication errors change their attitudes towards patient safety? (22)	United States	108 medical students in their second, third and fourth year.	As part of their 9 week paediatric clerkship. 145 min + self-directed small group exercise.	Online video introduction to patient safety, two "large-group" session (23-25 students) and a self-directed "small-group" exercise (4-5 students)	10 SAQ-related items (Safety Attitudes Questionnaire), measuring attitudinal domains using a standard 5-pt Likert scale and a satisfaction questionnaire	Students were largely satisfied with the curriculum, with 76% recommending that the session continue. There were significant changes in knowledge and attitudes about safety for most questions derived from the SAQ.

A fourth-year medical school rotation in quality, patient safety, and population medicine (23)	United States	510 fourth year medical students over 3 years. Mandatory participation.	A 4-week patient safety curriculum.	50% of the curriculum consisted of lectures and 50% of planning, implementing and evaluating a quality improvement project in teams.	Anonymous satisfaction questionnaire and a written summative evaluation, individual interviews with faculty and focus groups.	Results are limited by not having objective measurements documenting concrete changes in student knowledge or skills.
Teaching medical students the art of medical error full disclosure: evaluation of a new curriculum (24)	United States	18 health science students (10 medicine, 3 nursing, 3 applied science, 1 public health, 1 pharmacy)	Two 1.5-hour sessions within a 30-hour, 2-week patient safety elective	Large-group interactive lecture (session 1), combined with small-group sessions (session 2) with role-play of error disclosure to peers with faculty facilitation and feedback (learning reinforced during other aspects of 2-week patient safety elective)	Faculty subjective rating of structured pre– post assessment with SP; self- reported pre–post questionnaire	Inclusion of essential components of disclosure increased from 0% pre to 85.7% post, and offer of apology increased from 7% pre to 92.9% post; increased confidence in disclosure post
Effectiveness of patient safety training in equipping medical students to recognise safety hazards and propose robust interventions (25)	United States	65 third year medical students. Mandatory participation.	Two 1-h patient safety booster conferences, complementing a previously implemented second-year curriculum on quality improvement, patient safety and teamwork(8h)	Students got insight into using the root cause analysis (RCA) process (session 1), followed by a discussion about actual patient safety events and proposed system modifications to improve patient safety (session 2).	Pre-post self-reported safety skills survey, comparing students attending the patient safety curriculum and the students not.	Students completing the third-year safety booster conferences expressed statistically higher comfort levels with identifying the cause of an error than did the student control group (p<0.05)
Introducing patient safety to undergraduate medical students- a pilot program delivered by health care administrators (26)	China	130 third year medical student	2 x 60 min whole class lectures	Two lectures, with illustrative cases, which were designed to cover 8 of the 11 topics listed in the WHO curriculum guide (World Health Organization 2009)	Self-reported questionnaire survey on patient safety culture was given before ('pre-test') and at 3 months after, using a 5-pt Likert scale.	Thirteen of the 23 questionnaire items (56.5%) showed statistically significant changes at the post-test.
Teaching medication reconciliation through simulation: a patient safety initiative for second year medical students (27)	United States	170 second year medical students (required in their curriculum)	Single 2-hour simulation	30 min lecture about obtaining the accurate medication history (part 1), followed by actor-teacher role-play (part 2) and the students participating in the medication history/reconciliation taking process (part 3)	Self-reported questionnaire using a 10-pt Likert scale	Students rated their knowledge level as having increased by 27% and their comfort level as having increased by 20%. A full 91% of the 158 students felt that it should be performed again for the following medical student class.
An advanced quality improvement and patient safety elective (28)	United States	6 senior medical students	Two week quality improvement and patient safety elective	Didactic lectures, online courses, completion of a QI project proposal and completion of a case review	Pre-post skill assessments	Mean knowledge test scores improved after the elective [mean score (SD)]: before, 7.3 (1.4), versus after, 8.2 (0.4); p = 0.19, significant improvement in six of seven confidence questions.

Development and evaluation of a 1-day interclerkship program for medical students on medical errors and patient safety (29)	United States	229 third year medical students.	1 of 9 one-hour workshops available as part of full-day patient safety curriculum	Plenary sessions followed by small-group case studies facilitated by faculty members	Self-reported pre– post questionnaire	Overall positive impact of program, little specific about disclosure
The patient safety curriculum for undergraduate medical students as a first step toward improving patient safety (30)	Korea	156 (=all) second year medical students	1-week patient safety curriculum	Interactive lecture, discussion and small-group debriefing facilitated by a tutor	Self-reported pre– post questionnaire, using a 5-pt Likert scale	Significantly increased awareness about patient safety and the frequency and outcomes of medical errors
Patient safety: helping medical students understand error in healthcare (31)	United Kingdom	110 final year medical students	5 hrs, split in two sessions 3 days apart to encourage reflection.	Whole class presentation, discussion, video- and audio case studies, and role play	Self-reported pre-post questionnaire (post 1 year after), and a formative post-questionnaire about the teaching process	Knowledge and perceived personal control over safety had improved one year later
A patient safety course for preclinical medical students (11)	United States	144 third year medical students. Mandatory participation	31 hrs over 5 days	Lectures, web-based didactic materials, small group activities and different simulation exercises ("room of horrors", completing a lenticular puzzle in teams)	Self-reported post-questionnaire using a 4-pt Likert scale	93% of the students meant that the course improved their patient safety knowledge and skills.
Assessing the impact of teaching patient safety principles to medical students during surgical clerkships (32)	United States	A two part patient safety curriculum, for first year (all students participated) and 110 third year medical students (random cohort of students).	1-day for first year medical students, in addition 1.5-2h for the cohort of third year students	Introductory theories for first year students, followed by a clinically oriented course in their third year.	Pre-test before the start of the third year patient safety curriculum, and post-test.	There were found an increase in theoretical knowledge of patient safety principles (75.5% first year group versus 82.9% for the group also participating in the third year curriculum P < 0.001)
Planning and implementing a systems-based patient safety curriculum in medical education (33)	United States	18 first year health students (10 medicine, 3 nursing, 3 applied health science, 1 public health and 1 pharmacy student)	Patient safety elective. 10 hour, spanned over 5 weeks with weekly 2-hour sessions + 4 hr shadowing a nurse	Large-group interactive lecture with facilitated discussion and watching a training DVD (part 1), followed by small-group practice of full disclosure and root-cause analysis (part 2). Students also shadowed an intensive care unit nurse for 4 hours outside of class time.	A self-reported pre-post confidence survey, using a 4-pt scale	Significant improvements were observed in each of the four domains of full disclosure confidence and the summary score.
The Quality and Safety Track: Training Future Physician Leaders (34)	United States	23 medical students have completed the elective	4-year elective	Completion of 12 IHI open school online modules and an individual scholarly project relevant to quality or patient safety	The Quality Improvement Knowledge Assessment Tool (QIKAT), a pretest (n = 22) and posttest (n = 23) of self-assessed comfort	Students who completed the elective reported improved confidence in using core quality improvement skills.

					level with QI skills, was administered on the first day and on completion of the elective	
Human error and patient safety: interdisciplinary course (35)	United States	Nursing students, physicians, medical students.	A semester-long human error and patient safety course	Expert lecturers, readings, case studies, and analysis of patient safety problems.	The students were evaluated on class participation (30%), peer evaluation (15%), and the group project (55%).	All students rated the course highly and indicated that it enhanced their ability to work in interprofessional settings.
Driven to distraction: a prospective controlled study of a simulated ward round experience to improve patient safety teaching for medical students (36)	United Kingdom	28 final year medical students	30 min	Simulated ward round experience, where the students played the foundation doctor, involving distractions	50% received immediate feedback. Participation in a post-intervention ward round 4 weeks later. A standardised checklist was used to document student performance at both baseline and post- intervention ward rounds.	There was no statistically significant difference in errors or distractor management between intervention and control groups at baseline.
Improving awareness of patient safety in a peer-led pilot educational programme for undergraduate medical students (37)	United Kingdom	86 first and second year medical students	2hr seminar	A brief lecture (30 min) followed by a range of interactive activities (15 min each) in small groups	Pre-post evaluation, and follow-up questionnaires after six months	100% enjoyed the seminar, 99% recommended other students to take part and 92% thought it should be a mandatory part of the curriculum. The follow-up test showed significant maintenance of skills taught.
Teaching medical students about medical errors and patient safety: evaluation of a required curriculum (38)	United States	572 third year medical students	Four hour curriculum	An introductory lecture/discussion, brief required readings, and a videotaped simulation with a standardized patient.	Pre-post questionnaire using a 5-point scale, and a follow-up questionnaire 2-8 months after. The students received verbal and written feedback, but were not graded.	94% of the students strongly agreed/ agreed that it was a useful learning experience. There were statistically significant increases in the self-reported awareness of students' strengths and weaknesses in communicating medical errors to patients (p < .01).

Changing and sustaining medical students' knowledge, skills, and attitudes about patient safety and medical fallibility (13)	United States	92 second year medical students	10.5 hours	Five different patient safety themes presented by lectures, panel discussions, role playing and demonstrations	Evaluation prior to, immediately after and one year after the implementation of the course through a self-report questionnaire.	The curriculum led to changes in second- year medical students' knowledge, skills, and attitudes, but not all of the changes were sustained at one year, were in the desired direction, or were supported by their self-reported behaviours.
Screen savers as an adjunct to medical education on patient safety (39)	United States	27 third year medical students	Number of hours are not specified	During their 3-4 week rotation, the medical students were exposed to screen savers which taught 10 patient safety concepts.	Pre- post participation test, where the students were compared with a control group not participating in the project	The median improvement in test scores was 15% for both the 11 students in the control group and the 27 students in the intervention group (IQR: — both at $p < .001$.

Patient safety curriculums at the Norwegian faculties

The medical faculty of University of Oslo has a curriculum containing knowledge about evidence-based medicine, leadership training and quality improvement, called KLoK. Patient safety is a part of this course. Starting up as a pilot project, KLoK became an independent course in 2011. The purpose of the curriculum is to give the students the qualifications needed to practice medicine in a professional manner, both as a physician and as a team member. The medical curriculum at the University of Oslo has 12 semesters, where KLoK is integrated in 6 of them (40). This course has some mandatory elements, including two mandatory projects, and the contents are tested on the final exam of the fifth year and sixth year (8).

At the other faculties patient safety is taught either through single lectures (UiT, NTNU), or lectures and workshops (UiB). None of the events at these three faculties are mandatory. It was difficult obtaining a complete overview of the lectures taught, and there could be other elements incorporated into the training.

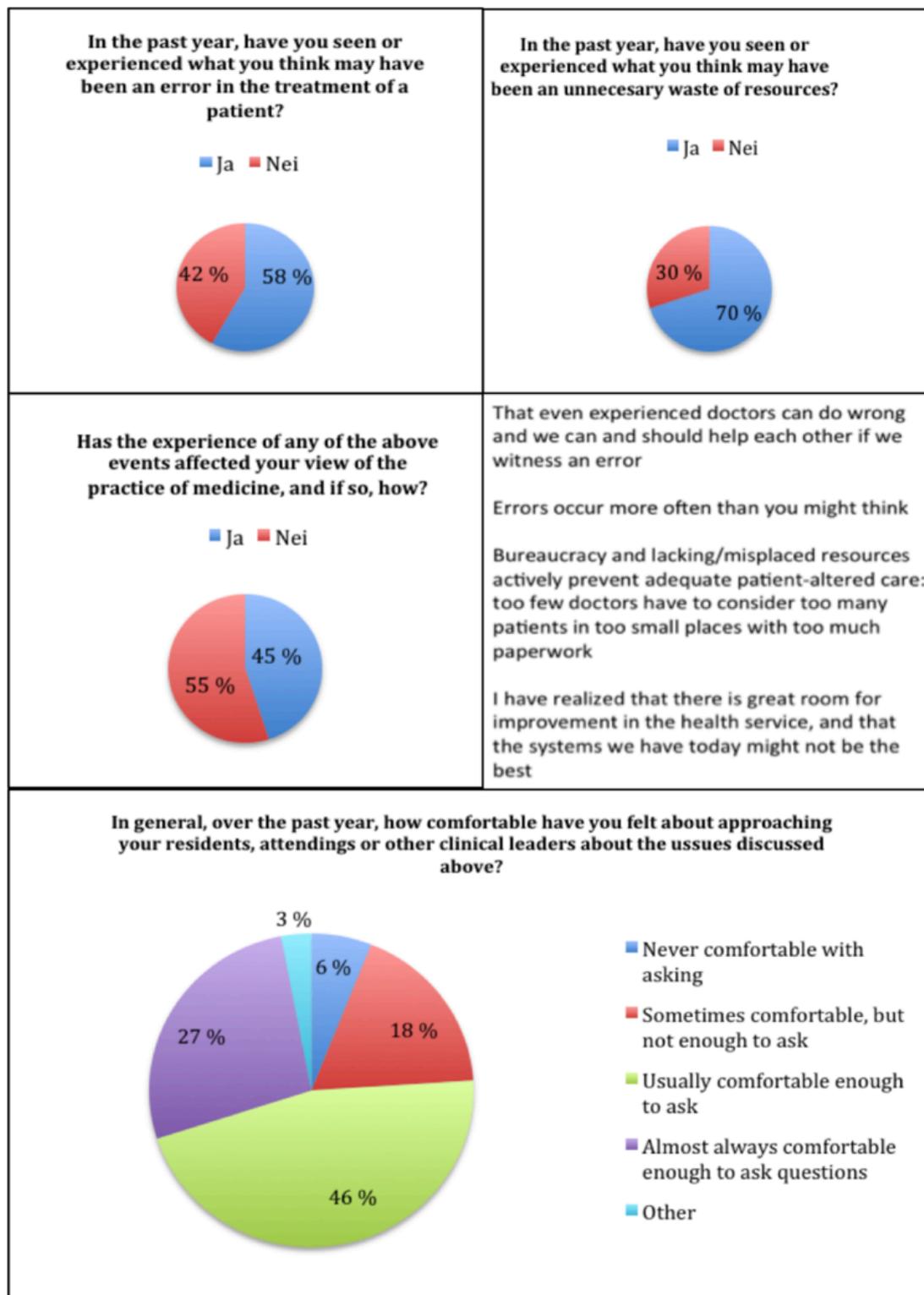
The results are summarized in table 2.

Table 2- patient safety curriculums at the Norwegian faculties

	Lectures	Workshop	Simulation	Project
University of Tromsø	4th year: 2h "Unfortunate events and medical errors" 6th year: 2h "How to react when we have done a mistake? How to respond to complaints from patients and officials"			
Norwegian University of Science and Technology (NTNU)	3rd year: 2h 1h: "Misdiagnosis, patient injuries and compensation" 1h: "Hospital mortality" 6th year: 3h "Quality improvement, errors and unfortunate events in health care"			
University of Oslo	3rd year: 2hr 1hr introduction to patient safety, 1 hr Leading change, 5th year: 10 hours, Quality Improvement, including EBM and leadership training, 6th year: 14 hr: Patient Safety and Quality Improvement, including EBM and leadership training	4th year: EBM for quality and safety 12th semester: deviations and errors	12th semester - one day simulation in communication, handover and leadership training	10th semester: 2 individual projects 11th semester: 1 group project
University of Bergen	3rd year: 2 h "patient safety/smittevern" 6th year:4h "unfortunate events"	6th year: "unfortunate events"		

Medical students' perception of patient safety

Figure 1- a selection of survey results



The study was distributed to altogether 800 medical students and 450 interns. Out of 1250 prospective we got replies from 198, of whom 67.2% were females, generating a response rate of 16%. Medical students from all of

the four Norwegian faculties responded, with the highest rate of respondents from the University of Oslo (37.8%) and NTNU (33.9 %). Most of the participants were between 24 and 28 years old. The full questionnaire with results can be found in appendix 2.

Over half of the respondents (57.6%) stated that they had experienced what may have been an error in the treatment of a patient the past year. When asked to specify, many of the errors witnessed were related to medications involving either providing an incorrect drug or a wrong dosage of the prescribed drug (n=33). 68.6% stated that they spoke to someone about their concern. Half of the respondents found the explanation given to be satisfactory. When asked whether there was evidence of change after the incident, 62.1% said there were none.

The majority of the respondents (59.6%) had witnessed avoidable events that negatively impacted on a patient's health less than six times a year. Some twelve per cent stated that they never had experienced this, and 25.6% had experienced this weekly or monthly.

Most of the respondents (69.8%) had witnessed an unnecessary waste of resources. Unnecessary imaging, especially x-ray of the thorax given to almost all of the medical patients, was reported as the most common (n=40).

When asked how comfortable they felt about approaching residents, attendings or other clinical leaders about medical errors, 72.8% replied that they were usually or always comfortable enough to ask questions. 6.1% reported they never were comfortable with asking.

Almost half (45.2%) of the participants stated that they had changed their view of the practice of medicine after their experiences with a medical error. When asked how, the answers were multiple, the most common (n=6) being the acknowledgement that mistakes can happen to everyone.

Discussion

The literature review

The majority of the curricula found in the literature review were evaluated using post - questionnaires, and in some they incorporated pre- post assessments to seek to evaluate the effect of their respective curriculum/project. Although this can be a quick way to evaluate whether the curriculum increased the students knowledge and skills on patient safety, it tells little of the long-term effect.

In the assessed literature there were numerous examples of approaches to integrate patient safety into the undergraduate curriculum. Whether this has any sustained effect on the medical students undergoing this teaching is unclear. Different evaluation methods and non-validated questionnaires make a comparison of the curricula and their evaluations difficult. This challenge is discussed in several of the studies, and showing a possible correlation between teaching patient safety skills and knowledge and improvements in care is difficult.

In the literature review we only used the articles that were included in our search strings, to help us get an overview over existing patient safety curricula, with our only search database being PubMed. This limitation has probably excluded some relevant articles, however given the scope of this thesis we found this limitation to be acceptable. The intention was to get an impression of different international educational patient safety interventions to identify similarities and differences between these and what is taught at the Norwegian medical schools.

Patient safety curriculums at the Norwegian faculties

At three of four Norwegian medical faculties we found a limited patient safety curricula, this being the curricula provided to the current 6th year medical students and interns during their six year education. However, because there was no overview of the detailed patient safety curriculums at the four faculties, with the University of Oslo being an exception, we therefore had to rely on the information provided to us by the faculty administration, course coordinators and other students. Because of this, some information could have been left of. This would especially be true for patient safety subjects presented as a part of a lecture with another subject.

The questionnaire

The questionnaire about perception of medical error unfortunately received a very low response rate. As discussed in the method section, the fact that the questions were in English could alone be a limiting factor, as well as unfamiliarity with some of the terms, although examples were given where it was relevant, and some of the specific jargons were translated. Two professors at the University of Oslo, Michael Bretthauer and Per Hjortdahl reviewed the survey, however it wasn't tested on any students prior to distribution.

The first 400 questionnaires were sent out electronically by email to the final year medical students the spring of 2014, where only 44 responded. This could be a result of sending the questionnaires close to their final year exam, where the student prioritize their time more effectively. Another reason could be the fact that the students

often receive questionnaires for different master projects at their student email, and our questionnaire therefore became “one of many”. At our second try, the winter of 2015, a student handed out the questionnaire in paper for the students to answer. The student did not talk about patient safety or the reason for making the questionnaire, to remain neutral and not influence the result. However, it is possible that the student either way could affect the atmosphere.

The low response rate could also reflect the students’ interest in patient safety. Even though patient safety is a buzzword used in media and by politicians, our impression after talking to our fellow medical students is that it is an unfamiliar subject for many. This opens the question whether the low interest is due to little education in this subject. Would the students find the subject more important, and hence be more willing to answer the questionnaire if they had more education in patient safety? If they are not aware of what possibly can go wrong, they can't reflect or report on it either.

Another limitation resulting from the low response rate is the possibility of a biased sample. The students and interns interested in patient safety, and that have witnessed an error may be more active responders than those who don't see patient safety as that important. Because the questionnaire didn't separate medical students from interns, the percentage of interns witnessing medical errors could be much higher due to their wider practical experience.

Many of the participants reported that they had witnessed avoidable delays, unnecessary waste of resources or deviation of standard care/best practice. Even though most participants spoke to someone after witnessing a possible or true medical error, fewer reported the same after witnessing the events just mentioned. This could reflect an attitude where the latter is more accepted as a part of health care. In the questionnaire an error was defined as “a preventable adverse effect of care, whether or not it is evident or harmful to the patient. For example, giving drug A when you intended to give drug B, even if there is no change in the patient’s condition or outcome”.

The majority had witnessed an avoidable event negatively impacting a patient’s health less than six times a year. None reported that they witnessed this daily and only a few weekly or monthly. Even so, almost half of the participants changed their view of the practice of medicine do to their experiences with health care. The questionnaire did not specify whether this had changed negatively or positively.

A question that rises is the credibility of the answers giving by the students/interns. There are many ways to skin a cat, and even though most of the questions in the survey are followed by examples, the possibility of misinterpretation always exists. An example of this is the term avoidable, which are used in two different questionnaires, asking for avoidable delays and avoidable events. It is a difficult to determine whether a situation is avoidable/preventable, and in some cases this could be a subjective statement. There is always a possibility that the responders could have misinterpreted a situation. They are not necessarily the ones with the most insight to determine whether a specific situation was avoidable. As a student with licence or an intern, they are faced with a lot of patients during a year. If the students/interns have not reflected on the situations earlier, and are

asked about events the passed year, it opens the possibility of not remembering everything correctly. In many ways a questionnaire like this measure subjective standards, it reflects the students' memories and interpretations of the situations. It therefore tells something about how the responders have experienced a situation, but it don't necessarily tell the whole truth. This would also be true the other way around. The respondents could have faced more possible errors than they might have reflected on. If an error didn't get any consequences for the patient or the student/intern, they might not remember the situation, or maybe they never understood that there was an error to begin with.

Due to the possibility of misinterpretation both ways, it is difficult to determine whether this points in favour of the survey showing too few or too many errors. It though tells something about that credibility of the answers, and the possibility of not catching a true picture.

As mentioned earlier, all of the Norwegian medical faculties have been under recent revision, with more focus on patient safety education for the new medical students. It could therefore be interesting to perform the same questionnaire again in six years time, to see whether the change in the amount of patient safety education would be reflected in their perceptions of medical error.

Reflection

Both the questionnaire and the literature review has its limitations, however a majority of the students which responded have observed medical errors happening, and with the exception of the University of Oslo, knowledge of patient safety is not emphasised in the undergraduate medical school curriculum in Norway. Based on the literature review most of the publications did not have any longitudinal evaluation of the different educational interventions. The WHO have developed a Curriculum Guide that could serve as an inspiration for medical school wanting to introduce this into their curriculum, so there are tools that are readily available. The data on what is efficient and not is limited, and for a country like Norway it seems feasible that the Norwegian medical schools would collaborate on both curriculum and faculty development. And when curricular interventions are planned in this field, they need to be evaluated properly in order for other institutions to learn.

With the increasing focus there has been on patient safety and the desire from authorities that this should be integrated into the curriculum it is important they support local initiatives and inquire about progress. The fact that almost half of the respondents (although the number of respondents were low) have changed their view of medicine after the exposure of the healthcare system is in itself a call for action. The literature search showed a variety of approaches to make it happen, and that it is possible to squeeze it in an already overfilled curriculum. It also provide a great opportunity for interprofessional learning, but the most important is to make it relevant for the students, in order for them to see the value of learning it while still in medical school, they are the future work force, and the system is expecting that they understand the system they are going to work in, why errors happen and how to learn from them.

References

1. Institute of Medicine Committee on Quality of Health Care in A. In: Kohn LT, Corrigan JM, Donaldson MS, editors. *To Err is Human: Building a Safer Health System*. Washington (DC): National Academies Press (US).
2. Thomson R, Lewalle P, Sherman H, Hibbert P, Runciman W, Castro G. Towards an International Classification for Patient Safety: a Delphi survey. *International journal for quality in health care : journal of the International Society for Quality in Health Care / ISQua*. 2009;21(1):9-17.
3. Sosial- og helsedirektoratet. Allgot B, Andreassen S, Andersen OK, Bergström M, Brønne I-H, Buschmann E et al. ...Og bedre skal det bli! Sosial- og helsedirektoratet; utgitt 09/2005. Tilgjengelig fra: <https://helsedirektoratet.no/publikasjoner/og-betere-skal-det-bli-nasjonal-strategi-for-kvalitetsforbedring-i-sosial-og-helsetjenesten-20052015>
4. World Health Organization. WHO Patient Safety Curriculum Guide for Medical Schools. World Health Organization 2009. Tilgjengelig fra: (http://www.who.int/patientsafety/education/curriculum/EN_PSP_Education_Medical_Curriculum/en/)
5. Patey R, Flin R, Ross S, Parker S, Cleland J, Jackson J et al. WHO Patient Safety Curriculum Guide for Medical Schools Evaluation Study. Report to WHO Patient Safety Programme. University of Aberdeen; Aug 2011. Tilgjengelig fra: http://www.who.int/patientsafety/education/curriculum/PSP_Eval_Study_Report-2011_March-2012.pdf
6. Det kongelige helse- og omsorgsdepartementet "God kvalitet- trygge tjenester. Kvalitet og pasientsikkerhet i helse- og omsorgstjenesten" (Meld. St. 10 (2012–2013) (Chapter 9.4).; utgitt 7. Desember 2012. Tilgjengelig fra: <https://www.regjeringen.no/contentassets/b9f8d14c14634c67a579a1c48a07c103/no/pdfs/stm201220130010000ddpdfs.pdf>
7. Helsedirektoratet. "Fremtidens legespesialister - En gjennomgang av legers spesialiststruktur- og innhold" Nov 2014. Tilgjengelig fra: <https://helsedirektoratet.no/Lists/Publikasjoner/Attachments/201/Fremtidens-legespesialister-en-gjennomgang-av-legers-spesialitetsstruktur-og-innhold-IS-2079-3.pdf>
8. Universitetet i Oslo. Fagsiden for Kunnskapshåndtering, ledelse og kvalitetsforbedring (KLoK). Publisert 1. Feb 2011, oppdatert 24.juli 2012, sitert 29.november 2014. Tilgjengelig fra: <http://www.med.uio.no/studier/ressurser/fagsider/klok/fagplan-klok.html>
9. Institute of Medicine Committee on Quality of Health Care in A. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington (DC): National Academies Press (US) Copyright 2001 by the National Academy of Sciences. All rights reserved.; 2001.
10. Busemann A, Busemann C, Traeger T, Festge OA, Neu J, Heidecke CD. [Curriculum "patient safety" for undergraduate medical students at the department of surgery, University of Greifswald]. *Zentralblatt fur Chirurgie*. 2013;138(6):657-62.
11. Shekhter I, Rosen L, Sanko J, Everett-Thomas R, Fitzpatrick M, Birnbach D. A patient safety course for preclinical medical students. *The clinical teacher*. 2012;9(6):376-81.
12. Anderson E, Thorpe L, Heney D, Petersen S. Medical students benefit from learning about patient safety in an interprofessional team. *Medical education*. 2009;43(6):542-52.

13. Madigosky WS, Headrick LA, Nelson K, Cox KR, Anderson T. Changing and sustaining medical students' knowledge, skills, and attitudes about patient safety and medical fallibility. *Academic medicine : journal of the Association of American Medical Colleges*. 2006;81(1):94-101.

14. Gonsenhausner I, Beal E, Shihadeh F, Mekhjian HS, Moffatt-Bruce SD. Development and assessment of quality improvement education for medical students at The Ohio State University Medical Center. *Journal for healthcare quality : official publication of the National Association for Healthcare Quality*. 2012;34(6):36-42.

15. Liaw SY, Zhou WT, Lau TC, Siau C, Chan SW. An interprofessional communication training using simulation to enhance safe care for a deteriorating patient. *Nurse education today*. 2014;34(2):259-64.

16. Smith SD, Henn P, Gaffney R, Hynes H, McAdoo J, Bradley C. A study of innovative patient safety education. *The clinical teacher*. 2012;9(1):37-40.

17. Roh H, Park SJ, Kim T. Patient safety education to change medical students' attitudes and sense of responsibility. *Medical teacher*. 2014:1-7.

18. Aboumatar HJ, Thompson D, Wu A, Dawson P, Colbert J, Marsteller J, et al. Development and evaluation of a 3-day patient safety curriculum to advance knowledge, self-efficacy and system thinking among medical students. *BMJ quality & safety*. 2012;21(5):416-22.

20. Daud-Gallotti RM, Morinaga CV, Arlindo-Rodrigues M, Velasco IT, Martins MA, Tiberio IC. A new method for the assessment of patient safety competencies during a medical school clerkship using an objective structured clinical examination. *Clinics (Sao Paulo, Brazil)*. 2011;66(7):1209-15.

21. de Feijter JM, de Grave WS, Hopmans EM, Koopmans RP, Scherpbier AJ. Reflective learning in a patient safety course for final-year medical students. *Medical teacher*. 2012;34(11):946-54.

22. Dudas RA, Bundy DG, Miller MR, Barone M. Can teaching medical students to investigate medication errors change their attitudes towards patient safety? *BMJ quality & safety*. 2011;20(4):319-25.

23. Dysinger WS, Pappas JM. A fourth-year medical school rotation in quality, patient safety, and population medicine. *American journal of preventive medicine*. 2011;41(4 Suppl 3):S200-5.

24. Gunderson AJ, Smith KM, Mayer DB, McDonald T, Centomani N. Teaching medical students the art of medical error full disclosure: evaluation of a new curriculum. *Teaching and learning in medicine*. 2009;21(3):229-32.

25. Hall LW, Scott SD, Cox KR, Gosbee JW, Boshard BJ, Moylan K, et al. Effectiveness of patient safety training in equipping medical students to recognise safety hazards and propose robust interventions. *Quality & safety in health care*. 2010;19(1):3-8.

26. Leung GK, Patil NG, Ip MS. Introducing patient safety to undergraduate medical students--a pilot program delivered by health care administrators. *Medical teacher*. 2010;32(12):e547-51.
27. Lindquist LA, Gleason KM, McDaniel MR, Doeksen A, Liss D. Teaching medication reconciliation through simulation: a patient safety initiative for second year medical students. *Journal of general internal medicine*. 2008;23(7):998-1001.

28. Mookherjee S, Ranji S, Neeman N, Sehgal N. An advanced quality improvement and patient safety elective. *The clinical teacher*. 2013;10(6):368-73.

29. Moskowitz E, Veloski JJ, Fields SK, Nash DB. Development and evaluation of a 1-day interclerkship program for medical students on medical errors and patient safety. *American journal of medical quality : the official journal of the American College of Medical Quality*. 2007;22(1):13-7.

30. Myung SJ, Shin JS, Kim JH, Roh H, Kim Y, Kim J, et al. The patient safety curriculum for undergraduate medical students as a first step toward improving patient safety. *Journal of surgical education*. 2012;69(5):659-64.
31. Patey R, Flin R, Cuthbertson BH, MacDonald L, Mearns K, Cleland J, et al. Patient safety: helping medical students understand error in healthcare. *Quality & safety in health care*. 2007;16(4):256-9.
32. Stahl K, Augenstein J, Schulman CI, Wilson K, McKenney M, Livingstone A. Assessing the impact of teaching patient safety principles to medical students during surgical clerkships. *The Journal of surgical research*. 2011;170(1):e29-40.
33. Thompson DA, Cowan J, Holzmueller C, Wu AW, Bass E, Pronovost P. Planning and implementing a systems-based patient safety curriculum in medical education. *American journal of medical quality : the official journal of the American College of Medical Quality*. 2008;23(4):271-8.
34. Vinci LM, Oyler J, Arora VM. The Quality and Safety Track: Training Future Physician Leaders. *American journal of medical quality : the official journal of the American College of Medical Quality*. 2013;29(4):277-83.
35. Wilson AR, Fabri PJ, Wolfson J. Human error and patient safety: interdisciplinary course. *Teaching and learning in medicine*. 2012;24(1):18-25.
36. Thomas I, Nicol L, Regan L, Cleland J, Maliepaard D, Clark L, et al. Driven to distraction: a prospective controlled study of a simulated ward round experience to improve patient safety teaching for medical students. *BMJ quality & safety*. 2015;24(2):154-61.
37. Hayes AJ, Roberts P, Figgins A, Pool R, Reilly S, Roughley C, et al. Improving awareness of patient safety in a peer-led pilot educational programme for undergraduate medical students. *Education for health (Abingdon, England)*. 2014;27(2):213-6.
38. Halbach JL, Sullivan LL. Teaching medical students about medical errors and patient safety: evaluation of a required curriculum. *Academic medicine : journal of the Association of American Medical Colleges*. 2005;80(6):600-6.
39. Coil C, Kaji AH, Crevensten H, Aaron KE, Lewis RJ, Coates WC. Screen savers as an adjunct to medical education on patient safety. *Joint Commission journal on quality and patient safety / Joint Commission Resources*. 2011;37(11):524-8.
40. Frich JC, Gran S F, Guldbrandsen P, Hjortdahl P. "Kunnskap, ledelse og kvalitet i studiet", Nr. 15 – 21. august 2012. *Tidsskr Nor Legeforen* 2012; 132:1768 – 70 [doi: 10.4045/tidsskr.12.0511](https://doi.org/10.4045/tidsskr.12.0511)

Appendix 1 - The questionnaire

Kjære medisinstudent/turnuslege,

Som sisteårsstudent/ferdig med sykehustjenesten inviteres du til å delta i en studie som utføres av lege Lakshman Swamy, ved Massachusetts Medical Center, Boston, Massachusetts i samarbeid med medisinstudent Katharina Nilsen ved Universitetet i Tromsø

Det norske pasientsikkerhetsprogrammet "I trygge hender 24/7" har gjennom undersøkelser vist at omtrent 1 av 10 pasienter som legges inn i norske sykehus opplever en utilsiktet hendelse(1). Man anslår videre at 50% av disse hendelsene kunne vært unngått. Medisinstudenter lærer generelt lite om hvorfor slike feil skjer og hvordan de kan forhindres.

Denne studien undersøker medisinstudenters/turnusleger erfaringer med kvalitet og sikkerhet i helsevesenet. Studien har ikke som hensikt å si noe om kvaliteten på institusjonene hvor studentene er, men den vil kunne gi en tilbakemelding til fakultetene om kvalitet- og sikkerhetsspørsmål er noe som opptar studentene. Vi håper derfor at du vil hjelpe oss med å fylle ut spørreskjemaet.

Studien planlegges gjennomført ved flere universiteter i USA og i Norge.

Ved å fullføre spørreundersøkelsen i vedlagte lenke så samtykker du til deltagelse i undersøkelsen. Deltagelsen er frivillig og informasjon som oppgis behandles konfidensielt. Undersøkelsen er beregnet til å ta i underkant av ti minutter.

Før oppstart gjøres du oppmerksom på følgende:

- 1) Du samtykker til deltagelse i studien dersom du sender inn svarene på spørreundersøkelsen.
- 2) Du står fritt til å avslutte undersøkelsen når du selv måtte ønske, og du trenger ikke å svare på alle spørsmålene.
- 3) Alle svar er anonyme og vil bli behandlet konfidensielt.
- 4) Spørsmålene i spørreskjemaet er på engelsk, men du kan svare på norsk.

For eventuelle spørsmål kan undertegnede kontaktes på e-post: katharinanilsen@gmail.com

Vennlig hilsen

Katharina Nilsen
Universitetet i Tromsø
katharinanilsen@gmail.com

Lakshman Swamy, MD
Boonshoft School of Medicine
Wright State University, Dayton, OH
Swamy.3@wright.edu

Kjønn

KVINNE MANN

Alder

18-23 24- 28 29- 33 >33

Stuedsted

UiO UiB UiT NTNU

1. In the past year, have you seen or experienced what you think may have been an error in the treatment of a patient? An error is defined as a preventable adverse effect of care, whether or not it is evident or harmful to the patient. For example, giving drug A when you intended to give drug B, even if there is no change in the patient's condition or outcome.

YES

NO

Did you speak to anyone about your concerns?

YES

NO

If you did speak to someone about your concerns, was a satisfactory explanation offered?

YES

NO

I did not speak to anyone.

Was there evidence of a change considered or implemented to prevent this from happening again?

YES

NO

Other (please specify):

Please describe the error:

2. In the past year, have you seen or experienced what you think may have been avoidable delays (forsinkelse i pasientbehandling) in patient care?

YES

NO

Did you speak to anyone about your concerns?

YES

NO

If you did speak to someone about your concerns, was a satisfactory explanation offered?

YES

NO

I did not speak to anyone.

Was there evidence of a change considered or implemented to prevent this from happening again?

YES

NO

Other (please specify):

Please describe the event here:

3. In the past year, have you seen or experienced what you think may have been a difference in the care that was provided to a patient due to insurance status, race, gender, age, sexual preference, or anything else that did not have a bearing on the patient's clinical condition? For example, an uninsured patient (e.g refugee) receiving different care for the same condition as an insured patient.

YES NO

Did you speak to anyone about your concerns?

YES NO

If you did speak to someone about your concerns, was a satisfactory explanation offered?

YES NO I did not speak to anyone.

Was there evidence of a change considered or implemented to prevent this from happening again?

YES NO Other (please specify):

Please describe the event here:

4. In the past year, have you seen or experienced what you think may have been a deviation (avvik) from the standard of care, best practice, or other evidence based guideline?

YES NO

Did you speak to anyone about your concerns?

YES NO

If you did speak to someone about your concerns, was a satisfactory explanation offered?

YES NO I did not speak to anyone.

Was there evidence of a change considered or implemented to prevent this from happening again?

YES NO Other (please specify):

Please describe the event here:

5. In the past year, have you seen or experienced what you think may have been an unnecessary waste of resources? For example, unnecessary imaging or labs or other misuse of medical resources?

YES NO

Did you speak to anyone about your concerns?

YES NO

If you did speak to someone about your concerns, was a satisfactory explanation offered?

YES

NO

I did not speak to anyone.

Was there evidence of a change considered or implemented to prevent this from happening again?

YES

NO

Other (please specify):

Please describe the event here:

6. In the past year, have you seen or experienced a deficit in a “patients first” attitude, where the care team put considerations other than the patient’s wellbeing first?

YES

NO

Did you speak to anyone about your concerns?

YES

NO

If you did speak to someone about your concerns, was a satisfactory explanation offered?

YES

NO

I did not speak to anyone.

Was there evidence of a change considered or implemented to prevent this from happening again?

YES

NO

Other (please specify):

Please describe the event here:

7. Has the experience of any of the above events affected your view of the practice of medicine, and if so, how?

YES

NO

If yes, please describe:

8. In general, over the past year, how comfortable have you felt approaching your residents (assistant/legger), attendings (overleger), or other clinical leaders about the issues discussed above?

Never comfortable with asking

Sometimes comfortable, but not enough to ask

Usually comfortable enough to ask

Almost always comfortable enough to ask questions

Other (please specify):

9. How often during the past year did you witness an avoidable event you felt had negatively impacted a patient's health (e.g. medical error, delay in care, disparate care, unnecessary testing, incomplete medical workup, etc)?

Daily Weekly Monthly Less than 6 times a year Never

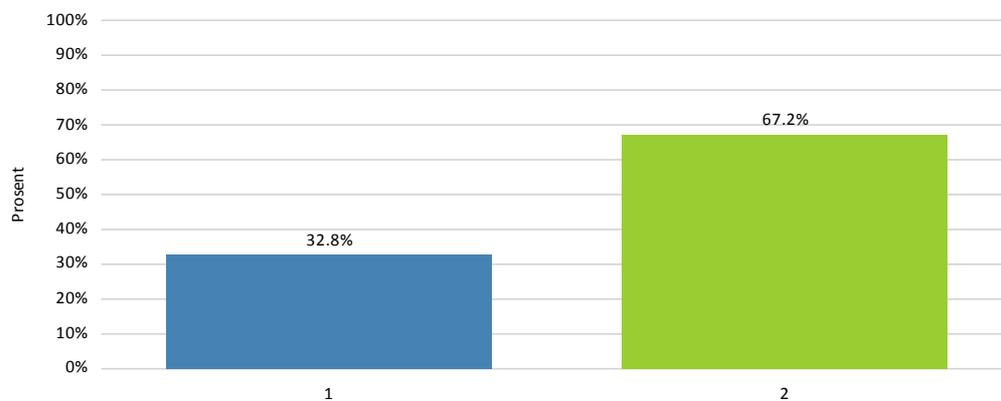
Other (please specify):

End of Survey. Thank you for your participation

(1) <http://www.regjeringen.no/nb/dep/hod/aktuelt/nyheter/2012/markant-nedgang-i-dodsfall-etter-pasient.html?id=700234>

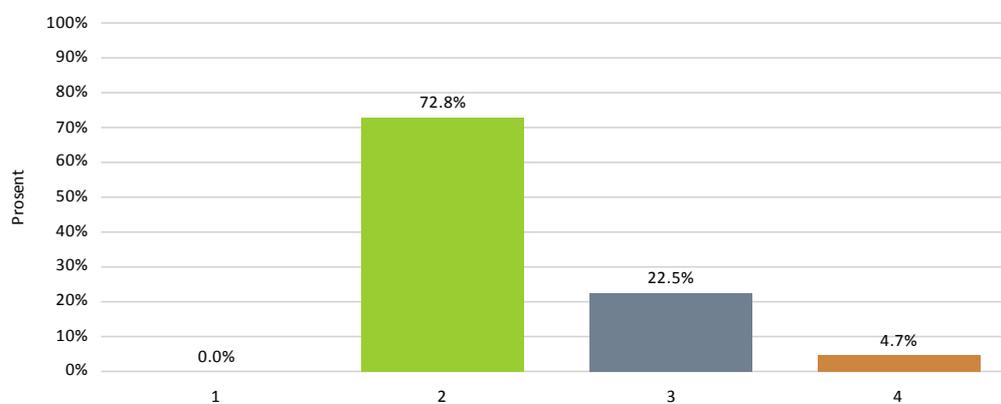
Appendix 2 – Results from the questionnaire

1. Kjønn:



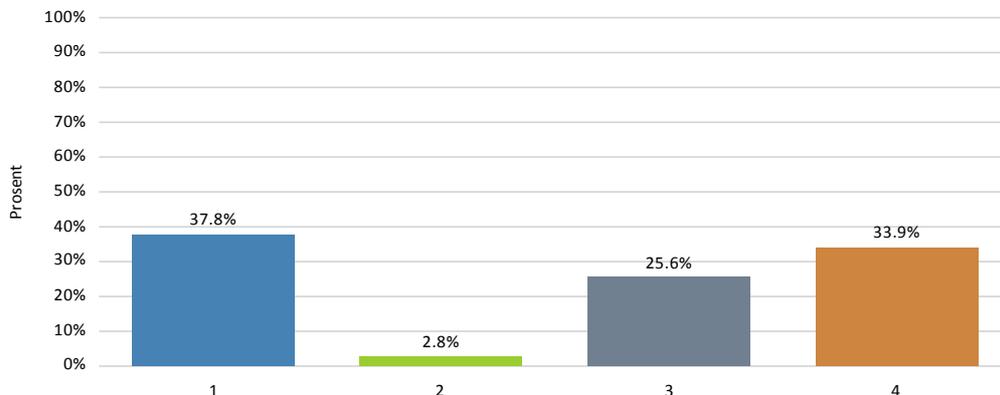
Navn	Prosent	
1	Mann	32,8%
2	Kvinne	67,2%
N		189

2. Alder:



Navn	Prosent	
1	18-23	0,0%
2	24-28	72,8%
3	29-33	22,5%
4	>33	4,7%
N		191

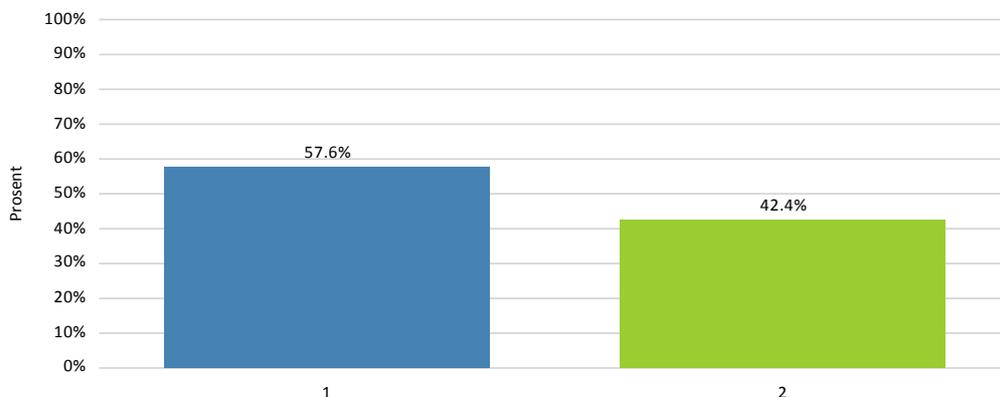
3. Studiested:



Navn	Prosent
1	37,8%
2	2,8%
3	25,6%
4	33,9%
N	180

4. In the past year, have you seen or experienced what you think may have been an error in the treatment of a patient?

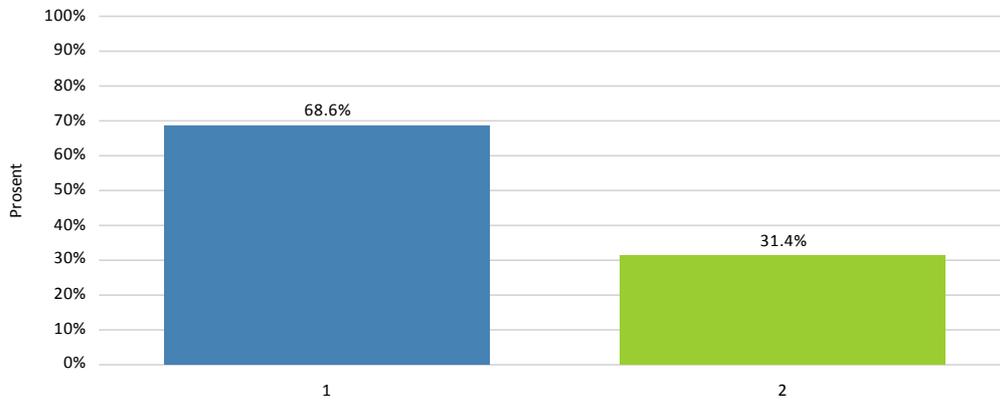
An error is defined as a preventable adverse effect of care, whether or not it is evident or harmful to the patient. For example, giving drug A when you intended to give drug B, even if there is no change in the patient's condition or outcome.



Navn	Prosent
1	57,6%
2	42,4%

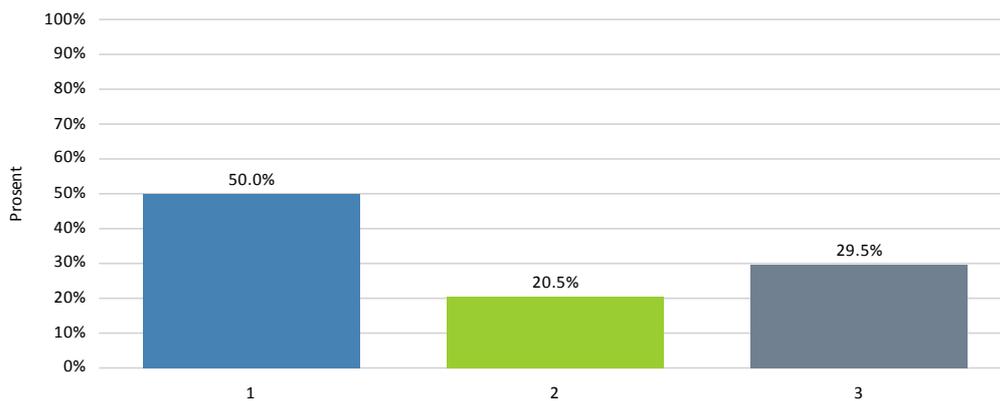
Yes	57,6%
No	42,4%
N	191

5. Did you speak to anyone about your concerns?



1	Navn	Yes
2		No
Navn		Prosent
Yes		68,6%
No		31,4%
N		137

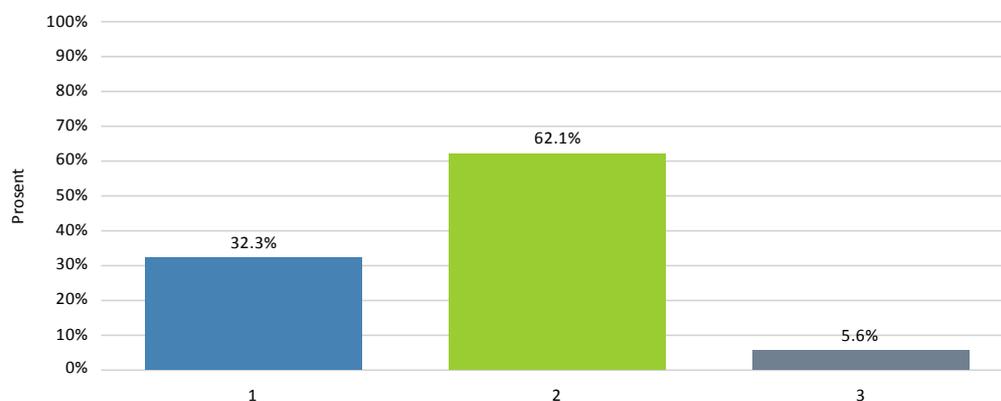
6. If you did speak to someone about your concerns, was a satisfactory explanation offered?



1	Navn	Yes
2		No
3		I did not speak to anyone
Navn		Prosent
Yes		50,0%
No		20,5%

I did not speak to anyone	29,5%
N	132

7. Was there evidence of a change considered or implemented to prevent this from happening again?



	Navn
1	Yes
2	No
3	Other (please specify):

Navn	Prosent
Yes	32,3%
No	62,1%
Other (please specify):	5,6%
N	124

ikke aktuelt

Not applicable

hendelsen skal granskes for å avdekke hva som gikk galt

do not know

8. Please describe the error:

sykepleier jeg jobbet med ga adrenalin iv og ikke im ved en allergisk reaksjon på legevakt

Ankelfraktur dårlig synlig via Rtg., klart synlig på CT etter 1 uke med gips og ”gradvis mobilisering” som ikke fungerte.

Thalassemi, got iron supplement for anemi

Feilmedisinering.

Kortidsvirkende Insulin ble ikke gitt før frokost, som følge av at ansvarlig pleier ikke hadde kompetanse til å sette insulin og vikar ikke var klar over at vedkommende skulle sette insulin på andres pasienter også

Medication dosing error.

Jeg overså en ekstrauterin graviditet som jeg burde ha diagnostisert. Pasienten kom tilbake etter noen dager med økende buksmerter. Ble på nytt gjort UL, da av overlege, som fant koagler i fossa douglasi og XU i adnex. Jeg fikk i etterkant god forklaring og opplæring i hvordan jeg skulle knipe disse pasientene

The patient was sent home to soon and not believed when she told her symptoms of dizziness and confusion

Hyponatremi hos kreftpasienter, en overlege trodde man skulle behandle med NaCl, når de i virkeligheten var overhydrert og hadde SIADH og skulle ha væskerestriksjon. Arrangert møte med undervisning om temaet.

A patient did not get heparin as indicated, Even though it was listed in the medication-chart. Ended up with pulmonary embolism.

Feildosert medikament. Oppdaget dagen etter, førte ikke til skade hos pasienten.

-Utallige tilfeller hvor steriliten på operasjon blir brutt, ink. et tilfelle hvor kirurgen forlater salen i fullsterilt, for så å komme tilbake 5 min senere og operere videre uten å vaske seg inn på nytt.

-Gjenglemte kompresser i pasienters buk hvor det ble oppdaget først etter at pasientene var lukket og man måtte åpne pasienten på nytt

Kvinne innlagt med tentativ diagnose endometritt, ikke undersøkt av lege før etter 10 timer på post, hadde da truende hypovolemisk sjokk pga ex. u.

Grunnet misforståelser/dårlig kommunikasjon mellom meg selv og sykepleier på post angående oppfølging av en pasient med oksygenbehandling gikk pasienten nesten inn i CO2-narkose uten at jeg eller noen andre leger fikk beskjed om pasienten tilstand før etter et par timer, da jeg selv ringte til sengeposten for å forhøre meg.

Wrong medication

Sto på antiøstrogenbehandling pga brystkreft. Sto samtidig på østrogenbehandling da onkologisk poliklinikk hadde glemt å se etter dette/seponere dette. Ingen på sykehjemmet hadde tenkt over dette.

Pasient som fikk 15 mg olanzapin istedetfor 5 mg

Fulgte ikke standard prosedyre

Et medikament ble gitt til feil pasient, da de to aktuelle pasienter hadde samme navn

A patient was given several medicaments that prolonged the QT interval, which resulted in a cardiac arrest, despite that this had happened before, and was described in her journal

Ibux ble gitt til en pasient med nyresvikt

I can only recall 1 preventable adverse effect of care... though it wasn't a mistake in prescribing... a nurse gave patient the wrong dosage of the correct medication.

I have also seen staff who still used rings/watches when caring for nursing home patients... there was one round of infection and the attending and I did discuss with the staff the possibility that the rings/watches could be playing a role in the spread.

Pasient som vanligvis får marevan, fikk ikke det under innleggelsen. Ingen følger, oppdaget ved utskrivelse.

wrong medication

Surgery was about to be done based on an oral misunderstanding.

Wrong dosage prescribed for inhouse patients when compiling different medical information sources

At a palliativ uretral stenting procedure, in a patient with advanced prostate cancer, a canal was accidentally made from urethra to scrotum.

Man glemte å sjekke INR samme dag som en mann skulle elektrokonverteres fra sin atrieflimmer. Han ble satt i narkose, så ble det oppdaget at dagens INR ikke var tatt, og man gjorde ingen elektorkonvertering fordi det da er fare for hjerneslag. Mannen ble så tatt ut av narkose. Fikk altså narkose unødvendig og det var like før det ble gjort elektrokonvertering som kunne gitt hjerneslag. INR tatt senere samme dag viste 1,8, altså for lav.

Feil i medikamentliste (cardex)

Wrong drug

New patient started on Warfarin, INR value over 3 on day 7, new INR planned after 14 days. In between nosebleeds, new INR above 8....

Treating for several serious condition at one time, without having enough clues or diagnostic answers proving the conditions ("over-treatment").

En gutt som skled og slo hodet slik at han ble liggende ute i kulda svimeslått om natten. Kom til og fikk ringt ambulanse, grunnet hypotermi innlagt medisinsk avdeling utskrevet et par timer etter alene til hybel med kraftig hodepine som ved hjernerystelse, uten at dette var tatt stilling til av medisinsk vakt om behov for CT caput som nok var indisert grunnet bevissthetstap og kraftige symptomer ei heller at han skulle observeres på sykehuset i mangel på pårørende.

Gav feil type væske til en med allerede høyt Na og K. Jeg lærte av feilen siden det ble påpekt, men ingen formell kvalitetssjekk ble innført. Ellers hender det ofte at sykepleiere kontrollerer at medisindoser skrives riktig i dosering.

Det ble gitt et penicillinholdig antibiotikum til en pasient som angivelig var penicillinallergisk.

Det skjer feil hele tiden, de aller fleste av dem har ingen større konsekvenser for pasienten. De som faktisk har betydning føler jeg blir tatt opp og gjort noe med der og da. Sjelden systemfeil, men feil gjort av enkeltpersoner.

CT caput ikke tatt på kvinne med bevissthetstap etter traume

Pasient ved sykehjem fikk medpasients medisiner!

a patient in the psychiatric ward did not get the medical treatment for an acute kidney failure because the nurses did not follow the doctors (my) orders, and sabotaged the treatment. Talked to the boss (a nurse), and she did not care about the incident or the doctors suggestions to make sure it did not happen again. This was just one of many errors experienced where errors happend because nurses ignored doctors orders and the bosses (nurses or economists, not doctors) did not care. I saved copies of the patients charts/files for documentaion, but no one cared (except the attending doctors, but they didn't have any power to do anything about it)

Gitt blodfortynnende til pasient med bryst smerter pga lav hb

infection after tonsillectomy, 4 patients operated by the same surgeon

pasient med septisk sjokk (kjent alkoholiker) hvor legen mente problemet var dehydrering. Selv om alle sepsiskriterier var oppfylt, også kriterier for septisk sjokk

Prednisolon twice the dose from a nurse

gjenglemte svamper i abdomen etter operasjon

pasient hadde ikke fått et medikament i forkant av en undersøkelse

High dose of Konakion.

utskrivende lege missed out on a fracture in cervical virvel og sendte personen hjem med store smerter. Det viste seg senere at det var spredning fra kreft. Han døde 1 mnd senere.

sykepleier ga feil dose sobril - pas. fikk dobbel dose

Det ble ikke gitt væske som var forordnet til pasienten på kurven. Det gikk bra, men pasienten hadde stort behov for væsken med elektrolytter da det var alvorlige elektrolyttforstyrrelser.

ga feil medisin til feil pasient

En pas. fikk en medisin på sykehjemmet han ikke skulle ha fått

too few experienced doctors in the ER that don't consider the patient throughoutly before sending home

oppgitt feil medikament på liste ved inkomstjournal, gitt en dose (men ingen fare i dette tilfellet)

pas. fikk kontraindisert legemiddel

½ dose of prescribed given

for iv fluid infusion, a 5-fold too high concentration of K+ was prescribed

Postarbeid, blodprøver ble tatt kvelden i forveien og det var først på morgenmøtet dagen etter at blodprøvene ble sett på av lege, det viste skyhøye troponiner og pasienten ble akutt sendt til et annet sykehus for Pci.beh (men 12 timer senere enn optimalt)

at pasient med alvorlig skade, subduralt hematoma (spørsmålsteget pågående blødning) ble overlatt til den minst erfarne legen (turnuslegen), fordi bakvakten er hjemme på et lte sykehus. All kommunikasjon skjedde via telefon

bruk av ACE-hemmer hos nyresyk pas

wrong administration route of adrenalin

Husker ikke hendelsen helt, men vet det var snakk om å separere antiarytmika

not given recommended analgetic. given morfin instead of paracet/NSAID as recommended

en sykepleier glemte å gi medisiner til en hel avdeling kl 13

a nurse (on her own) mase a patient drink a lot of plain water- diluting an already low Na+, resulting in the patient staying extra days in the hospital

En pasient som ikke fikk hjelp på flere timer fordi det var mye å gjøre på avdelingen. Hun var en stabil, men gammel pasient som hadde gjort på seg. Fikk ikke hjelp til skift og dusj før det hadde gått lang tid.

pasient stod på, og fikk en medisin som vedkommende ut ifra aktuell sykdom ikek burde hatt

albue lux ble ikke reponert, på pas med nedsatt sensibilitet grunnet tidligere skade.

vedvarende kompresjon av innstikssår - som førte til dårlig sirkulasjon og hudskade

upresis dokumentasjon av medikament. pasienten fikk mer enn nødvendig

EKG ikke tolket av sekundærvakt

på sykehjem ikke gitt AB som forordnet grunnet dårlig info/opplæring

wrong medication was given

det ble gitt seloken på en VT, feiltolket som AF

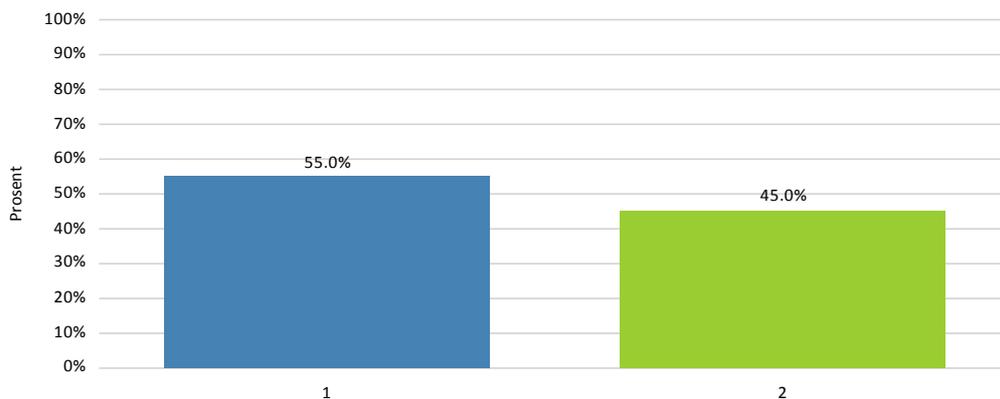
sterke smertestillende til en pasient med kjent misbruk av dette smertestillende. vi startet sammen opp en videreoppfølging med fastlege, avhengighetsspesialist og i samråd med pas

manglende opplæring av meg som vikarierende avdelingslege, førte til at pasienten ikke fikk den standardiserte "pakken" av medikamenter mot sin tilstand. Dette ble etterhvert endret til at pas. fikk den optimale behandlingen

flere feil i medisinkurve i forhold til medisinaliste eller medisinalister som ikke stemmer overens

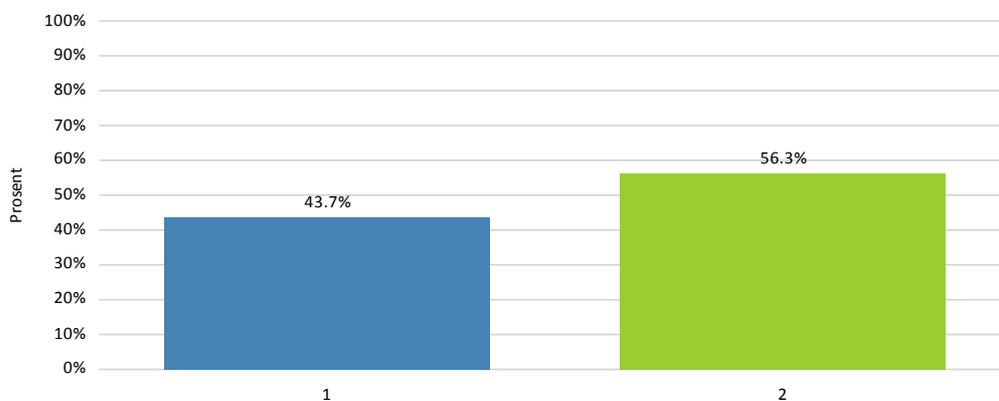
pas. med lungebetennelse endre på respirator. spm om hypoksisk hjerneskade etterpå fordi pas hadde sympt på hjerneslag, men andre digg diagnoser var malignt nevroepileptikasymptom

9. In the past year, have you seen or experienced what you think may have been avoidable delays (forsinkelse i pasientbehandling) in patient care?



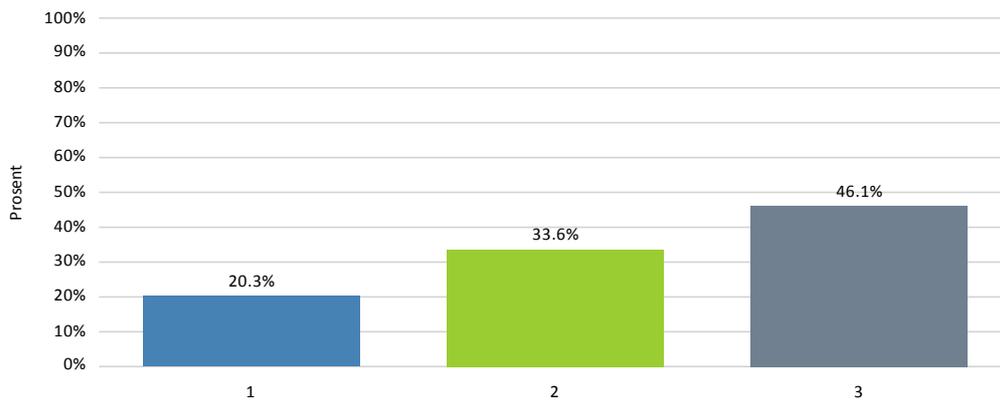
		Navn
1	Yes	
2	No	
Navn	Prosent	
Yes	55,0%	
No	45,0%	
N	191	

10. Did you speak to anyone about your concerns?



		Navn
1	Yes	
2	No	
Navn	Prosent	
Yes	43,7%	
No	56,3%	
N	135	

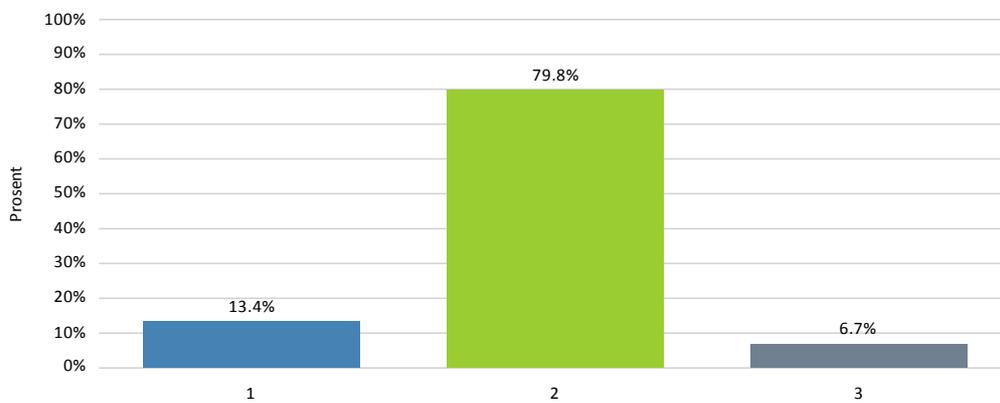
11. If you did speak to someone about your concerns, was a satisfactory explanation offered?



	Navn
1	Yes
2	No
3	I did not speak to anyone

Navn	Prosent
Yes	20,3%
No	33,6%
I did not speak to anyone	46,1%
N	128

12. Was there evidence of a change considered or implemented to prevent this from happening again?



	Navn
1	Yes
2	No
3	Other (please specify):

Navn	Prosent
Yes	13,4%
No	79,8%
Other (please specify):	6,7%
N	119

no experience

Vet ikke

Enkelte ganger forsøk på bedre rutiner

vet ikke

hendelsen skal granskes for å avdekke hva som gikk galt

Det vet jeg ikke.

13. Please describe the event here:

Henvisning på avveie.

Medisin ble ikke gidd til rett tid pga andre oppgaver som måtte prioriteres først

Kvinne med økende bukromfang ble henvist til gyn.pol med spørsmål om graviditet og samtale ang beholde/avbryte svangerskapet, tross negativ hcg. Kvinnen hadde ovarialcancer. Feilen burde vært oppdaget når henvisningene sorteres og pasienten fikk time..

Unødvendig lang liggetid i akuttmottak pga. dårlig bemanning av turnusleger og dermed mye å gjøre

Opplevd ved praksis hos en allmennlege med dårlige kunnskaper i psykiatri: Flere tilfeller hvor pasienter med psykiske problemstillinger ikke ble henvist videre til spesialisthelsetjenesten før de var blitt veldig mye sykere enn hva de var ved første besøk hos legen.

Pasient med kjent lymfom og nøytropen feber fikk ikke tilsyn av lege før han hadde ligget nesten en time i mottak fordi "han ikke så så dårlig ut" da han ankom og derfor ble triagert feil.

Patient forgotten in radiology department

Small ER and shortness of staff delayed necessary diagnosis and treatment

Pas. med sarkom - tydelig MR-tegn. Fastlege brukte lang tid på å henvise denne pas.

En lege hadde satt opp flere timer enn legen hadde mulighet til å gjennomføre innen oppgitt tidsrom

Pasienter som venter for lenge i akuttmottaket. Grunnet dårlig bemanning og lite opplæring av nye turnusleger.

Forsinkelser i skriving av epikriser

Medical conditions discovered that were considered "not relevant" for current problem was not described in patients journal or otherwise taken care of.

Har jobbet med pasienter som skal til forundersøkelse dagen før angiografi og få informasjon, undersøkelse, Plavix/Albyl evt andre medisiner. Generelt alltid forsinket til å ta i mot pasienter, egentlig grunnet konstant underbemanning.

Pasienter i akuttmottaket som ble liggende for lenge å vente uten tilsyn av lege

Pasienter venter i akuttmottak pga for få sykepleiere og for få leger i mottak.

Forsinket colonoskopi ettersom positiv FeCal-test ble feilaktig oppfattet som falsk positiv grunnet samtidig jernbehandling.

Unødvendig lang ventetid i akuttmottak

Mange pasienter i mottaket og altfor få pasient rom for å ivareta alle. Flere dårlige pasienter som ble liggende lenge uten å få oppstart med intravenøs ab for sepsis. Er tatt opp med ledelse og er planlagt utbygging av akuttmottaket innen 3 år samt det er innført triagesystem og opplæring av sykepleierne.

Bare hvordan et fullt mottak gjør at enkelte prioriteringer gjøres feil og blodprøvesvar forsinket en ellers rask prosess.

Waiting for bloodtransfusion for hours resulting in cardiac ischemia

Waiting for insulin/glucose for pt with hypercalcemia

Mye av ineffektiviteten skyldes ofte logistikk, og forsinkelser i logistikk kan ofte være pga. et ønske om å drifte mest mulig økonomisk.

Legenes vurdering av pasientene ignoreres av sykepleiere og andre sjefer som bestemmer prioritering ut fra politiske, personlige eller andre ikke-faglige kriterier. Mine erfaringer er fra psykiatrien, hvor sykepleiere, sosionomer og andre har stor innflytelse og jevnt over ignorerer faglige råd fra leger., noe som gir feilbehandling og feilprioriteringer - folk prioriteres ut fra meninger og følelser, ikke fag

Langvarig pasientforløp m/claudicatio, liggesår, amputasjon av 1 fot. lang tid før angio av resterende fot.

Delay for elective PCI-procedures, due to excess nurse eating breaks, > 1h

Patient with neutropenia died from infection

delay in sending patient from ER to specific clinic

Patient with fractures coming to the OR instead of "legevakten" or the GP.

beslutning oppstart medikamentell behandling av lege i mottak, pas. liggende å vente på videre transport til avd.

Behandling ikke igangsatt i mottak

flere tilfeller med altfor mange pas. i akuttmottaket som ikke har blitt undersøkt tidlig nok, fordi de ikke er i veldig dårlig tilstand

Pasient ikke klargjort til å bli kjørt på CT.

En cancer pas. ble ikke innkalt til kontroll når han skulle ha vært det i utgangspunktet.

lang ventetid for pas på akuttmottaket. lang ventetid for undersøkelse hos pas. som blir henvist til sykehus fra allmennlege

pasient møtt til us., sittet mange timer på venterom, men feil side av rommet og ikke tatt inn til us. dement pas, ingen følge

Stor arbeidsbyrde i akuttmottak hos sykepleiere og legere -> Uforsvarlig lang venting hos pasienter

forsinket igangsatt behandling av smerter hos cancerpasient

at pas. med alvorlige skader blir ventende i mottak (akilleseneruptur) for lenge. Lite bemaning

delay in psychiatric treatment

forsinket operasjon pga fullt operasjonsprogram

presentation of patient triage through PC-software

generell forsinkelse i akuttmottaket

anal hemorrhoids that was actually cancer

Bleeding

flere sykehjemspasienter hadde ikke innkomstjournal, til tross for at de hadde fast plass i flere mnd

utsettelse av operasjoner pga høyt fravær av anestesipersonell

tidspress- feil prioritering av hvilke pas som bør behandles først. Lange ventetider ved henvisning

pas. innlagt m/tbl 4,7 til kAD istedetfor sykehus av fastlege. Fastlege hadde blp som viste fallende hb

forsinkelse i akuttmottak, ligger mange timer uten grunn

unødvendig stor tidsbruk på presivsitt og morgenmøte- nesten ikke tid til pasientene ved visitt og for dårlig daglig oppdatering/undersøkelse av pasientene

pas som lå 4 uker og ventet på hoftekirurgi, på å få klarsignal fra irurg. AB behandlet

øvre GI blødning og ustabil pas som fikk vente 8t på gastroskopi pga at gastrovakt måtte reise fra annet sykehus

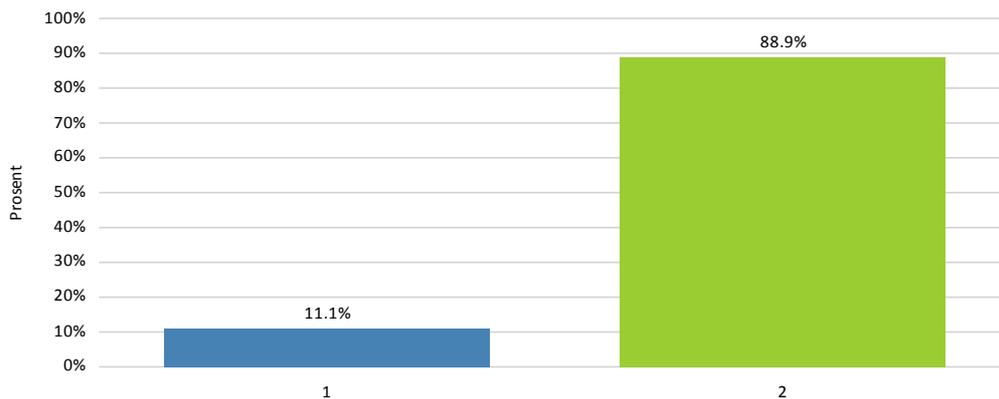
gynekologisk avd nektet å ta imot en pasient med høyt sannsynlig ovariekreft før biopsi av tumor bekreftet diagnosen. en biopsi vil uansett ikke kunne gjøres på gastromedisinsk avd

forsinkelser i operasjonsprogrammet, der pasienter blir strøket på overfullt program. burde kunne planlegges bedre, sparer ekstraarbeid og tid

svikt med pasienttransport mellom sykehus; pas inne for avrusing sendt til medisinsk avd på annet sykehus for utredning for nyoppståtte ødemer. På vei tilbake til avrusningsenhet i taxi ber pas taxisjåfør om et stopp, og kommer tilbake til avrusningsenheten ruset. Innen 1 time er pas. tilbake på medisinsk avd for intox

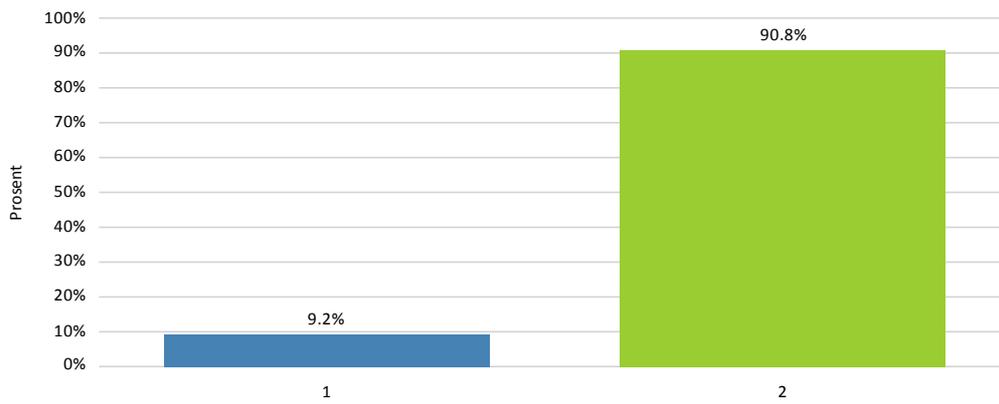
forgotte to put a patient on the operation program, waited for surgery for several days without being on the list

14. In the past year, have you seen or experienced what you think may have been a difference in the care that was provided to a patient due to insurance status, race, gender, age, sexual preference, or anything else that did not have a bearing on the patient's clinical condition? For example, an uninsured patient (e.g refugee) receiving different care for the same condition as an insured patient.



Navn	Prosent
1	Yes
2	No
Navn	Prosent
Yes	11,1%
No	88,9%
N	190

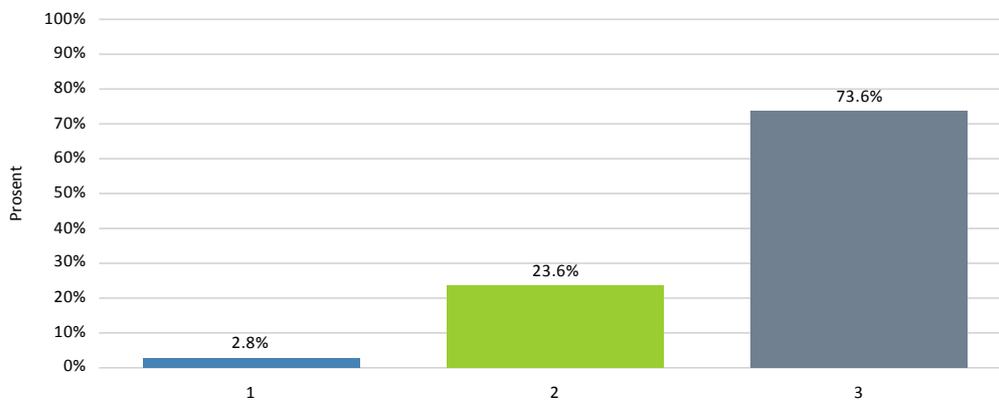
15. Did you speak to anyone about your concerns?



Navn	
1	Yes
2	No

Navn	Prosent
Yes	9,2%
No	90,8%
N	76

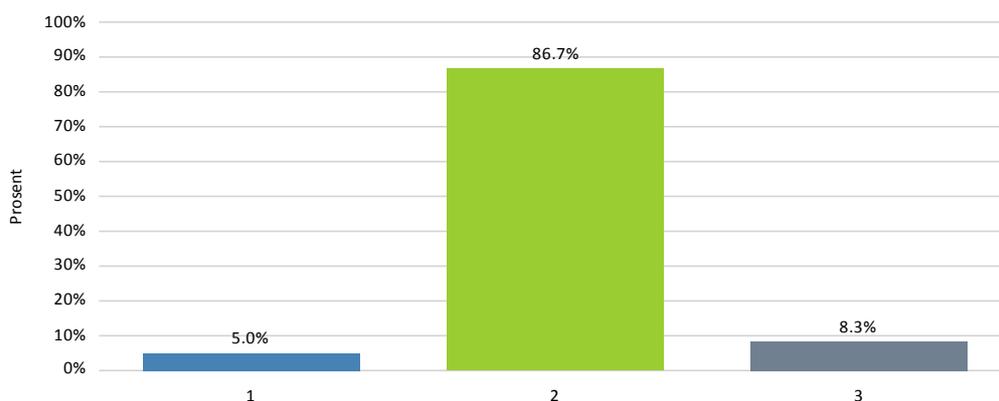
16. If you did speak to someone about your concerns, was a satisfactory explanation offered?



Navn	
1	Yes
2	No
3	I did not speak to anyone

Navn	Prosent
Yes	2,8%
No	23,6%
I did not speak to anyone	73,6%
N	72

17. Was there evidence of a change considered or implemented to prevent this from happening again?



	Navn
1	Yes
2	No
3	Other (please specify):

Navn	Prosent
Yes	5,0%
No	86,7%
Other (please specify):	8,3%
N	60

did not experience this

ikke aktuelt

18. Please describe the event here:

Samme kvinnen: det ble sagt om henne at ”de overdriver alltid smerteuttrykket sitt, de som kommer fra det landet...”

Pas. med narkomani, HBV, magesmerter. Ø-hjelp. Ble utredet svært lite.

lege/andre helsepersonell som kommer raskere frem i køen

I have only seen differences in care that could be attributed to less-than-ideal communication between patient-doctor. Cultural and linguistic misunderstandings happen.

Pasienter som er slektninger av leger får ofte kortere ventetid, vet om snarveier, får grundigere utredning enn andre med samme sykehistorie.

Asylsøkere får dårligere behandling, dels fordi de prinsipielt kun har rett til øyeblikkelig hjelp, og dels pga. kulturelle forskjeller og språkproblemer.

Hypotherm drugaddict. When I came to see him he was not cared for, lying in his cold clothes without duvet/blanket.

Folk blir behandlet jevnt over likt, og bra, uavhg. av økonomisk eller sosial status, eller hudfarge, kjønn eller legning.

Pasient med septisk sjok (kjent alkoholiker) hvor legen mente problemet var dehydrering. Selv om alle sepsiskriterier var oppfylt, også kriterier for septisk sjokk

Lege tok opp på neste morgenmøte at pas. burde fått antibiotika...

doctors and famous people got much better care than elderly e.g. with dementia

mann fikk ikke undersøkt prostata v/symå på prostatahyperplasi

people of low social status are not considered with the same seriousness

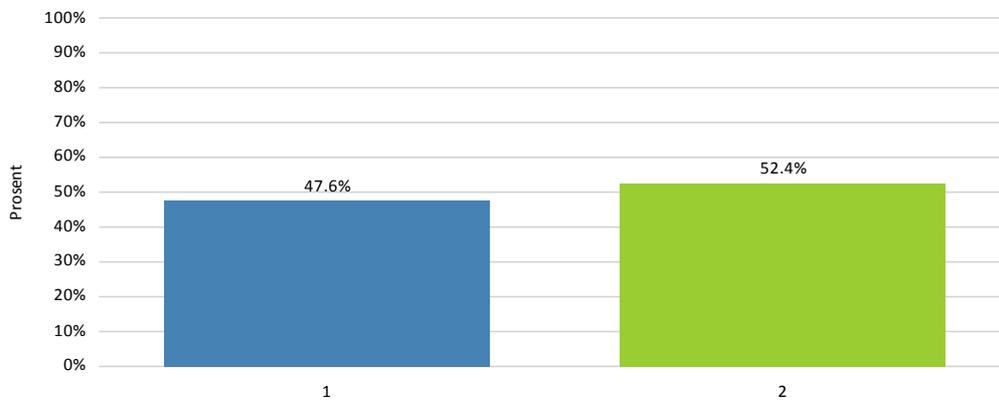
a patient with advanced dementia recieved a too superficial clinical assessment and was suddenly by a single doctor declared as do-not-resuscitate without a throughout evaluation

gammel pas. - færre tiltak igangsatt

pas m/emosjonell personlighetsforstyrrelse får dårligere behandling av pleiere fordi pleierne har en oppfatning om at de er plagsomme, oppmerksomhetssyke

på legekantor med mange asylsøkere fikk jeg inntrykk av at disse pas. ble tatt mindre alvorlig fordi legen mente de oftere kom til legen for bagateller

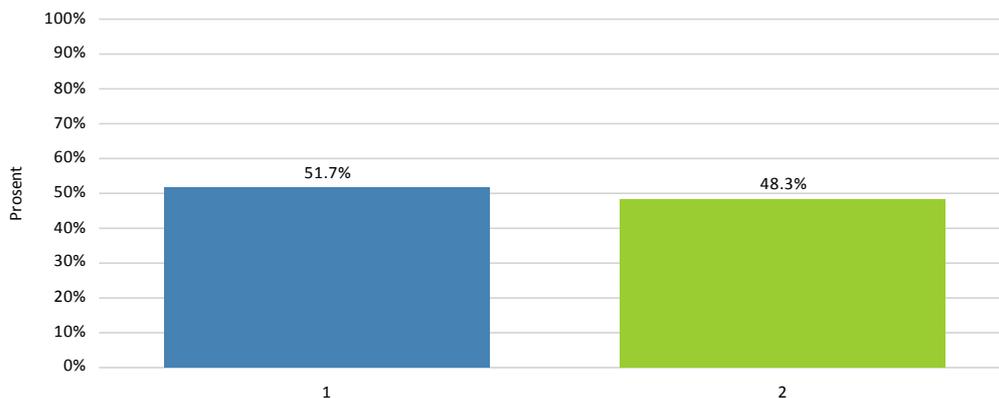
19. In the past year, have you seen or experienced what you think may have been a deviation (avvik) from the standard of care, best practice, or other evidence based guideline?



Navn	
1	Yes
2	No

Navn	Prosent
Yes	47,6%
No	52,4%
N	187

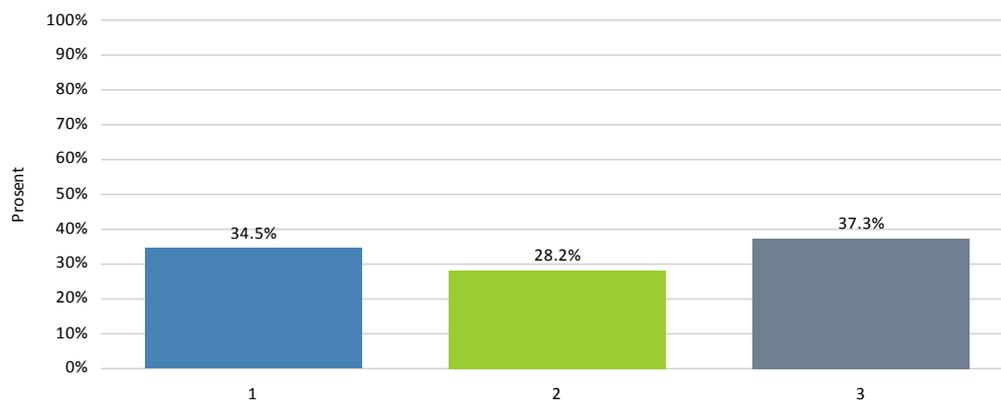
20. Did you speak to anyone about your concerns?



	Navn
1	Yes
2	No

Navn	Prosent
Yes	51,7%
No	48,3%
N	116

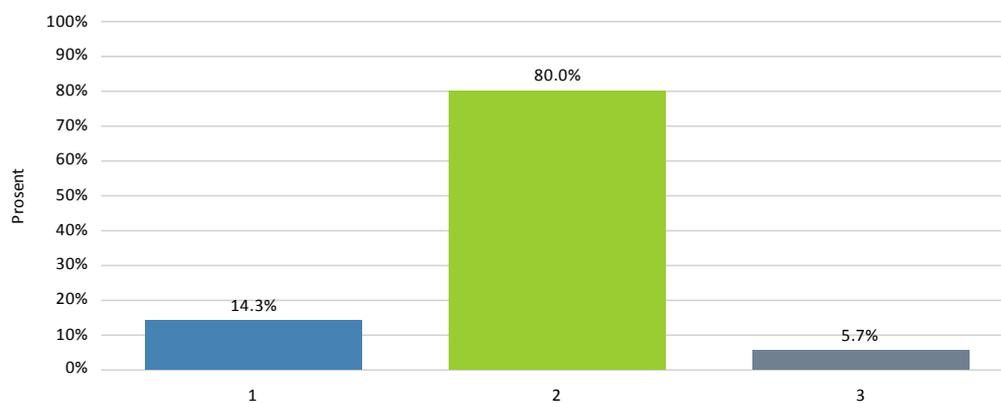
21. If you did speak to someone about your concerns, was a satisfactory explanation offered?



	Navn
1	Yes
2	No
3	I did not speak to anyone

Navn	Prosent
Yes	34,5%
No	28,2%
I did not speak to anyone	37,3%
N	110

22. Was there evidence of a change considered or implemented to prevent this from happening again?



	Navn
1	Yes
2	No
3	Other (please specify):

Navn	Prosent
Yes	14,3%
No	80,0%
Other (please specify):	5,7%
N	105

ikke aktuelt

Pågående opplæring av vikar ved hendelsen

Vet ikke utfallet.

23. Please describe the event here:

Ikke-kvalifisert personell fikk ansvar for å dele ut medisin

Deviated from the guidelines.

Generell holding i store deler av helsevesnet på at man gjør ting fordi man alltid har gjort det på den måten. Har opplevd å sette spørsmålsteget ved rutiner og henviser til evidensbaserte guidelines i UptoDate, BestPractice, McMaster+, men blitt møtt med en fullstendig uvitenhet om eksistensen av evidensbaserte retningslinjer og oppslagsverk eller en sur kommentar om at man ikke alltid skal tro på "ting man leser på internett".

Alle rekvisisjoner av klamydia genitalium-test blir automatisk testet også for gonore.

Alle med kols-forverring ble i mottak satt på antibiotika, uavhengig av klinisk status...

Patient on LCP regime was moved from hospital

Flere situasjoner med avvik fra protokoll - noen har jeg diskutert med overlege, andre ikke

Behandling av hyperglykemi/ketoacidose

Allmennleger som henviser mange pasienter til sykehus som ifølge retningslinjene kan behandles i allmennpraksis.

Dette skjer hele tiden i allmennpraksis. Mange fikk ikke behandling helt etter retningslinjer. har ikke noen spesiell situasjon å trekke frem.

Innleid legevikar med middelmådelige norskkunnskaper.

Lots of people dont know the guidelines and rely on what they've always done

Best practice og guidelines tar ikke hensyn til faktiske pasienter som er multimorbide, det er således ikke mulig følge opp samtlige guidelines som gjelder for pasienter med flere sykdommer.

Feilaktig oppstart av marevan, med for høy dosering og for lenge til kontroll.

Rutine controls after hospital stay.

Same situation as described earlier.

Samme som første hendelse som beskrevet i første oppgave om error. Hodets med bevissthetstap over et par min varighet uten nødvendig CT eller observasjonstid i etterkant.

Var alene med en dårlig pasient i noen timer da ingen av bakvaktene våknet av callingene. Var ikke mulighet for å gå og vekke den heller.

Det skjer stadig vekk at leger avviker fra det som er retningslinjer, vi snakker om det, ofte er det da snakk om at erfarne leger har egne oppfatninger om hva som fungerer, og bruker dette.

As described earlier I have several times during my intership at a psychiatric ward experienced that nurses and other health care providers ignored doctors order about blood sugar measurements, i.v. fluid treatment, and looking after patientes. This happend several times a day every day., mostly because of ignorance and a "bad culture"

A treatment which is used in a trial, not proven efficacy as of yet

pasientens tilstand gjorde avvik fra retningslinjer indisert

fjerning av føflekk med feil snittføring

Feil diagnose (en diagnose pasienten ikke hadde) ble beskrevet i journalen. Dette ble videreført til epikrise og pasientorientering. Pasienten reagerte selvfølgelig negativt til dette- belastning for pasienten

wrong medications, changed to the eight one after explaining

patient in fear of cancer had to wait 2 months before seeing the GP. In my opinion a short consult would have eased the far but secretary would not let patient through

ble tatt HbA1c med få ukers mellomrom

Not giving statins with high colesterol

pasient som kom inn med crp på 580 og ingen videre undersøkelser ble gjort i akuttmottaket. Ble sendt opp til avdeling fordi det var fullt der

Lokal bruk av antibiotika på follikulitt

AB gitt hos barn oftere enn retningslinjene sier

bruk av mer bredspektret AB enn retningslinjer tilsier

Ikke gitt medisiner etter protokoll.

a patient was treated with iv AB although the probability for a infection was quite low- just because another doctor who had hardly seen the patient had said so

Mange allmennleger gir råd utifra det de anser som best, men som ofte ikke er kunnskapsbasert. Fastlegen har gode erfaringer med rådet (ila en lang karriere) og gjør det uten vitenskapelig grunnlag.

indication for ct-caput in children with minor/moderat head injury

sacral nursing home patients were gicen both metoprolol and diltiazem

postoperativ smertebehandling

medisinering i psykiatrien - får med. som ikke følger nasjonale retningslinjer

AB-beh som er annleredes på lokalsykehus enn nasjonale retningslinjer

1) manglende avklaring av HLR minus, aktiv behandling +/- og sykehusinnleggelse +/- på sykehjem,
2)vedvarende tvangsmedisinering uten tvangsvedtak i sykehjem

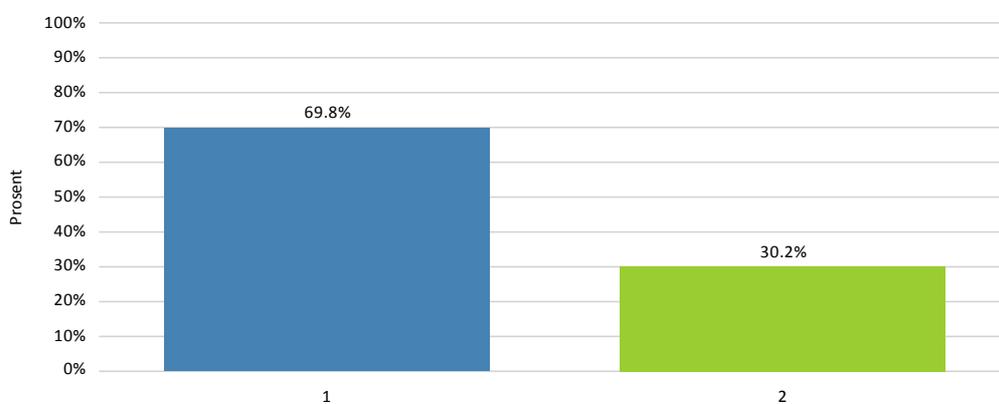
for dårlig kirurgisk håndvask (fulgte ikke gjeldende retningsliinjer)

antibiotics given for bronchitis

sykepleier hadde ikke nok tid /personell for tilstrekkelig monitorering av syk pas. Alle parter var enig i at det var et organisatorisk problem, men hjelptes å gjøre det beste av situasjonen

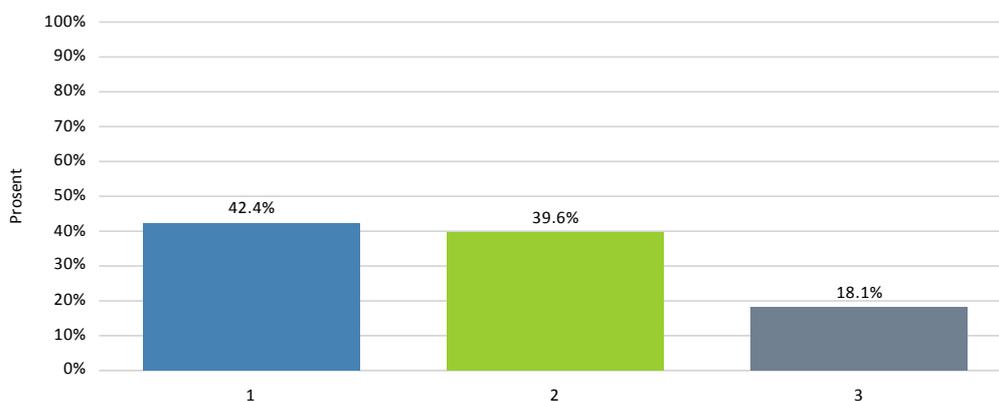
ved behandling m trombolysse ved hjerneslag ble ikke prosedyren fulgt slik at pas kom til CT etter 45 min

24. In the past year, have you seen or experienced what you think may have been an unnecessary waste of resources? For example, unnecessary imaging or labs or other misuse of medical resources?



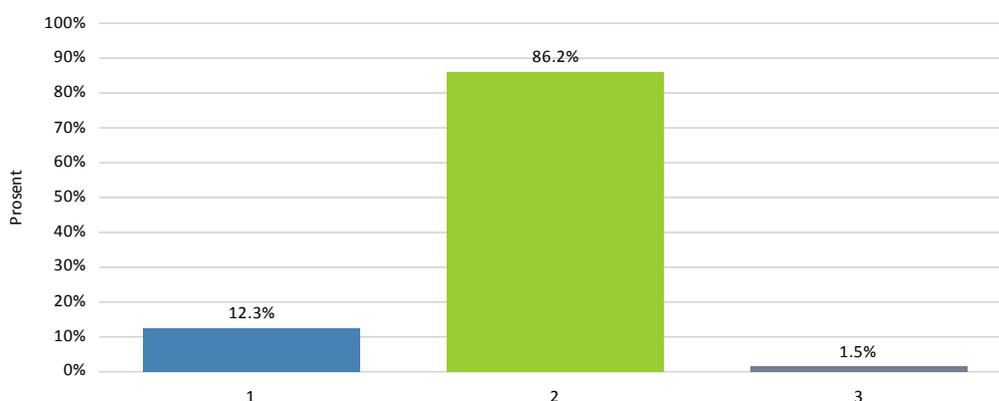
Navn	Prosent
1	69,8%
2	30,2%
N	189

25. Did you speak to anyone about your concerns?



Navn	Prosent
1	42,4%
2	39,6%
3	18,1%
N	144

26. Was there evidence of a change considered or implemented to prevent this from happening again?



Navn	Prosent
1 Yes	12,3%
2 No	86,2%
3 Other (please specify):	1,5%
N	130

27. Please describe the event here:

I believe there is a general misuse of resources

Unnecessary use of Xrays

CRP, Hb og StrepA blir svært hyppig brukt i allmennpraksis uten at indikasjonene blir godt nok vurdert.

MR

unødvendig billeddiagnostikk av krevende pasient

excessive use of antibiotics in almenpraksis

Undersøker pasienter unødig fordi de er engstelige - typisk angst/hjerteinfarkt; ingen hjertemarkører, ikke EKG-
endringer, tar likevel ekko cor + AKG

At mange ser ut til å ta ”unødvendige” lab- og rtg undersøkelser uten nødvendig indikasjon (særlig i
allmennpraksis)

CT abdomen on patients with diffuse stomachache, EKG and troponins on patient who fainted in the heath

Rtg thorax på si og si alle medisinske pasienter uten grunn for det

Some blood tests and imaging have become almost routine even if not strictly necessary.

For mange henvisninger til bildediagnostikk. Særlig kne og skuldre, henvisning til MR.

Bruken av MR for å diagnostisere knesmerter. De var enige i argumentasjonen, men de har ikke endret praksis.

Radiolog som ikke gidder å ta ultralyd, velger nesten alltid CT selv om ultralyd er bestilt. Snakket med overlegen om dette, de vet det er et problem, men gjør ikke noe med det.

imaging and unnecessary tests

Svært bred (ukritisk?) indikasjon for rtg thorax ved innleggelse ved medisinsk avdeling

Vært i praksis i allmennpraksis. En av legene der har en altfor stor tendens til å skrive ut B-preparater, ta PSA-undersøkelser og annen villscreening for sikkerhetsskyld, samt henvise for mye til undersøkelser som strengt tatt er unødvendig.

Ineffektivitet på sykehus. Leger som blir brukt som sekretærer, systemer som ikke fungerer

Routine CT on very poor indication, for instance tension type headache or peripheral vertigo. D-dimer for patients with other than low risk of DVT/PE.

Unnecessary imaging or lab to satisfy the patient.

Mange unødvendige undersøkelser gjøres for å forsikre seg om at en ikke overser sykdom. Spesielt unge (og samvittighetsfulle) leger gjør dette, eventuelt når problemstillingen er utenfor fagfeltet til en mer erfaren lege.

Feilaktig innkalling til røntgendiagnostikk.

Unødvendige blodprøver, CT, og andre prøver(f.eks spirometri)

Usage of MRI just because patients wants it...

A fellow doctor in the hospital (medical ward) ordered way too many expensive and often unnecessary tests (both imaging and labs) because he suspected extremely rare conditions and diseases.

I al.praksis, kommer de ofte med bestillinger ift MR, CT ++. Enkelte ganger kan det være vanskelig å avslå, til tross for at det ikke er medisinsk indisert.

Mange us gjøres på rutine.

Many cases of old pts with comorbidity doing biopsy/CT scans when results won't change the outcome
Terminal pts doing painful /unpleasant procedures

Mange overflødige CT-caput etter lettere hodetraumer i kirurgisk akuttmottak

Stadig taes bilder unødvendig, synes jeg.

Incompetent doctors and nurses ordering unnecessary blood test. Incompetent nurses not doing their job properly, making the doctors life harder. More a rule than an exception

rtg thorax tas på omtrent alle

billeddiagnostikk uten konsekvens for pasienten

overbruk av rtg thorax (brukt som rutine)

standard blodprøvepakker og rtg thorax ved pas. med brystmerter osv. Dårlig indikasjon, men noe som gjøres rutinemessig.

krysse av for ekstra blodprøver for "sikkerhets skyld". Gjøres overalt selv om det virker som de fleste er klar over at man bør unngå dette

Ekstra CT-scann

Mye bruk av bildediagnostikk- CT med kontrast for eksempel, for å helgardere seg --> forelå kanskje ikke noen klar indikasjon slik jeg så det. Konsekvens av at det forventes at man oppdager alt , lite kritikk for å gjøre for mye

unødvendig prøvetakning (lab)

we do a lot of radiography/x-ray when airway infection due to a missed pneumonia one time at the GP

pasient i allmennpraksis, skuldersmerter flere mnd, ønsket MR, fikk dette selv om det ble bestemt av lege som unødvendig fra et medisinsk perspektiv

Patient demands excess treatment.

use of x-ray or tests when the diagnosis could have been detected clinically

sende pas på røntgen når funnet ikke spilte noen rolle for behandling

ble gjort ct thorax og abdomen på pas med gi-blødning, fordi man ikke hadde tid til colonoskopi. Måtte ta colonoskopi etterpå allikevel

For liberal indikasjon på å ta urinstix på sykehjemmene og starte med antibiotika

patients with backpain that want MR

unødvendig bruk av MR-undersøkelse hos pasient med nyoppstått depresjon

”bundles” of lab workup. chest x-ray automatically ordered. Arterial blood gas for every patient

For mange blodprøver rekvirert (som ike har noe å si for behandling eller utfallet til pasientn), samme med rtg. thorax på sykehus <- det virker som man har veldig lav terskel for å ta det, uten at det er indikasjon alltid. Samtidig som det er stort trykk på radiologisk avd.

fastlegen gav etter, når pasienten krevde henvisning til MR, uten tilstrekkelig info. Fordi pasienten var vanskelig

overdreven bruk av rtg thorax/ct-caput

too much imaging or lab-test ”better to be safe”

barn av lege fikk MR etter kortvarig, lett belastningsrelatert knesmerte

mye radiologi for lumbago

pas som ønsker ”helsesjekk”- fastlege tar mange blodprøver. daglige blodprøver på sykehusavdeling uten indikasjon for prøvetakning

rtg thorax fordi pasienten ønsket det, uten at det var medisinsk nødvendig/indikasjon

”krav” fra pasientens sønn om CT-undersøkelse. Måtte ”strekke” indikasjonen litt for å kunne forsvare undersøkelsen

stadig og unødvendig blodprøvetaking som ikke fører til endret diagnostikk eller behandling

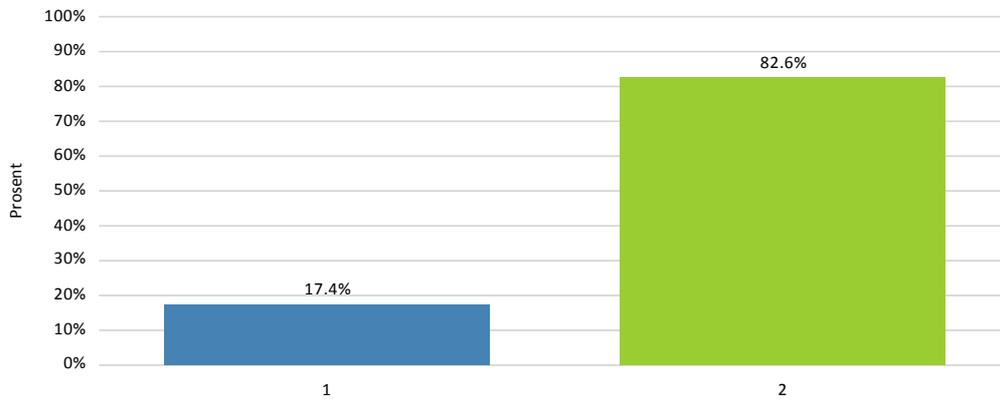
feks smitteregime, at alle inkl studenter tar ny frakk, bruker i 2 min og kaster

hyppigere kontrolltime av BT/BS pga ønske fra pas og ikke fordi det var grunnlag for det

dobbeltsjekking, ktr lab og bilder, selv om det utifra det kliniske bildet ikke er nødvendig. kontrollen ble tatt for å dokumentere sikkert at sykdommen var tilbakelagt, altså juridisk helgardering

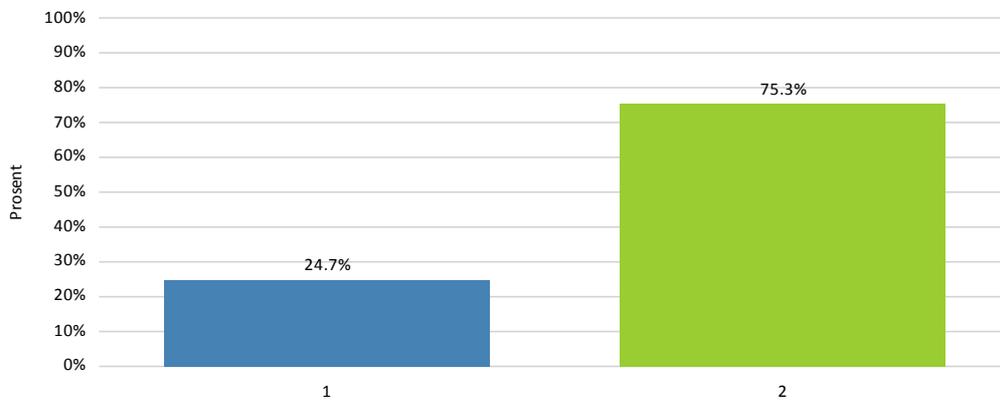
personalet tar med unøvendig mye utstyr (håndklær, bleier etc) inn på smitterom (som ikke blir brukt fordi man ikke sjekker hva som trengs først). tungvint når man må ta på alt smitteutstyr før man går inn. Har vært tatt opp på morgenmøte

28. In the past year, have you seen or experienced a deficit in a “patients first” attitude, where the care team put considerations other than the patient’s wellbeing first?



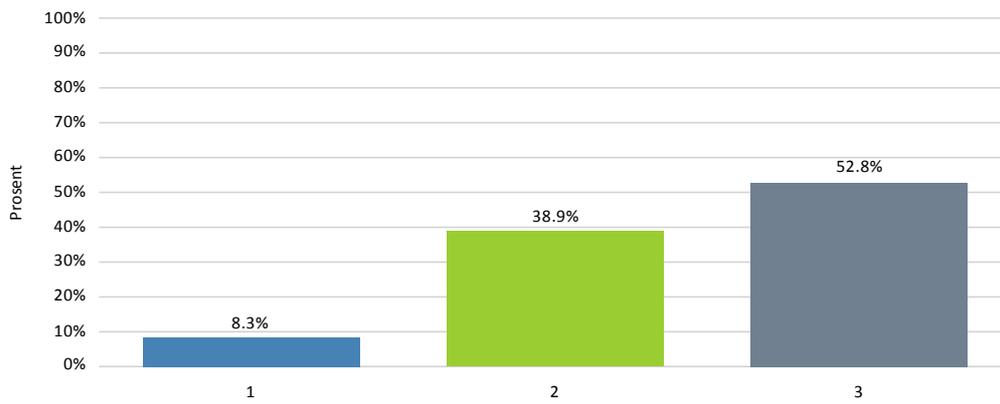
		Navn
1	Yes	
2	No	
Navn		Prosent
Yes		17,4%
No		82,6%
N		184

29. Did you speak to anyone about your concerns?



		Navn
1	Yes	
2	No	
Navn		Prosent
Yes		24,7%
No		75,3%
N		73

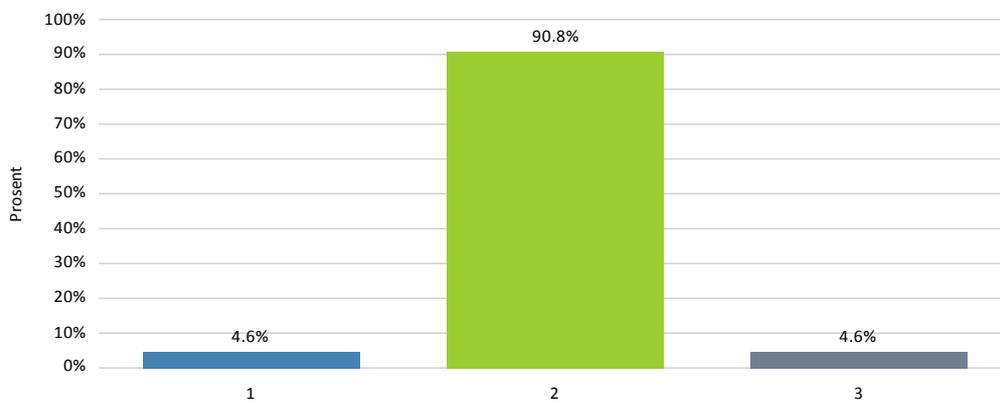
30. If you did speak to someone about your concerns, was a satisfactory explanation offered?



	Navn
1	Yes
2	No
3	I did not speak to anyone

Navn	Prosent
Yes	8,3%
No	38,9%
I did not speak to anyone	52,8%
N	72

31. Was there evidence of a change considered or implemented to prevent this from\ happening again?



	Navn
1	Yes
2	No
3	Other (please specify):

Navn	Prosent
Yes	4,6%
No	90,8%
Other (please specify):	4,6%
N	65

ikke aktuelt

32. Please describe the event here:

Veldig strikt tolkning av "akutt hendelse" som grunn for CT på kveld/natt og helger, slik at bildet ikke ble tatt før neste arbeidsdag.

Sending av pasienter mellom sykehus

Kreftpasienter skal starte opp behandling innen en viss dato etter diagnosen er stadfestet. Dette var ved flere tilfeller ikke mulig grunnet sommerferieavvikling hos legene.

Alkohol/ruspåvirket pasient som slåss med samboer og "revet ned" hele leiligheten. Psykiatribakgrunn - ble sendt i fyllarrest, truet med selvmord (hadde tidl. forsøk) hvis hun ikke ble lagt inn på sykehus

I think in general I have experienced that patients come first. BUT, for some reason, doctors dont always communicate information so well to the patients. It would be really helpful if doctors made it a routine to say to the patients "could you please summarize what i just told you? I want to make sure that you understand your diagnosis/treatment plan." It is important to "patients first" that they understand the information given!

Terminal patient with severe dementia. Because the family threatened with lawsuit, the patient was admitted and given i.v. treatment instead of best terminal care at the community hospital. The interests of the family were weighted more than the patient interests.

En avtroppende turnuslege fortalte at hun var uenig i at Bakvakt ønsket å sende hjem en dame med akutt abdomen og crp >200 fra akutt mottaket med po antibiotika grunnet plassmangel men Turnuslege tok det opp med Bakvakt at hun var uenig og pasienten ble innlagt.

Many situations where it seems personal pride is way more important than the patient.

Nurses in psychiatric ward caring primarily about their feelings and their need of feeling involved. The patients were always second to some. I believe this is very common, my experience is with psychiatric nurses. Also nurses at the orthopedic clinic making the interns doing their job because 1) to prove a point and b) because they do not care

Nurses prioritizing excessive breaks >1h instead of treating waiting CAD patients who were waiting for PCI

pasienten ønsket å dø. ikke samtykkekompetent? tror det. fortsatte med relativt omfattende og behandling

"Plagsom pasient". Han kan bare vente

doctors that put their own personal pride and stubbornness after having made decisions, not listening to patients wishes

palliative care of metastised cancer

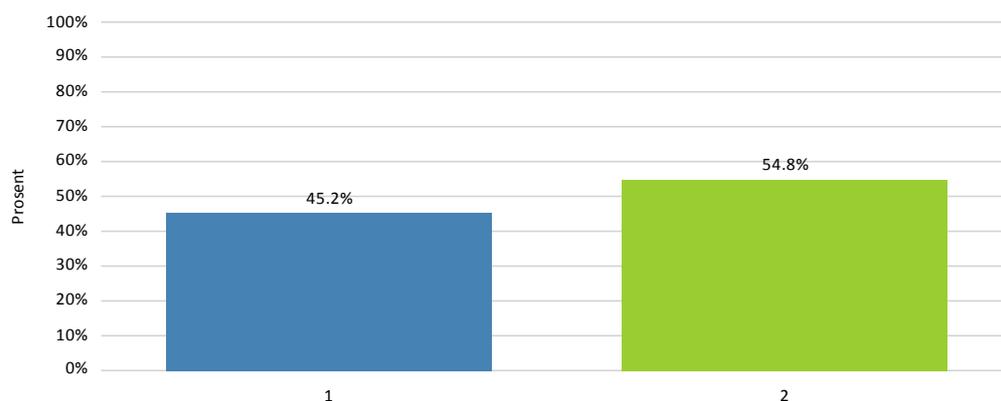
unngå å legge inn pasienten grunnet mangel på sengeplass (ikke uforsvarlig å sende pas hjem, men pas ønsket selv innleggelse), kom neste dag isteet

en pasient med personlighetsforstyrrelse som var voldtatt ble ikke tatt alvorlig av sykepleierne

prioritering i forhold til ressurser, ikke pasientens beste

klokker som ringer på sengepost når alle tar lunsj samtidig (dårlig organisert) gjør at pas må vente lenger

33. Has the experience of any of the above events affected your view of the practice of medicine, and if so, how?



Navn	
1	Yes
2	No

Navn	Prosent
Yes	45,2%
No	54,8%
N	168

34. If yes, please describe:

Helsepersonell er også mennesker, med uensartet oppfatning av hva som er indisert og hvor fort dette skal gjøres.

Billedundersøkelser gjøres noen ganger i terapeutisk øyemed, uten at det vil ha noen konsekvenser for behandling.

That even rutined doctors can do wrong and we can og bør hjelpe hverandre om vi ser noen gjør feil.

Det skjer mer feil enn man tror.

Sometimes the patient safety is not the top priority.

Our health systems has several rooms for improvement.

Pasienten settes ikke først

Always double check your own and others prescriptions

Jeg har blitt mye mer bevisst på hvor mange feil som gjøres i helsevesenet som pasientene ikke er klar over, hvor ineffektivt helsesystemet opererer og hvor vanskelig det er å innføre nye rutiner. Det gjør at jeg er mye mer desillusjonert på vegne av det norske helsevesenet og min egen rolle som praktiserende lege enn det jeg var når jeg begynte å studere medisin. Men det jeg virkelig verdsetter ved å skulle praktisere medisin i det norske helsevesenet er at jeg alltid har opplevd at alle pasienter behandles likt.

Pasientene må være oppmerksomme på oppfølgingen de får, det kan skje flere glipp på veien, behandlingen kan komme senere enn de har krav på, eller de kan bli "glemt" i systemet.

Bureaucracy and laching/misplaced resources actively prevent adequate patient-altered care: too few doctors have to consider too many patients in too small places with too much paperwork

Ønsker behandle pas. på samme måte, uansett sosial klasse m.v.

Vil svært gjerne følge retningslinjer og protokoller for pasientens skyld - men også for å ikke få skyld om noe går galt.

Kun ta nødvendige undersøkelser, dobbeltsjekke pas-identitet osv.

Tettere kommunikasjon mellom turnus - lis- overlege forhindrer feil og unødvendig tidsbruk som går utover pasientene

På studiet lærer vi for lite om behandling. Det burde inngå mer.

Vurdere og evaluere de avgjørelsene vi tar, samt diskutere de i felleskap. Vi tar generelt for mange tester for å sikre oss.

Jeg har vel innsett at det er stort forbedringspotensiale i helsetjenesten, og at det vi har av systemer i dag kanskje ikke er det beste.

around medication and the importance of communication between the different health groups

More focus on this subject! :) patient safety <3

Treatment of dementia

Man blir mer bevisst på sin egen rolle i pasienthåndteringen for å sikre likhet for pasientene. Utvilsomt dårlig pas.sikkerhet med 19t-vakter for turnusleger alene i mottak, sårbart system hvor en person kan gjøre stor skade. . Jeg stoler mindre på ”andre” (leger/sykepleier etc) sine funn og vurderinger. Jeg er kritisk til hvor informasjonen kommer fra.

Valg av videre spesialisering

The communication between hospitals and primary physicians should be more detailed in expected followups in primary care.

I've been more aware of the importance of avoiding unnecessary diagnosing and/or treatment (as I've seen what the consequences can be).

Jeg er mer oppmerksom på at pasienter kan bli skrevet ut for tidlig eller få mangelfull behandling og har dette i bakhodet.

Jeg er veldig fornøyd med mine opplevelser rundt pasientsikkerhet ved Haukeland Universitetssykehus.

Overrasket over hvordan noen prioriterer å sove framfor å jobbe og dele byrden, dette være seg leger eller spl som ikke vil koordinere seg litt annerledes denne natten for å få inn en akutt operasjon som hadde vært til beste for pasienten.

Trust issues. I doublecheck all information

Mange pasienter overutredes, uten at det gjøres særlig mye tiltak for å forhindre dette.

Man lærer fort at det er en annen virkelighet når man begynner å jobbe, enn den som beskrives på studiet og i bøkene. Man står ovenfor et helt annet press, fra pasientene, fra kollegaer, fra systemet og fra budsjettene.

Når jeg selv gjør feil som jeg blir oppmerksom på, blir jeg flittigere å følge gjeldende guidelines

I am disillusioned. I want to work private

mer oppmerksom på å tenke indikasjon for undersøkelse

Å kjempe pasientens sak i større grad, selv om jeg er ”nederst på rangstigen” og overlegen/ass.legen ikke tar ting nok på alvor

jeg må ikke la andre avgjøre hva jeg skal utsette pasientene for, jeg må spørre flere overordnede først ihvertfall

mistakes do happen, and everything take much longer time then it could

det tas ofte ekstra prøver i frykt for å ikke oppdage noe som ikke er sett klinisk. Lav terskel for å legge til et par ekstra kryss på en rekvisisjon mens man alt tar en blodprøve. Uheldig, men ”komfortabelt”

Mye helgardering. Mer fokus på avansert bildediagnostikk enn nøye anamnese og klinisk undersøkelse. Lite rom for å si at man ikke skal utrede mer dersom man ikke har gjort mye allerede

Blitt oppmerksom på at feil skjer ofte på sykehus, i helsevesenet, spesielt mtp medisinerer

Clinical decisions cannot always be based on guidelines alone.

man må dobbeltsjekke, stå på, være veldig nøyaktig for at ting skal bli gjort

være skeptisk til ”livslang erfaring” blant pleiepersonell/sykepleiere. Samt være forberedt på holdninger blant ansatte ifht spesielle pasientgrupper

it is more about money, time than the patients wellbeing, in many cases

”god behandling” krever våkent personale, både når det gjelder oppdatert unnskap, logistikk, individuelle hensyn og et velfungerende system

jeg har lært av andres feil

concerned with patient autonomy. knowledge before professional position

mye tilfeldigheter i behandlingsprodukter, avhengig av stedet man er på. Enormt ansvar for det svakeste/minst erfarne leddet - turnuslegen. For lite bemanning og lang arbeidstid = farlig for pasienten

ta seg tid til å lytte til pas. kommunisere, verdien er uvurderlig

find a validated guideline!

To be more careful. Put the responsibility on other health care workers

I’m more aware of the fact that errors occur. In my opinion errors happen in most cases due to lack of staff and stressed nurses

complicated. many contributions to health care. difference between probable disease and the tests to ensure that serious conditions are not present

mennesker feiler

man bør tilstrebe å følge retningslinjer, samt å bli bedre til å melde feil og mangler

folk gjør feil, men ønske om forbedring er tilstede

viktigheten av gode systemer i klinisk praksis. Mindre interesse for ”klassiske medisinske fag”, større interesse for klok. Større mulighet til å hjelpe flere gjennom forbedringsarbeid enn selvstendig lege

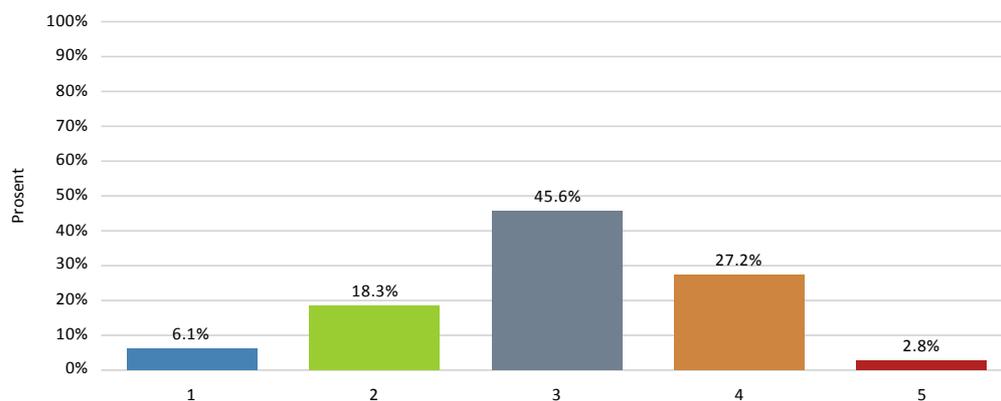
i for stor grad ”sånn er det her” mentalitet. i enkelte tilfeller uprofesjonalist. for stor vaktbelastning på både leger og sykepleiere- ressursmangel- dette fører til farlige situasjoner

plass/ressursmangel leder til forsinkelser som kan være skadelig for pasientene

many doctors oking at the same place for many years aren’t really open for changes; we do it like we’ve always done it. New doctors aren’t always heard when they want to make changes for the better

ikke alltid pasientforløpet avgjøres utifra det kliniske bildet, men heller på grunnlag av ressurser og juss

35. In general, over the past year, how comfortable have you felt approaching your residents (assistentleger), attendings (overleger), or other clinical leaders about the issues discussed above?



Navn

1	Never comfortable with asking
2	Sometimes comfortable, but not enough to ask
3	Usually comfortable enough to ask
4	Almost always comfortable enough to ask questions
5	Other (please specify):

Navn

Prosent

Never comfortable with asking	6,1%
Sometimes comfortable, but not enough to ask	18,3%
Usually comfortable enough to ask	45,6%
Almost always comfortable enough to ask questions	27,2%
Other (please specify):	2,8%
N	180

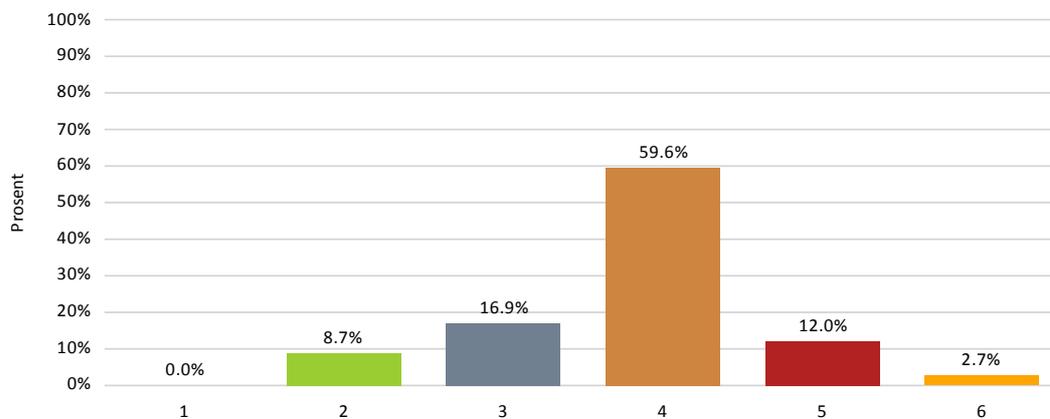
ikke relevant

always

Did not experience anything

ukomfortabelt å spørre - spør likevel (når jeg tør)

36. How often during the past year did you witness an avoidable event you felt had negatively impacted a patient's health (e.g. medical error, delay in care, disparate care, unnecessary testing, incomplete medical workup, etc)?



	Navn
1	Daily
2	Weekly
3	Monthly
4	Less than 6 times a year
5	Never
6	Other (please specify):

Navn	Prosent
Daily	0,0%
Weekly	8,7%
Monthly	16,9%
Less than 6 times a year	59,6%
Never	12,0%
Other (please specify):	2,7%
N	183

don't remember

1 gang på ett år

Mulig jeg har opplevd noen, men ingen jeg kan huske nå. Det er uansett svært få.

1 gang

Husker ikke
