Adherence to the surgical safety checklist: cross-sectional surveys at two Annual Meetings of Surgery

Technical report

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Abstract

Background: In 2008, the World Health Organization (WHO) launched the Surgical Safety Checklist (hereafter, the "checklist") to increase the safety and security of surgery. Attitudes toward the checklist, especially its efficacy, are mixed. Additionally, the frequency of wrong site surgery among Swiss surgeons and anaesthetists is not known.

Objectives: To describe the use of the checklist among Swiss surgeons and anaesthetists two years after its international launching, their self-reported compliance and attitudes toward the checklist and their number of self-reported participation to wrong-site errors.

Methods: Cross-sectional surveys at two meetings of surgery, in 2010, in Switzerland: 97th Annual Meeting of the Swiss Society of Surgery, Interlaken, 26th-28th of May, and the 45th Annual Meeting of the European Society for Surgical Research, Geneva, 9th-12th of June.

Results: In the first meeting (Interlaken), 433 questionnaires were distributed and 152 returned (participation rate = 35%). 64.7% respondents acknowledged having a checklist in their hospital or their clinic. Median implementation year was 2009. More than 8 out of 10 respondents reported they team applied the Sign In and the Time Out very often or quasi systematically, whereas almost half of respondents acknowledged the Sign Out was applied never or rarely. Respondents agreed that the checklist improves safety and team communication, helps to develop a safety culture. However, they were mitigated about the opinion that the checklist facilitates teamwork and eliminates social hierarchy between caregivers. Self-reported participation in surgical procedure where an operating site error (wrong side, level, procedure, or patient) took place (*no matter who were the persons responsible*), during the entire career, was 42.8%.

In the second meeting (Geneva), 400 questionnaires were distributed and, after returned, 38 were usable (participation rate = 9.5%). 68% acknowledged having a checklist in their hospital / clinic, for a median year of implementation in 2009. Respondents reported they team applying very often or quasi systematically all sections of the Checklist (Sign In, Time Out and Sign Out). Respondents agreed the checklist as tool for improving safety procedures, team communication, teamwork, and safety culture. However, they were mitigated about the scientific evidence of its efficacy and the opinion that it eliminates social hierarchy between

caregivers professions. Self-reported participation in surgical procedure where an operating site error (wrong side, level, procedure, or patient) took place (*no matter who were the persons responsible*), during the entire career, was 8%.

Conclusion: Use of the checklist among Swiss surgeons and anaesthetics participating to the meetings is spreading. Attitudes of respondents toward the checklist are generally good. Proportion of surgeons and anaesthetics reporting participation in surgical procedure where an operating site error (wrong side, level, procedure, or patient) took place was not negligible, suggesting that Swiss doctors are disposed to report their errors.

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1. Background

Despite its rarity, wrong site surgery (i.e., wrong-site site / side / patient / procedures errors) is subjectively very distressing.

Risk of surgical errors is not only related to physical characteristics of patient, emergency cases, complexity of procedures, time pressure[1], but also to working in team with different professions, to communication problems[2] and to operator workload[3].

To improve the safety of surgical interventions within the complex environment of operating rooms, various safety checklists have already been adopted in hospitals throughout the world[4-7] over the last decade [8]. In 2008, the WHO launched the Surgical Safety Checklist (hereafter, the checklist) to reduce communication breakdown in the operating room[9]. The checklist has been shown to improve patient clinical outcome and has been widely distributed throughout the world [10-12].

According to the WHO, around 300 professional agency and organizations around the world endorse the checklist[13]. Despite health authority support and growing scientific evidence, implementation of surgical safety checklist remains relatively slow. Several years are needed to change attitudes and practices of team operating theaters[14].

We do not know if Swiss surgeons and anaesthetists are using a safety checklist before operating patients and whether they are, or not, convinced about its efficiency and utility. Moreover, we do not know of the frequency of wrong site surgery among Swiss surgeons and anaesthetists.

The emerging culture of safety and security among healthcare professionals suggests that a survey focused on this highly sensitive topic might be favourably welcomed while providing interesting results that will pave the way to develop new research protocols on quality of perioperative care.

2. Objectives

The present research addresses the following main objectives:

1) To investigate the implementation of checklists among Swiss surgeons and anaesthetists.
2) To explore the self-reported compliance and attitudes toward the safety checklist, among surgeons and anaesthetists.
3) To explore the number of self-reported wrong-site errors among surgeons and anaesthetists.

Secondly, it will examine the following secondary objectives:

4) To compare attitudes toward the checklist between surgeons and anaesthetists who use the checklist and those not.
5) To describe socio-demographics associations with safety culture.

3. Methods

Design:

Cross-sectional survey, with self-administered questionnaire. The same questionnaire (four language versions: German, French, Italian and English – see Annexes) was administered in two settings.

Settings:

Setting 1) 97th Annual Meeting of the Swiss Society of Surgery, Interlaken, 26th-28th of May, 2010, in combination with the Swiss Society of Society of Anesthesiology and Reanimation (http://www.chirurgiekongress.ch/)

Setting 2) 45th Annual Meeting of the European Society for Surgical Research, Geneva, 9th-12th of June, 2010 (http://www.essr2010.ch/)

Population study:

Setting 1) all participants to the meeting (mainly surgeons and anesthetists). Between 1'100 and 1'300 participants were expected.

Setting 2) all participants to the meeting (mainly surgeons). Between 300 and 350 participants were expected.

Dependent variables:

- implementation of checklists among participants' hospitals/clinics
- self-reported compliance to the surgical safety checklist at the operating room
- attitudes toward the surgical safety checklist
- attitudes toward safety culture (5 items selected and adapted from the Pharmacy Safety Climate Questionnaire[15]; see annex D)
- self-reported number of participation to wrong site surgery (site / side / procedure / patient error) throughout the career and during the last three years

Independent variables:

- attitudes toward security at the operating room (2 items)
- sociodemographics variables (age, sex)

- medical specialty (surgeons, anaesthetist)
- work experience (years in practice)
- main location of practice (public hospitals, private hospitals, private practice)
- self reported annual operative load (number of interventions or procedures per year)
- postgraduate medical training abroad (yes or no)

Administration of the questionnaire:

Participants were invited to fill in the questionnaire during the Meeting. Participants received a short (1 page, double-sided) questionnaire with an introductory letter – see Annexes.

Setting 1) The letter and the questionnaire were translated from French into German and Italian. Translations were conducted by two translators and pre-tested.

Participants were invited to fill in the questionnaire during the "Surgery/Anaesthesia day" of the Meeting, i.e. Friday 28th of May 2010, conducted in combination with the Swiss Society of Thoracic and Cardiovascular Surgery.

7 bilingual medical students distributed the questionnaires. Participants who returned their questionnaire received a small Swiss chocolate.

Setting 2) The letter and the questionnaire were translated from French into English. Translations were conducted by one translator and pre-tested.

Questionnaires were distributed within the package delivered to the participants.

Analysis:

General linear models were used to examine predictors of the attitudes toward surgical safety checklist and teamwork functioning. Alternatively, logistic regression models were used to examine the self-reported compliance to surgical safety checklist.

Limitations:

- Possible selection and omission bias due to the highly sensitive topic.

- Possible bias due to the fact that some institutions use to send a relevant part of their staff to such congresses (bias of the proportion of implementation of checklists among participants' hospitals/clinics)

4. Guarantee of anonymity of the data

The present topic is highly sensitive. Therefore, we had to guarantee that the data collected would be completely anonymous.

Anonymity:	no information allowing identification were asked (first name, last name, or exact date of birth, name of the institution, nor the city or Canton name of practice).
Data storage:	during the analysis, data were stored on a protected directory of the Quality of care Service (University Hospitals of Geneva) at the end of the study (publication of the results), data will be transferred on a CD-Room and kept (with the questionnaires) in a closed storage cupboard of the Quality of care Unit. Data originally stored on the protected directory will be deleted.
Data access control:	access to data stored on the Quality of care Service was restricted by password to the principal investigator of the study (Stéphane Cullati) and the director of the Quality of care Service (Dr. Pierre Chopard)

5. Acknowledgments

We thank the Chairmen of the Swiss Society of Surgery and the Swiss Society of Anesthesiology and Reanimation, respectively Dr. Othmar Schöb and Dr. Tiziano Cassina, for their authorization and their support to conduct the survey at the 97th Annual Meeting of the Swiss Society of Surgery, Interlaken, 26th-28th of May 2010. We thank Dr. Valentin Neuhaus, University Hospital of Zurich, for his support during the data administration (setting 1).

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6. Results

6.1. 97th Annual Meeting of the Swiss Society of Surgery, Interlaken, 26th-28th of May, 2010, in combination with the Swiss Society of Society of Anesthesiology and Reanimation (http://www.chirurgiekongress.ch/)

6.1.1. Data collection and sample description

Medical students distributed 433 questionnaires. 152 questionnaires were returned (128 in German, 23 in French, 1 in Italian). Participation rate was 35%.

The respondents included 37.4% women. Respondents' mean age was 45 years (standard deviation (SD) 11 years, Min=20, Max=79) and 31.1% did a postgraduate training in another country (60.6% didn't and the question was not applicable for 8.3%). Most were surgeons (61.6%), one third (34.1%) were anaesthetists (Nurse: 3.6%; Others: 0.7%). Mean number of years of practicing in surgery/anaesthetics was 15.6 (SD 10 years, Min=1, Max=40) and median number of interventions/procedure performed each year was 500 (Mean 833, SD 1325, Min=20, Max=8000). Surgeons who described their clinical specialty (N=49) were: general surgeons (47%), digestive surgeons (27%), trauma surgeons (10%), vascular surgeons (4%) or practiced a combination of surgical specialties (12%). 16.5% of respondents were working as private practitioners (consulting rooms, either alone or with colleagues), the rest were employed in non-university public hospitals (73.6%), university hospitals (14.4%) and private hospitals/clinics (12%).

6.1.2. Implementation of checklists among surgeons and anaesthetists and self-reported compliance

Almost two out of three respondents (N=97, 64.7%) acknowledged having a surgical safety checklist similar to the one proposed by the WHO in their hospital/clinic. 27.3% responded that their institution did not have a surgical safety checklist implemented (4.7% didn't know, 3.3% didn't know this surgical safety checklist; 2 respondents skipped the question). The institutions in which respondents performed their surgical procedures were

mainly non-university public hospital (70.9%), followed by private hospital/clinic (17.2%) and university hospital (11.9%).

Discussion: This result is not representative of the implementation of surgical safety checklists among Swiss hospitals and clinics. However, it suggests that the checklist is spreading among operating theatres where Swiss surgeons and anesthetics are performing their procedures.

In France, 80% [16]. In UK, a survey among 238 hospitals showed that two-thirds of them used the checklist as mandatory[17].

In the context of emergency medicine, the spread of the Checklist is higher: 87% of US emergency physicians reported that time out was warranted by their Emergency Department[18].

Limitation: it is expected that an unknown proportion of respondents worked in the same institution; consequently, we cannot assume that 97 Swiss institutions implemented the checklist.

The median year of implementation of the surgical safety checklists in hospitals/clinics' respondents was 2009 (2007 and before = 5; 2008= 19; 2009=44; 2010=16; missing=68).

We asked respondents if their hospital/clinic's checklist received support from senior managements at the time of its implementation. Answers are given in the following table:

"In your opinion, to what extent was the implementation of the checklist supported by…"	No support or little support	Medium support	Strong support or very strong	Mean* (SD)
your hospital/clinic senior management (N=73)	6.8%	15.1%	78.1%	4.27 (0.96)
the department of surgery senior management (N=89)	5.6%	19.1%	75.3%	4.24 (0.95)
the department of anaesthesiology senior management (N=86)	3.5%	5.8%	90.7%	4.56 (0.81)
the nursing department (including instrumentists) senior management (N=81)	22.2%	11.1%	66.7%	3.84 (1.27)

* No support = 1, Little support =2, Medium support=3, Strong support=4, Very strong support=5

Discussion: respondents reported less support from the Nursing Department Senior Management, compared to the other Senior Managements.

We asked the respondents if the implemented checklist comprised the following sections: Sign In (before induction of anesthesia), Time Out (before skin incision), Sign Out (after the procedure) and other sections. If yes, for each section, respondents were asked to report if the checklist section was applied (never, rarely, partially, very often, quasi systematically) within their surgical/anesthetic team (or the one with which they operate most often). Answers are given in the following table:

	Yes	If yes, applied:				
		Never (0%) or rarely (1-29%)	Partially (30-59%)	Very often (60-90%) or quasi systematically (>90%)	Mean* (SD)	Missing
Sign In (N=94)	91.5%	4.5%	5.6%	89.9%	4.6 (0.9)	5
Time Out (N=101)	96.0%	8.2%	9.3%	82.5%	4.4 (1.0)	4
Sign Out (N=87)	49.4%	45.2%	8.2%	46.6%	3.0 (1.8)	14
Other section (N=45)	26.7%	63.6%	0%	36.4%	2.5 (1.9)	12

* Never= 1, Rarely=2, Partially=3, Very often=4, Quasi systematically=5

Discussion: it should be noted that one out of two respondents reported no Sign Out comprised in their hospital/clinic's checklist. Moreover, respondents reported discrepant views about the application of the Sign Out.

In a before/after implementation study in UK, compliance with pre- and post-operative checks was 61.2% and 67.6%, respectively, before implementation, and improve to 79.7% and 84.7% after 1 year[19].

After introduction of the checklist in a Spanish hospital, 95.7% of professionals reported using always or almost always the checklist[20].

6.1.3. Self-reported attitudes toward the safety checklist

We used 8 items to evaluate the participants' general attitude toward the safety checklist. The question was "Regarding the use of the checklist in operating theatres, to what extent are you in agreement with the following opinions". Answers were given on a scale from 1 (don't agree at all) to 5 (fully agree) (see Table below).

The checklist…	Don't agree at all or don't agree	Partially agree	Fully agree or agree	Mean* (SD)
improves the safety of procedures (anaesthetic and surgical) (N=143)	5.6%	4.9%	89.5%	4.5 (0.9)
is a waste of time (N=138)	68.8%	15.9%	15.2%	2.1 (1.2)
improves team communication (related to safety) (N=141)	12.1%	19.1%	68.8%	3.8 (1.1)
brings no extra value to *existing* safety procedures already in place in my hospital/clinic *before* its implementation (N=130)	61.5%	20.8%	17.7%	2.3 (1.2)
helps to develop a safety culture in surgical teams (N=138)	10.1%	14.5%	75.4%	4.0 (1.1)
has not demonstrated its efficacy in the scientific literature (N=95)	53.7%	24.2%	22.1%	2.4 (1.3)
facilitates teamwork (N=136)	21.3%	33.1%	45.6%	3.4 (1.1)
eliminates (during the controls) the hierarchy between healthcare professionals (N=127)	43.3%	31.5%	25.2%	2.7 (1.2)

* Don't'agree at all= 1, Don't agree=2, Partially agree=3, Agree=4, Fully agree=5

Discussion: respondents agree that the checklist improves the safety of procedures, improve team communication, help to develop a safety culture and disagree with the opinions that the checklist is a waste of time, brings no extra value to safety procedures already implemented in their hospital/clinic and has not demonstrated its efficacy. Respondents are mitigated about the opinion that the checklist facilitates teamwork and eliminates the social-professional hierarchy between OR's caregivers.

Compared to other studies, our results are similar on the following items:

- *"improves the safety of procedures"* [16].
- *"is not a waste of time"* [16]. *However, a qualitative study conducted among OR managers responsible for the implementation of the checklist reported that the contrary*[21].
- *"improves team communication": in a before/after implementation survey, 69.6% of staff reported improvement in interprofessional communication*[19]. *However, in a Spanish survey, 32.5% of professionals agreed with this item*[20]. *A randomized clinical trial showed that surgeons in the checklist group were more likely to involve positive safety-related team behaviors*[22]

We compared the attitude toward the checklist between surgeons and anaesthetists who use the checklist and those not. Respondents were grouped whether they were operating in hospital with checklist or not (question n°2 of the questionnaire). Results are given in the following table:

Proportion of "Fully agree or agree" with the following items: *The checklist…*	Respondents operating in hospitals with checklist (N=97)	Respondents operating in hospitals without checklist (N=48)	Exact p-value for ordinal distribution
improves the safety of procedures (anaesthetic and surgical) (N=141)	91.7%	86.7%	0.556
is a waste of time (N=136)	10.8%	23.3%	0.005
improves team communication (related to safety) (N=139)	73.4%	60.0%	0.140
brings no extra value to *existing* safety procedures already in place in my hospital/clinic *before* its implementation	14.0%	23.8%	0.020

(N=128)			
helps to develop a safety culture in surgical teams (N=136)	70.7%	86.4%	0.493
has not demonstrated its efficacy in the scientific literature (N=93)	16.4%	31.3%	0.030
facilitates teamwork (N=134)	45.6%	47.7%	0.816
eliminates (during the controls) the hierarchy between healthcare professionals (N=125)	24.7%	27.5%	0.197

Discussion: respondents working in hospitals where a checklist was not implemented reported higher proportion of agreement with the opinions that the checklist is a waste of time, brings no extra value to existing safety procedures and has not demonstrated its efficacy in the scientific literature.

6.1.4. Attitudes toward the safety culture

We selected and adapted 5 items of the Pharmacy Safety Climate Questionnaire, to evaluate participants' perception of the safety culture within the team. The question was "If you think about your *anaesthetic/surgical* team, to what extent are you in agreement with the following opinions". Answers were given on a scale from 1 (don't agree at all) to 5 (fully agree). Answers to the items were as follow:

	Don’t agree at all or don’t agree	Partially agree	Fully agree or agree	Mean* (SD)
Staff routinely discuss ways to prevent incidents from happening again (N=135)	27.4%	28.1%	44.4%	3.4 (1.2)
The culture is one of continuous improvement (N=138)	8.0%	25.4%	66.7%	3.8 (1.0)
The team has a shared understanding and vision about safety issues; everyone is equally valued and feels free to contribute (N=136)	16.9%	30.1%	52.9%	3.5 (1.1)
Staff feel free to question the decisions or actions of those with more authority (N=135)	23.7%	31.9%	44.4%	3.3 (1.1)
There is a blame culture, so staff are reluctant to report incidents (N=129)	64.3%	20.2%	15.5%	2.2 (1.2)

* Don’t agree at all= 1, Don’t agree=2, Partially agree=3, Agree=4, Fully agree=5

After reversing the item “blame culture”, correlations between the items ranged from -0.01 to 0.69 and the Cronbach α coefficient was 0.73. One item (“blame culture”) had a correlation coefficient close to zero with most of other items and was therefore removed. Within the reduced 4-items scale, correlations between the items ranged from 0.48 to 0.69 and the Cronbach α coefficient was 0.83. A principal component analysis extracted one factor explaining 67% of the variance. Based on this reduced 4-items scale, we computed a mean score for safety culture from 0 (low safety culture of the team) to 100 (high safety culture of the team). The mean score was 40.6 (Median 37.5, SD 19.6).

Safety culture decreased significantly as age of respondent increased (standardized slope -0.36) and as the number of years of practice increased (-0.42) and was higher among respondents working in a hospital (public or private) and those not having completed a postgraduate training abroad – see table below.

Score of safety culture (univariate analysis)	Mean	p-value[a]
Sex		0.13
women	44.0	
men	38.5	
Age	-	<0.000[b]
Profession		0.49
surgeon	39.2	
anaesthetist	41.7	
Number of year of practice	-	<0.000[b]
Average number of interventions / procedures by year	-	0.35[b]
Employed in		0.003
private practice	27.5	
hospital / clinic	43.1	
Postgraduate training in another country		0.029
yes	35.5	
no	43.8	

[a] one-way anova, [b] simple linear regression

Attitude toward safety culture was assessed by two supplementary items to evaluate general perception. Answers were as follow:

"Regarding safety of care in the operating theatre, to what extent are you in agreement with the following opinions"	Don't agree at all or don't agree	Partially agree	Fully agree or agree	Mean* (SD)
Safety is an individual concern above all, and a team concern to a lesser extent (N=137)	81.0%	9.5%	9.5%	1.8 (1.1)
Safety is dependent not only on the responsibility of doctors, but of all healthcare professionals (nurses, auxiliary-nurses, etc) (N=136)	0.7%	1.5%	97.8%	4.7 (0.6)

* Don't agree at all= 1, Don't agree=2, Partially agree=3, Agree=4, Fully agree=5

First item ("Safety is an individual concern...") was reversed. Between those two items, correlation was very low 0.18.

6.1.5. Self-reported participation to wrong-site errors among surgeons and anesthetists

The question was: "Have you participated in a surgical procedure where an operating site error (wrong side, level, procedure, or patient) took place with subsequent consequences for the patient (*no matter who were the persons responsible*) during the last 3 years? during your career?" This question contains four *subsidiary* questions (one by type of error): 14 respondents skipped the entire question (9.2%). Among those who answered the question (N=138), some skipped one or more of its components. We imputed a "0" (zero) to these missing, i.e. if a respondent skipped one (or more) *subsidiary* question, we assume that he did not participated to a wrong-site error. Details are given in the table below:

An error…	Between 2007-2009 (A)		During the career (until end 2006) (B)		All career until 2009 (A+B)	
	N (%)	*If yes, how many*: Mean (SD; Min-Max)	N (%)	*If yes, how many*: Mean (SD; Min-Max)	N (%)	*If yes, how many*: Mean (SD; Min-Max)
wrong side	15 (10.9)	1.3 (0.6; 1-3)	37 (26.8)	1.6 (1.0;1-5)	47 (34.1)	1.7 (1.2;1-6)
wrong level	4 (2.9)	1.5 (0.6; 1-2)	12 (8.7)	1.5 (0.8; 1-3)	14 (10.1)	1.6 (0.7;1-3)
wrong procedure	7 (5.1)	1.2 (0.5; 1-2)	18 (13.0)	2.1 (1.5; 1-5)	20 (14.5)	2.3 (1.7;1-6)
wrong patient	7 (5.1)	1.4 (0.6; 1-2)	16 (11.6)	1.3 (0.5; 1-2)	19 (13.8)	1.5 (0.7;1-3)

More than four out of ten (42.8%) respondents reported having participated in one or more surgical procedure where one operating site error took place (during their career and the last 3 years), whatever the type of error (side or level or procedure or patient). Among those respondents (N=59), the mean number of participation in a wrong-site error was 2.9 (Median 2.0, SD 3.2, Min 1, Max 16).

Reporting participation in a wrong-site error (yes versus no) was more frequent among older respondents (20-37y: 25.0%, 38-50y: 40.9%, 51y and older: 64.3%, p=0.001), among anaesthetists (72%, surgeons 25.9%, others 50.0%, p<0.001) and among doctors in private practice (76.2% versus doctor employed by a hospital/clinic 37.1%, p=0.001).

6.2. 45th Annual Meeting of the European Society for Surgical Research, Geneva, 9th-12th of June, 2010 (http://www.essr2010.ch/)

6.2.1. Data collection and sample description

400 questionnaires were distributed through the documentation given to participants at the registration desk. Participants were invited to fill the questionnaire and return it 1 of the 4 ballot boxes installed in the Congress centre. 40 questionnaires were returned. Among them, 2 respondents did not work in the clinical field (researcher, manager) and were excluded. The final number of filled questionnaires was 38 and participation rate was 9.5% (38/400).

The respondents included 87% men. Respondents' mean age was 40 years (SD 10 years, Min=25, Max=69) and 35% did a postgraduate training in another country (51% didn't and the question was not applicable for 14%). Most were surgeons (92%), (Others: 8 %). Mean number of years of practicing in surgery/anaesthetics was 11 (SD 7 years, Min=1, Max=30) and median number of interventions/procedure performed each year was 250 (Mean 295, SD 247, Min=30, Max=1000). All respondents (100%) were employed (no private practitioners), mostly in university hospitals (78%), and non-university hospitals (22%).

6.2.2. Implementation of checklists among surgeons and anaesthetists

Almost two out of three respondents (N=26, 68%) acknowledged having a surgical safety checklist similar to the one proposed by the WHO in their hospital/clinic. 21% responded that their institution did not have a surgical safety checklist implemented (3% didn't know, 8% didn't know this surgical safety checklist). The institutions in which respondents performed their surgical procedures were mainly university public hospital (79%) – non-university hospital (21%).

The median year of implementation of the surgical safety checklists in hospitals/clinics' respondents was 2009 (2008= 6 ; 2009=12 ; 2010=5 ; missing=15).

We asked respondents if their hospital/clinic's checklist received support from senior managements at the time of its implementation. Answers are given in the following table:

"In your opinion, to what extent was the implementation of the checklist supported by…"	No support or little support	Medium support	Strong support or very strong	Mean* (SD)
your hospital/clinic senior management (N=23)	9%	0%	91%	4.9 (1.1)
the department of surgery senior management (N=24)	13%	0%	87%	4.6 (1.0)
the department of anaesthesiology senior management (N=24)	13%	4%	83%	4.4 (1.3)
the nursing department (including instrumentists) senior management (N=22)	5%	9%	86%	4.5 (1.3)

* No support = 1, Little support =2, Medium support=3, Strong support=4, Very strong support=5

Discussion: respondents reported most support from the hospital/clinic senior management.

We asked the respondents if the implemented checklist comprised the following sections: Sign In (before induction of anesthesia), Time Out (before skin incision), Sign Out (after the procedure) and other sections. If yes, for each section, respondents were asked to report if the checklist section was applied (never, rarely, partially, very often, quasi

systematically) within their surgical/anesthetic team (or the one with which they operate most often). Answers are given in the following table:

	Yes	If yes, applied:				
		Never (0%) or rarely (1-29%)	Partially (30-59%)	Very often (60-90%) or quasi systematically (>90%)	Mean* (SD)	Missing
Sign In (N=25)	84%	4%	8%	88%	4.4 (0.8)	-
Time Out (N=26)	85%	4%	0%	96%	4.7 (0.6)	1
Sign Out (N=26)	73%	4%	9%	87%	4.3 (1.0)	3
Other section (N=18)	39%	46%	0%	54%	3.3 (1.7)	7

* Never= 1, Rarely=2, Partially=3, Very often=4, Quasi systematically=5

Discussion: respondents reported convergent views about the application of the Sign In, Time Out and Sign Out, and discrepant views about the "Other section".

6.2.3. Self-reported compliance and attitudes toward the safety checklist

We used 8 items to evaluate the participants' general attitude toward the safety checklist. The question was "Regarding the use of the checklist in operating theatres, to what extent are you in agreement with the following opinions". Answers were given on a scale from 1 (don't agree at all) to 5 (fully agree) (see Table below).

The checklist…	Don't agree at all or don't agree	Partially agree	Agree or fully agree	Mean* (SD)
improves the safety of procedures (anaesthetic and surgical) (N=35)	0%	14%	86%	4.4 (0.7)
is a waste of time (N=35)	77%	6%	17%	1.9 (1.3)
improves team communication (related to safety) (N=34)	21%	12%	68%	3.8 (1.4)
brings no extra value to *existing* safety procedures already in place in my hospital/clinic *before* its implementation (N=34)	44%	27%	29%	2.8 (1.3)
helps to develop a safety culture in surgical teams (N=35)	14%	9%	77%	4.1 (1.1)
has not demonstrated its efficacy in the scientific literature (N=31)	39%	29%	32%	2.7 (1.3)
facilitates teamwork (N=34)	18%	29%	53%	3.7 (1.2)
eliminates (during the controls) the hierarchy between healthcare professionals (N=34)	41%	27%	32%	2.9 (1.4)

* Don't agree at all= 1, Don't agree=2, Partially agree=3, Agree=4, Fully agree=5

Discussion: attitudes toward the checklist are roughly similar to the Interlaken sample.

We compared the attitude toward the checklist between surgeons and anaesthetists who use the checklist and those not. Respondents were grouped whether they were operating in hospital with checklist or not (question n°2 of the questionnaire). Results are given in the following table:

Proportion of "Fully agree or agree" with the following items: *The checklist…*	Respondents operating in hospitals with checklist (N=26)	Respondents operating in hospitals without checklist (N=9)	Exact p-value for ordinal distribution
improves the safety of procedures (anaesthetic and surgical) (N=141)	80.8%	100.0%	0.996
is a waste of time (N=136)	11.5%	33.3%	0.434
improves team communication (related to safety) (N=139)	69.2%	62.5%	0.369
brings no extra value to *existing* safety procedures already in place in my hospital/clinic *before* its implementation (N=128)	16.0%	66.7%	0.027
helps to develop a safety culture in surgical teams (N=136)	76.9%	77.8%	0.999
has not demonstrated its efficacy in the scientific literature (N=93)	18.2%	66.7%	0.049
facilitates teamwork (N=134)	56.0%	44.4%	0.557
eliminates (during the controls) the hierarchy between healthcare professionals (N=125)	34.6%	25.0%	0.180

Discussion: respondents working in hospitals where a checklist was not implemented reported higher proportion of agreement with the opinions that the checklist brings no extra value to existing safety procedures and has not demonstrated its efficacy in the scientific literature.

6.2.4. Attitudes toward the safety culture

We selected and adapted 5 items of the Pharmacy Safety Climate Questionnaire, to evaluate participants' perception of the safety culture within the team. The question was "If

you think about your *anaesthetic/surgical* team, to what extent are you in agreement with the following opinions". Answers were given on a scale from 1 (don't agree at all) to 5 (fully agree). Answers to the items were as follow:

	Don't agree at all or don't agree	Partially agree	Fully agree or agree	Mean* (SD)
Staff routinely discuss ways to prevent incidents from happening again (N=38)	11%	29%	60%	3.8 (1.1)
The culture is one of continuous improvement (N=38)	5%	37%	58%	3.8 (1.0)
The team has a shared understanding and vision about safety issues; everyone is equally valued and feels free to contribute (N=37)	19%	22%	59%	3.7 (1.2)
Staff feel free to question the decisions or actions of those with more authority (N=37)	16%	27%	57%	3.6 (1.2)
There is a blame culture, so staff are reluctant to report incidents (N=35)	63%	23%	14%	2.2 (1.2)

* Don't agree at all= 1, Don't agree=2, Partially agree=3, Agree=4, Fully agree=5

After reversing the item "blame culture", correlations between the items ranged from -0.08 to 0.80 and the Cronbach α coefficient was 0.77. One item ("blame culture") had a correlation coefficient close to zero with most of other items and was therefore removed. Within the reduced 4-items scale, correlations between the items ranged from 0.40 to 0.81 and the Cronbach α coefficient was 0.85. A principal component analysis extracted one factor explaining 72% of the variance. Based on this reduced 4-items scale, we computed a mean score for safety culture from 0 (low safety culture of the team) to 100 (high safety culture of the team). The mean score was 32 (Median 31, SD 23).

Safety culture decreased significantly as the number of years of practice increased (-0.37) – see table below.

Score of safety culture (univariate analysis)	Mean	p-value[a]
Sex		0.23
women	43.8	
men	30.1	
Age	-	0.33[b]
Profession		0.79
surgeon	31.6	
other	35.4	
Number of year of practice	-	0.17[b]
Average number of interventions / procedures by year	-	0.042[b]
Working in		0.91
university hospital	20.7	
non-university hospital	32.9	
Postgraduate training in another country		0.19
yes	32.6	
no	25.0	

[a] one-way anova, [b] simple linear regression

Attitude toward safety culture was assessed by two supplementary items to evaluate general perception. Answers were as follow:

"Regarding safety of care in the operating theatre, to what extent are you in agreement with the following opinions"	Don't agree at all or don't agree	Partially agree	Fully agree or agree	Mean* (SD)
Safety is an individual concern above all, and a team concern to a lesser extent (N=35)	54%	20%	26%	2.5 (1.5)
Safety is dependent not only on the responsibility of doctors, but of all healthcare professionals (nurses, auxiliary-nurses, etc) (N=36)	0%	6%	94%	4.7 (0.6)

* Don't agree at all= 1, Don't agree=2, Partially agree=3, Agree=4, Fully agree=5

First item ("Safety is an individual concern...") was reversed. Between those two items, correlation was very low 0.18.

6.2.5. Self-reported participation to wrong-site errors among surgeons and anesthetists

The question was: "Have you participated in a surgical procedure where an operating site error (wrong side, level, procedure, or patient) took place with subsequent consequences for the patient (*no matter who were the persons responsible*) during the last 3 years? during your career?" This question contains four subsidiary questions (one by type of error): 2 respondents skipped the entire question (5%). Among those who answered the question (N=36), some skipped one or more of its components. We imputed a "0" (zero) to the missing cells (when a respondent skipped one subsidiary question, we supposed that was because he did not participated to a wrong-site error). On the other hand, when a respondent answered "yes" to a specific wrong-site error but did not reported the number (the "*If yes, how many?*" column, below), we imputed a "1" (one) to the missing cells. Details are given in the table below:

An error…	Between 2007-2009		During the career (until end 2006)		All career until 2009	
	N (%)	*If yes, how many*: Mean (SD; Min-Max)	N (%)	*If yes, how many*: Mean (SD; Min-Max)	N (%)	*If yes, how many*: Mean (SD; Min-Max)
wrong side	1 (3)	1 (NA; 1-1)	1 (3)	1	2 (6)	1 (0;1-1)
wrong level	1 (3)	1 (NA; 1-1)	0	-	1 (3)	1 (NA; 1-1)
wrong procedure	2 (6)	1 (0; 1-1)	1 (3)	1 (0; 1-1)	2 (6)	1.5 (0.7; 1-2)
wrong patient	1 (3)	1 (NA; 1-1)	0	-	1 (3)	1 (NA; 1-1)

3 (8%) respondents reported having participated in one or more surgical procedure where one operating site error took place (during their career and the last 3 years), whatever the type of error (side or level or procedure or patient). Among those respondents (N=3), the mean number of participation in a wrong-site error was 2.3 (Median 2.0, SD 1.5, Min 1, Max 4).

6.3. Comparison and pooling of the results of SSS/SSAR sample and ESSR sample

The objective of the present section is to evaluate the possibility of pooling the 2 samples, in regards to the description of the following outcomes: (1) implementation of the checklist and attitudes toward the checklist, (2) attitudes toward the safety culture and (3) reporting of wrong-site errors. Consequently, the present section compares the responses of respondents between the two samples (SSS/SSAR, Interlaken, and ESSR, Geneva)

Pooling the two samples lead to a sample size of 190 respondents. Sample characteristics of the pooled sample are given in the following table:

	Total (Interlaken+ Geneva)	**SSS/SSAR, Interlaken**	**ESSR, Geneva**	**Samples difference**
	N(%)	N(%)	N(%)[a]	p-value[b]
Sex (N=176)				0.005[c]
women	57 (32.4)	52 (37.4)	5 (14)	
men	119 (67.6)	87 (62.6)	32 (87)	
Age [year] (N=172)				0.042[d]
Mean age (SD)	43.6 (11.9)	44.5 (11.1)	40 (9.9)	
Range	20-79	20-79	25-69	
by age classes:				0.045
20-37	64 (37.2)	48 (35.6)	16 (43)	
38-50	62 (36.0)	45 (33.3)	17 (46)	
51 and older	46 (26.7)	42 (31.1)	4 (11)	

Profession (N=175)				<0.0001
Surgeon	119 (68.0)	85 (61.6)	34 (92)	
Anaesthetists	47 (26.9)	47 (34.1)	0 (0)	
Others	9 (5.1)	6 (4.3)	3 (8)	
Mean number of year of practice (SD) (N=143)	14.8 (9.8)	15.6 (10.1)	11 (7.4)	0.039
Median number of interventions / procedures by year (mean) (N=133)	400 (707)	500 (833)	250 (295)	0.027
Type of employment (N=164)				0.004[c]
private practitioners	21 (12.8)	21 (16.5)	0(0)	
employed, *working in: (N=162)*	143 (87.2)	106 (83.5)	37 (100)	
university hospital	*47 (29.0)*	*18 (14.4)*	*29 (78)*	*<0.0001*
non-university hospital	*100 (61.7)*	*92 (73.6)*	*8 (22)*	
private hospitals/clinics	*15 (9.3)*	*15 (12%)*	*0(0)*	
Postgraduate training in another country (N=153; *not applicable and missing excluded*)				0.54
yes	54 (35.3)	41 (33.9)	13 (40.6)	
no	99 (64.7)	80 (66.1)	19 (59.4)	

[a] Total of percentage exceed 100% due to surrounding
[b] Chi-square test
[c] Fisher's Exact test
[d] t-test

Discussion: except on having a postgraduate training in another country, the sample of the SSS/SSAR and of the ESSR are different on all socio-demographics characteristics. SSS/SSAR was a joint meeting between surgeons and anaesthetists, whereas ESSR was a meeting of

surgeons only. Moreover, as SSS/SSAR was a meeting of Swiss physicians, ESSR brought together participants across Europe.

6.3.1. Implementation of the checklist and attitudes toward the checklist

	Total (Interlaken+ Geneva)	**SSS/SSAR, Interlaken**	**ESSR, Geneva**	**Sample differences**
"In your opinion, to what extent was the implementation of the checklist supported by…"	Mean* (SD)	Mean* (SD)	Mean* (SD)	p-value[a]
your hospital/clinic senior management (N=96)	4.4 (0.9)	4.27 (0.96)	4.9 (1.1)	0.081
the department of surgery senior management (N=113)	4.3 (0.9)	4.24 (0.95)	4.6 (1.0)	0.29
the department of anaesthesiology senior management (N=110)	4.5 (0.9)	4.56 (0.81)	4.4 (1.3)	0.12
the nursing department (including instrumentists) senior management (N=103)	3.9 (1.2)	3.84 (1.27)	4.5 (1.3)	0.18
[a] t-test				

Discussion: compared to the SSS/SSAR respondents, ESSR respondents reported higher support for all types of management/Department, except Anaesthesiology.

Answers to the items related to the content of the checklist and the self-reported application within the team are given in the following table:

	Total (Interlaken + Geneva)	**SSS/SSAR, Interlaken**	**ESSR, Geneva**	**Sample differences**	**Total (Interlaken+ Geneva)**				
					If yes, applied:				
	Yes	Yes	Yes	p-value[a]	Never (0%) or rarely (1-29%)	Partially (30-59%)	Very often (60-90%) or quasi systematically (>90%)	Mean* (SD)	Missing
Sign In (N=119)	89.9%	91.5%	84.0%	0.22	4.4%	6.1%	89.5%	4.5 (0.9)	5
Time Out (N=127)	93.7%	96.0%	84.6%	0.055	6.6%	8.2%	85.2%	4.4 (1.0)	5
Sign Out (N=113)	54.9%	49.4%	73.1%	0.027	35.4%	8.3%	56.3%	3.3 (1.7)	17
Other section (N=63)	30.2%	26.7%	38.9%	0.26	59.1%	0%	40.9%	2.7 (1.8)	19

[a] Fisher's Exact test

Discussion: compared to the answer of the SSS/SSAR and ESSR sample, proportions are similar.

Answers to the items related to the attitudes toward the checklist are given in the following table:

	Total (Interlaken+ Geneva)	**SSS/SSAR, Interlaken**	**ESSR, Geneva**	**Sample differences**
The checklist…	Mean* (SD)	Mean* (SD)	Mean* (SD)	p-value
improves the safety of procedures (anaesthetic and surgical) (N=178)	4.5 (0.9)	4.5 (0.9)	4.4 (0.7)	0.67
is a waste of time (N=173)	2.0 (1.3)	2.1 (1.2)	1.9 (1.3)	0.35
improves team communication (related to safety) (N=175)	3.8 (1.1)	3.8 (1.1)	3.8 (1.4)	0.93
brings no extra value to *existing* safety procedures already in place in my hospital/clinic *before* its implementation (N=164)	2.4 (1.3)	2.3 (1.2)	2.8 (1.3)	0.043
helps to develop a safety culture in surgical teams (N=173)	4.0 (1.1)	4.0 (1.1)	4.1 (1.1)	0.70
has not demonstrated its efficacy in the scientific literature (N=126)	2.5 (1.3)	2.4 (1.3)	2.7 (1.3)	0.27
facilitates teamwork (N=170)	3.4 (1.1)	3.4 (1.1)	3.7 (1.2)	0.10
eliminates (during the controls) the hierarchy between healthcare professionals (N=161)	2.8 (1.3)	2.7 (1.2)	2.9 (1.4)	0.31

Discussion: the samples of SSS/SSAR and ESSR are similar in their opinions related to the checklist, except for the item the checklist bring no extra value to existing safety, where agreement was higher among ESSR respondents.

6.3.2. Attitudes toward the safety culture

Attitudes toward the safety culture are given in the following table:

	Total (Interlaken+ Geneva)	**SSS/SSAR, Interlaken**	**ESSR, Geneva**	**Sample differences**
Attitudes toward the safety culture	Mean* (SD)	Mean* (SD)	Mean* (SD)	p-value
Staff routinely discuss ways to prevent incidents from happening again (N=173)	3.4 (1.3)	3.4 (1.2)	3.8 (1.1)	0.047
The culture is one of continuous improvement (N=176)	3.8 (1.0)	3.8 (1.0)	3.8 (1.0)	0.77
The team has a shared understanding and vision about safety issues; everyone is equally valued and feels free to contribute (N=173)	3.6 (1.1)	3.5 (1.1)	3.7 (1.2)	0.45
Staff feel free to question the decisions or actions of those with more authority (N=172)	3.4 (1.1)	3.3 (1.1)	3.6 (1.2)	0.23
There is a blame culture, so staff are reluctant to report incidents (N=164)	2.2 (1.2)	2.2 (1.2)	2.2 (1.2)	0.87

Discussion: Attitudes toward the safety culture are similar between the samples of SSS/SSAR and ESSR, excepted for one item: agreement toward "staff routinely discuss ways to prevent incidents from happening again" was higher among ESSR respondents.

	Total (Interlaken+ Geneva)	**SSS/SSAR, Interlaken**	**ESSR, Geneva**	**Sample differences**
"Regarding safety of care in the operating theatre, to what extent are you in agreement with the following opinions"	Mean* (SD)	Mean* (SD)	Mean* (SD)	p-value
Safety is an individual concern above all, and a team concern to a lesser extent (N=172)	2.0 (1.2)	1.8 (1.1)	2.5 (1.5)	0.001
Safety is dependent not only on the responsibility of doctors, but of all healthcare professionals (nurses, auxiliary-nurses, etc) (N=172)	4.7 (0.6)	4.7 (0.6)	4.7 (0.6)	0.70

Discussion: the opinion that safety is related to the individual level above all ("Safety is an individual concern above and a team concern to a lesser extent") was more often accepted by ESSR respondents. No differences were observed about the opinion that safety is under the responsibility of all caregivers and not only under the medical responsibility.

6.3.3. reporting of wrong-site errors

For the question “Have you participated in a surgical procedure... etc." and its four subsidiary questions (one by type of error), 16 respondents skipped the entire question (8.4%). Among those who answered the question (N=174), some skipped one or more of its components: we imputed a “0” (zero) when a respondent skipped one (or more) subsidiary question and a “1” when a respondent answered “yes” to a specific wrong-site error but did not reported the number (following the rationale below, see § 5.1.5.).

Details are given in the table below:

An error…	Between 2007-2009		During the career (until end 2006)		All career until 2009	
	N (%)	*If yes, how many*: Mean (SD; Min-Max)	N (%)	*If yes, how many*: Mean (SD; Min-Max)	N (%)	*If yes, how many*: Mean (SD; Min-Max)
wrong side	16 (9.2)	1.3 (0.6; 1-3)	38 (21.8)	1.6 (1.0; 1-5)	49 (28.2)	1.6 (1.2;1-6)
wrong level	5 (2.9)	1.4 (0.6; 1-2)	12 (6.9)	1.5 (0.8;1-3)	15 (8.6)	1.6 (0.7;1-3)
wrong procedure	9 (5.2)	1.1 (0.4; 1-2)	19 (10.9)	2.0 (1.5; 1-5)	22 (12.6)	2.2 (1.7;1-6)
wrong patient	8 (4.6)	1.3 (0.5; 1-2)	16 (9.2)	1.3 (0.5;1-2)	20 (11.5)	1.5 (0.7;1-3)

62 (35.6%) respondents reported participation in at least one (or more) wrong-site error, whatever the type of error (side or level or procedure or patient). Among those last respondents, the mean number of participation in a wrong-site error was 2.8 (Median 2.0, SD 3.1, Min 1, Max 16).

Reporting participation in a wrong-site error (yes versus no) was more frequent among older respondents (20-37y: 18.8%, 38-50y: 35.0%, 51y and older: 58.7%, $p<0.0001$), among anaesthetists (71.7%, surgeons 21.2%, others 33.3%, $p<0.0001$) and among doctors in private practice (76.2% versus doctor employed 29.8%). Among the employed, doctors in private hospital/clinic more often reported wrong-site error compared to doctors working in university hospitals or non-university public hospital (respectively 64.3%, 21.7%, 34.0%, $p=0.011$)

Discussion:

Self-reported incidence of wrong-site surgery is highly variable across studies. Incidence is also variable across clinical specialities: between less than 1%[23] and one out of five[3] among hand surgeon, one out of two[24] among neuron surgeon, between 3%[23] and one out of two among spine surgeon, 8.3% among knee arthroscopists, and less than 1% among general orthopedic and sports surgeon[23].

Self-reported participation in a wrong-site error in our study (35.6%) is higher compared to a US survey (21%)[25]. Our sample included anaesthetics (a subgroup of doctors where safety culture is more developed) and this could explain the relatively higher rate.

6.3.4. Concluding remark related to pooling the samples

In conclusion, despite different socio-demographics characteristics, the two samples reported similar perceptions of the implementation of the checklist in their hospital/clinic, similar attitudes toward the checklist, similar opinion toward the safety culture. Pooling the two samples is conceivable when describing the safety culture and the reporting of wrong-site errors. However, describing the implementation of the checklist by pooling the two samples is less conceivable due to different national healthcare context.

7. Further work planned

The following publications are expected:

1. Implementation of safety surgical checklist among Swiss surgeons and anaesthetists (short-report) and attitudes toward surgical safety checklist among surgeons and anaesthetists (short-report)
2. Factors of safety culture among surgeons and anaesthetists (short-report)
3. Factors of wrong-site errors among surgeons and anaesthetists (short-report)

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Annexes

Questionnaire – French version – (Interlaken)

Stiftung für Patientensicherheit
Fondation pour la Sécurité des Patients
Fondazione per la Sicurezza dei Pazienti
Patient Safety Foundation

foQual forum de la qualité

SGC SSC Schweizerische Gesellschaft für Chirurgie
Société Suisse de Chirurgie
Società Svizzera di Chirurgia

SSAR SGAR

Usages et opinions sur la check-list de sécurité de l'OMS aux blocs opératoires: enquête auprès des participants à la journée commune Chirurgie / Anesthésie du 97ème congrès annuel de la Société Suisse de Chirurgie (Interlaken, 26 au 28 mai 2010)

Mai 2010

Madame, Monsieur, Cher-ère collègue,

La Fondation Suisse pour la Sécurité des Patients et le Forum de la Qualité participent à la réalisation d'un sondage auprès des participants à la journée commune Chirurgie / Anesthésie du 97ème congrès annuel de la Société Suisse de Chirurgie, en collaboration avec les Hôpitaux Universitaires de Genève. Cette étude a reçu l'autorisation de la Société Suisse de Chirurgie et de la Société Suisse d'Anesthésie-Réanimation, que nous remercions chaleureusement pour leur soutien.

Cette étude s'intéresse à la check-list de sécurité dans les blocs opératoires, développée par l'OMS – the WHO Surgical Safety Checklist. Par check-list de sécurité, il est entendu une liste de contrôles à effectuer au bloc opératoire avant (Sign In, Time Out) et après (Sign Out) une intervention chirurgicale (par ex.: identité du patient, marquage du site, côté, type d'intervention, ordres post-opératoires, etc.), dans le but d'améliorer la qualité et la sécurité des soins.

Cette étude a pour objectif d'évaluer l'utilisation d'une check-list inspirée du modèle de l'OMS parmi les chirurgiens et anesthésistes suisses et de mieux comprendre les attitudes à l'égard de la check-list, mais aussi vis-à-vis du fonctionnement en équipe et de la sécurité en général. Elle vise également à explorer le nombre d'erreurs de site opératoire vécues au cours de leur carrière par les chirurgiens et anesthésistes.

Ce questionnaire prend environ 8 minutes pour être rempli. D'avance, nous vous remercions vivement de votre collaboration. Une fois rempli, veuillez le donner à l'une des personnes en charge de la récolte des questionnaires remplis (portant un T-shirt "Surgical Safety Checklist" de couleur verte).

Les réponses récoltées seront traitées de manière **confidentielle** et les résultats sont **anonymes** (c'est-à-dire qu'ils portent sur des **groupes** et non sur des individus).

Dr. med. Marc-Anton Hochreutener
Directeur, Fondation pour la Sécurité des Patients

Adriana Degiorgi
Présidente, FoQual

Prof. Dr. med. Othmar Schöb
Président, Société Suisse de Chirurgie

Dr. med. Tiziano Cassina
Président, Société Suisse d'Anesthésie et Réanimation

Dr. med. Pierre Chopard
Médecin adjoint responsable de service, Hôpitaux Universitaires de Genève

Quelques consignes importantes pour remplir ce questionnaire:

a) une seule personne peut répondre à un questionnaire,
b) il n'y a pas de réponse juste ou fausse; seul votre avis personnel compte,
c) pour les *questions relatives à votre hôpital ou votre clinique*:
   a. si vous travaillez dans plusieurs hôpitaux et/ou cliniques, merci de penser au lieu dans lequel vous travaillez *principalement* ou le plus souvent ou, à défaut, le plus important à vos yeux,
   b. si vous travaillez dans un *cabinet*, veuillez répondre en pensant à l'hôpital ou la clinique dans lequel / laquelle vous faîtes le plus d'interventions chirurgicales.

☎ 🖹✉ Stéphane Cullati, Service qualité des soins, Hôpitaux Universitaires de Genève, Rue Gabrielle-Perret-Gentil 4, 1211 Genève 14, Tél. 022 372 90 56, Stephane.Cullati@hcuge.ch

La check-list de sécurité dans votre hôpital ou votre clinique

1) L'institution dans laquelle vous faîtes vos interventions chirurgicales est un… (*une seule réponse possible*)
❑ hôpital universitaire ❑ hôpital public non universitaire ❑ hôpital privé ou clinique privée

2) Dans votre hôpital ou votre clinique, une check-list de sécurité inspirée du modèle de l'OMS a-t-elle été mise en place pour les interventions aux blocs opératoires?

1. oui ..... ❑ ☞ *passez à la question n°**3***
2. non ..... ❑ ☞ *passez à la question n°**6***
3. je ne sais pas..... ❑ ☞ *passez à la question n°**6***
4. je ne connais pas cette check-list de sécurité ..... ❑ ☞ *passez à la question n°**7***

3) En quelle année cette check-list a-t-elle été mise en place? .....

4) Selon vous, dans quelle mesure la mise en place de cette check-list a-t-elle été soutenue par…
(*pour chaque ligne, veuillez cocher la bonne case*)

	aucun soutien		soutien moyen		soutien très fort	sans opinion
1. la direction de votre hôpital ou votre clinique	1	2	3	4	5	❑
2. la direction du Département de chirurgie	1	2	3	4	5	❑
3. la direction du Département d'anesthésie	1	2	3	4	5	❑
4. la direction des soins infirmiers / des instrumentistes	1	2	3	4	5	❑

5) Cette check-list est-elle composée des parties suivantes: (*pour chaque ligne, veuillez cocher la bonne case*)

	non	oui
1. Sign In (avant l'induction anesthésique)	❑	❑ ☞
2. Time Out (avant l'incision chirurgicale)	❑	❑ ☞
3. Sign Out (après l'intervention)	❑	❑ ☞
4. autre(s) partie(s), merci de préciser:	❑	❑ ☞

☞ Pour chaque case cochée "oui", veuillez préciser si, au sein de *votre équipe anesthésio-chirurgicale* (celle avec laquelle vous intervenez le plus souvent), ces parties de la check-list sont appliquées jamais, rarement, moyennement, très souvent ou quasi systématiquement:

	jamais (0%)	rarement (1-29%)	moyennement (30-59%)	très souvent (60-90%)	quasi systématiquement (>90%)
1. Sign In	❑	❑	❑	❑	❑
2. Time Out	❑	❑	❑	❑	❑
3. Sign Out	❑	❑	❑	❑	❑
4. autre(s)	❑	❑	❑	❑	❑

Votre opinion sur la check-list

6) Concernant l'utilisation de la check-list dans les blocs opératoires, dans quelle mesure êtes-vous d'accord avec les opinions suivantes: *(pour chaque opinion, veuillez entourer le bon chiffre)*

La check-list…

	pas du tout d'accord		moyennement d'accord		tout à fait d'accord	sans opinion
1. améliore la sécurité des interventions (anesthésie et chirurgie)	1	2	3	4	5	❑
2. fait perdre du temps	1	2	3	4	5	❑
3. améliore la communication (en lien avec la sécurité) dans l'équipe	1	2	3	4	5	❑
4. n'apporte rien de plus par rapport aux contrôles de sécurité *déjà en place* dans mon hôpital ou ma clinique *avant* son implémentation	1	2	3	4	5	❑
5. développe une culture de la sécurité dans les équipes chirurgicales	1	2	3	4	5	❑
6. n'a pas démontré son efficacité dans la littérature scientifique	1	2	3	4	5	❑
7. facilite le travail en équipe	1	2	3	4	5	❑
8. supprime (durant les contrôles) la hiérarchie entre professionnels (médecins, infirmiers, etc.)	1	2	3	4	5	❑

9. si vous souhaitez indiquer une autre opinion, merci de la préciser ci-dessous:

_____

Votre opinion sur la culture de la sécurité

7) Si vous pensez à *votre équipe anesthésio-chirurgicale*, dans quelle mesure êtes-vous d'accord avec les opinions suivantes: *(pour chaque opinion, veuillez entourer le bon chiffre)*

	pas du tout d'accord		moyennement d'accord		tout à fait d'accord	sans opinion
1. Les membres de l'équipe discutent régulièrement des manières d'empêcher que les incidents ne se reproduisent	1	2	3	4	5	❑
2. La culture est celle de l'amélioration continue	1	2	3	4	5	❑
3. L'équipe a une conception commune des problèmes de sécurité; tout le monde est apprécié de manière équivalente et se sent autorisé à amener sa contribution	1	2	3	4	5	❑
4. Les membres de l'équipe se sentent libres de mettre en doute les décisions ou les actions de leurs supérieurs hiérarchiques	1	2	3	4	5	❑
5. Il y a une "culture du blâme", qui rend les membres de l'équipe hésitant à signaler les incidents	1	2	3	4	5	❑

6. Si vous souhaitez indiquer une autre opinion, merci de la préciser ci-dessous:

_____

8) Par rapport à la sécurité des soins *au bloc opératoire*, dans quelle mesure êtes-vous d'accord avec les opinions suivantes: *(pour chaque opinion, veuillez entourer le bon chiffre)*

	pas du tout d'accord		moyennement d'accord		tout à fait d'accord	sans opinion
1. La sécurité est avant tout une affaire individuelle et, dans une moindre mesure, une affaire d'équipe	1	2	3	4	5	❑
2. La sécurité relève aussi bien de la responsabilité des médecins que de celle des professionnels para-médicaux (infirmières, aides-soignants, etc.)	1	2	3	4	5	❑

3. Si vous souhaitez indiquer une autre opinion, merci de la préciser ci-dessous:

_____

Les erreurs de site opératoire

9) Avez-vous participé à une intervention chirurgicale dans laquelle une erreur de site opératoire (de côté, de niveau, de procédure ou de patient) a eu lieu, avec des conséquences pour le patient (*peu importe qui était/ent le responsable / les responsables*), au cours des trois dernières années? de votre carrière?

	entre 2007-2009			**dans votre carrière (jusqu'en 2006)**		
Une erreur…	non	oui	Combien?	non	oui	Combien?
1. de côté	❑	❑	.....	❑	❑	.....
2. de niveau	❑	❑	.....	❑	❑	.....
3. de procédure	❑	❑	.....	❑	❑	.....
4. d'identité de patient	❑	❑	.....	❑	❑	.....

Quelques données sur vous

10) Êtes-vous… ❑ un homme ❑ une femme

11) Votre année de naissance: .....

12) Vous êtes… ❑ chirurgien ☞ ❑ anesthésiste ☞ ❑ infirmier ❑ autres, préciser :.....

☞ Votre(vos) spécialité(s) chirurgicale(s) ou anesthésique(s): .....

☞ Votre nombre d'années de pratique en chirurgie ou en anesthésie: .....

13) Le nombre moyen d'interventions/procédures que vous pratiquez par année: .....

14) Êtes-vous… ❑ à votre compte (cabinet, seul ou avec des confrères)
❑ employé, dans un ☞ ❑ hôpital universitaire
❑ hôpital public non universitaire
❑ hôpital privé ou clinique privée

15) Après votre diplôme FMH, avez-vous suivi une partie de votre formation à l'étranger?
❑ non ❑ oui, dans quel pays? ..... ❑ non applicable

Merci pour votre collaboration!

Questionnaire – German version – (Interlaken)

Stiftung für Patientensicherheit
Fondation pour la Sécurité des Patients
Fondazione per la Sicurezza dei Pazienti
Patient Safety Foundation

foQual
forum de la qualité

SGC
SSC
Schweizerische Gesellschaft für Chirurgie
Société Suisse de Chirurgie
Società Svizzera di Chirurgia

SSAR
SGAR

Sicherheits-Checkliste der WHO für den Operationssaal: Nutzung und Einschätzung. Umfrage bei den Teilnehmenden am gemeinsamen Tag für Chirurgie/Anästhesie im Rahmen des 97. Jahreskongresses der Schweizerischen Gesellschaft für Chirurgie (Interlaken, 26.–28. Mai 2010)

Mai 2010

Sehr geehrte Frau Kollegin, sehr geehrter Herr Kollege,

In Zusammenarbeit mit dem Universitätsspital Genf (Hôpitaux Universitaires de Genève, HUG) beteiligen sich die Stiftung für Patientensicherheit Schweiz und die Gruppe FoQual (Qualitätsforum) an der Durchführung einer Umfrage bei den Teilnehmenden am gemeinsamen Tag für Chirurgie/Anästhesie im Rahmen des 97. Jahreskongresses der Schweizerischen Gesellschaft für Chirurgie. Diese Erhebung wird von der Schweizerischen Gesellschaft für Chirurgie und der Schweizerischen Gesellschaft für Anästhesiologie und Reanimation unterstützt.

Die Erhebung betrifft die "WHO Surgical Safety Checklist", eine von der WHO entwickelte Sicherheits-Checkliste für den Operationssaal. Diese Sicherheits-Checkliste besteht aus einer Reihe von Kontrollen, die vor (Sign In, Time Out) und nach (Sign Out) einem chirurgischen Eingriff durchzuführen sind (z.B. Identifizierung des Patienten, Markierung der Operationsgebietes, postoperative Anordnungen usw.). Ziel ist, Qualität und Sicherheit der Behandlung zu verbessern.

Diese Erhebung verfolgt das Ziel, die Benutzung einer Checkliste, welche sich am WHO-Modell anlehnt, bei Chirurgen und Anästhesisten in der Schweiz zu evaluieren. Sie soll zu einem besseren Verständnis der Einstellungen zur Checkliste, aber auch zur Arbeit im Team und zur Sicherheit im Allgemeinen beitragen. Ebenso soll die Erhebung auch die Häufigkeit der Fehler eruieren, welche die Chirurgen und Anästhesisten im Laufe ihrer beruflichen Tätigkeit im Operationssaal erlebt haben.

Das Ausfüllen dieses Fragebogens dauert ca. 8 Minuten. Für Ihre Hilfe danken wir Ihnen schon im Voraus. Geben Sie bitte den ausgefüllten Fragebogen bei einer der Personen ab, die für das Einsammeln der ausgefüllten Fragebogen zuständig sind (erkennbar am grünen T-Shirt "Surgical Safety Checklist").

Ihre Antworten werden **vertraulich** behandelt, und die Ergebnisse bleiben **anonym** (d.h. sie werden **Gruppen** zugeordnet, nicht aber individuellen Personen).

Dr. med. Marc-Anton Hochreutener
Geschäftsführer Stiftung für Patientensicherheit

Adriana Degiorgi
Präsidentin FoQual

Prof. Dr. med. Othmar Schöb
Präsident der Schweizerischen Gesellschaft für Chirurgie

Dr. med. Tiziano Cassina
Präsident der Schweizerischen Gesellschaft für Anästhesiologie und Reanimation

Dr. med. Pierre Chopard
Leiter Abteilung Qualität der Universitätsspitäler Genf

Wichtige Anleitungen für das Ausfüllen des Fragebogens:

a) Ein Fragebogen darf nur von einer Person ausgefüllt werden.
b) Es gibt keine richtigen oder falschen Antworten; nur Ihre persönliche Meinung zählt.
c) Für *Fragen zu Ihrem Spital/Ihrer Klinik*:
   a. Falls Sie in mehreren Spitälern und/oder Kliniken arbeiten, beziehen Sie sich bitte auf den Ort, an dem Sie *hauptsächlich* bzw. am häufigsten tätig sind oder – falls dies nicht möglich ist – der aus Ihrer Sicht am wichtigsten ist.
   b. Falls Sie in einer *Praxis* tätig sind, beziehen Sie sich bitte auf das Spital oder die Klinik, in dem/der Sie die meisten chirurgischen Eingriffe vornehmen.

☎ Stéphane Cullati, Abteilung Qualität, Universitätsspitäler Genf, Rue Gabrielle-Perret-Gentil 4, 1211 Genf 14, Tel. 022 372 90 56, Stephane.Cullati@hcuge.ch

Die Sicherheits-Checkliste in Ihrem Spital oder Ihrer Klinik

1) Die Institution, in der Sie Ihre chirurgischen Eingriffe vornehmen, ist ein: (*nur eine mögliche Antwort*)
❑ Universitätsspital ❑ öffentliches, nicht universitäres Spital ❑ Privatspital oder eine Privatklinik

2) Wurde in Ihrem Spital/Ihrer Klinik für die Eingriffe im Operationssaal eine Sicherheits-Checkliste in Anlehnung an das WHO-Modell eingeführt?

1. ja ..... ❑ ☞ *weiter zu Frage Nr.* ***3***
2. nein..... ❑ ☞ *weiter zu Frage Nr.* ***6***
3. ich weiss nicht..... ❑ ☞ *weiter zu Frage Nr.* ***6***
4. ich kenne diese Sicherheits-Checkliste nicht ..... ❑ ☞ *weiter zu Frage Nr.* ***7***

3) In welchem Jahr wurde diese Checkliste umgesetzt? .....

4) In welchem Ausmass wurde Ihrer Meinung nach die Einführung dieser Checkliste von folgenden Stellen unterstützt? (*Bitte zu jeder Ansicht die entsprechende Zahl einkreisen*)

	keine Unterstützung		mittlere Unterstützung		starke Unterstützung	keine Meinung
1. Spital- oder Klinikleitung.....	1	2	3	4	5	❑
2. Leitung der Chirurgie-Abteilung.....	1	2	3	4	5	❑
3. Leitung der Anästhesie-Abteilung	1	2	3	4	5	❑
4. Instrumentier-/Pflegedienstleitung.....	1	2	3	4	5	❑

5) Diese Checkliste besteht aus folgenden Teilen: (*Bitte in jeder Zeile die zutreffende Antwort ankreuzen*)

	nein	ja
1. Sign In (vor Einleitung der Anästhesie).....	❑	❑ ☞
2. Time Out (vor dem Schnitt).....	❑	❑ ☞
3. Sign Out (nach dem Eingriff).....	❑	❑ ☞
4. andere(r) Teil(e) – bitte angeben:.....	❑	❑ ☞

☞ Geben Sie bitte für jedes angekreuzte "Ja" an, ob die jeweiligen Teile der Checkliste *in Ihrem OP-Team* (dem Anästhesie- und Chirurgie-Team, in dem Sie am häufigsten arbeiten) gar nicht, selten, häufig, sehr oft oder fast immer verwendet werden:

	gar nicht (0%)	selten (1-29%)	häufig (30-59%)	sehr oft (60-90%)	fast immer (>90%)
1. Sign In.....	❑	❑	❑	❑	❑
2. Time Out.....	❑	❑	❑	❑	❑
3. Sign Out	❑	❑	❑	❑	❑
4. andere.....	❑	❑	❑	❑	❑

Ihre Meinung zur Checkliste

6) In wie weit sind Sie mit den folgenden Meinungen zur Benutzung der Checkliste für den Operationssaal einverstanden? *(Bitte zu jeder Ansicht die entsprechende Zahl einkreisen)*

Die Checkliste…

	gar nicht einverstanden		mehr oder weniger einverstanden		völlig einverstanden	keine Meinung
1. verbessert die Sicherheit der Eingriffe (Anästhesie und Chirurgie).....	1	2	3	4	5	❑
2. verschwendet Zeit	1	2	3	4	5	❑
3. verbessert die Kommunikation (in Verbindung mit der Sicherheit) im Team	1	2	3	4	5	❑
4. bringt keinen zusätzlichen Vorteil zu den Kontrollen, die *vor* ihrem Einsatz in meinem Spital/meiner Klinik *bereits vorhanden waren*	1	2	3	4	5	❑
5. entwickelt eine Sicherheitskultur der Chirurgie-Teams.....	1	2	3	4	5	❑
6. hat ihre Wirksamkeit nicht in der wissenschaftlichen Literatur nachgewiesen.....	1	2	3	4	5	❑
7. erleichtert die Teamarbeit	1	2	3	4	5	❑
8. setzt (während der Kontrollen) die Hierarchiebeziehungen unter den Fachkräften (Ärzt/innen, Pfleger/innen usw.) ausser Kraft.....	1	2	3	4	5	❑

9. wenn Sie eine weitere Ansicht mitteilen möchten, tragen Sie diese bitte hier unten ein:

_____

Ihre Meinung zur Sicherheitskultur

7) Wenn Sie an *Ihr OP-Team* denken: In welchem Ausmass sind Sie mit folgenden Aussagen einverstanden?
(Bitte zu jeder Aussage die entsprechende Zahl einkreisen)

	gar nicht einverstanden		mehr oder weniger einverstanden		völlig einverstanden	keine Meinung
1. Die Team-Mitglieder besprechen regelmässig, wie man Zwischenfälle künftig vermeiden kann	1	2	3	4	5	❑
2. Es ist eine Kultur der ständigen Verbesserung	1	2	3	4	5	❑
3. Das Team hat gemeinsame Vorstellungen zu Sicherheitsfragen; jedes Mitglied wird gleichermassen geschätzt und fühlt sich befugt, einen Beitrag zu leisten	1	2	3	4	5	❑
4. Die Team-Mitglieder haben keine Angst, die Entscheidungen oder Aktionen ihrer hierarchischen Vorgesetzten in Frage zu stellen	1	2	3	4	5	❑
5. Es besteht eine "Beschuldigungskultur", aufgrund derer die Mitglieder des Teams zögern, Zwischenfälle zu melden	1	2	3	4	5	❑

6. Wenn Sie eine weitere Sichtweise mitteilen möchten, tragen Sie diese bitte hier ein:

_____

8) In welchem Ausmass sind Sie mit den folgenden Auffassungen zur Behandlungssicherheit *im Operationssaal* einverstanden? *(Bitte zu jeder Aussage die entsprechende Zahl einkreisen)*

	gar nicht einverstanden		mehr oder weniger einverstanden		völlig einverstanden	keine Meinung
1. Sicherheit ist vor allem eine individuelle Angelegenheit und weniger eine Team-Angelegenheit	1	2	3	4	5	❑
2. Für die Sicherheit sind sowohl die Ärzte als auch das sonstige medizinische Personal (Pflegefachpersonen, Hilfspflegekräfte usw.) verantwortlich	1	2	3	4	5	❑

3. Wenn Sie eine weitere Auffassung mitteilen möchten, tragen Sie diese bitte hier ein:

_____

Fehler, welche die Operationsstelle betreffen

9) Waren Sie innerhalb der letzten drei Jahre bzw. innerhalb ihrer gesamten beruflichen Tätigkeit an einem chirurgischen Eingriff beteiligt, bei dem ein Fehler betreffend Operationsstelle (falsche Seite, falsches Niveau, falsches Verfahren oder falscher Patient) mit Folgen für den Patienten geschehen ist (*es spielt dabei keine Rolle, wer verantwortlich war*)?

	2007-2009			**Im Verlauf Ihrer gesamten Tätigkeit bis 2006**		
Art des Fehlers:	nein	ja	wie oft?	nein	ja	wie oft?
1. falsche Seite	❑	❑	.....	❑	❑	.....
2. falsches Niveau	❑	❑	.....	❑	❑	.....
3. falsches Verfahren	❑	❑	.....	❑	❑	.....
4. falscher Patient	❑	❑	.....	❑	❑	.....

Angaben zu Ihrer Person

10) Geschlecht: ❑ männlich ❑ weiblich

11) Geburtsjahr: .....

12) Beruf: ❑ Chirurg/-in ☞ ❑ Anästhesist/-in ☞ ❑ Pflegefachperson ❑ anderes (bitte angeben):: .....

☞ Chirurgische(s)/anästhesiologische(s) Spezialgebiet(e): .....

☞ Anzahl Jahre der praktischen Erfahrung in der Chirurgie bzw. Anästhesie? .....

13) Durchschnittliche Anzahl Eingriffe/Prozeduren, welche Sie pro Jahr durchführen: .....

14) Sie sind … ❑ selbstständig (eigene Praxis oder Gemeinschaftspraxis)
❑ angestellt, ☞ ❑ Universitätsspital
❑ öffentliches, nicht universitäres Spital
❑ Privatspital oder Privatklinik

15) Haben Sie nach Ihrem FMH-Diplom einen Teil Ihrer Ausbildung im Ausland absolviert?
❑ nein ❑ ja (bitte Land angeben) ..... ❑ nicht anwendbar

Herzlichen Dank für Ihre Unterstützung!

Questionnaire – Italian version – (Interlaken)

Utilizzo e opinioni sulla checklist di sicurezza dell'OMS nei blocchi operatori: inchiesta tra i partecipanti alla giornata comune Chirurgia / Anestesia del 97° congresso annuale della Società Svizzera di Chirurgia (Interlaken, 26 - 28 maggio 2010)

Maggio 2010

Gentile Signora, egregio Signore, cari Colleghi,

La Fondazione Svizzera per la Sicurezza dei Pazienti e il Forum de la Qualité, in collaborazione con gli Ospedali Universitari di Ginevra, partecipano alla realizzazione di un sondaggio presso i partecipanti alla giornata comune Chirurgia / Anestesia del 97° congresso annuale della Società Svizzera di Chirurgia. Questo studio ha ottenuto l'autorizzazione dalla Società Svizzera di Chirurgia e dalla Società Svizzera di Anestesia-Rianimazione, che ringraziamo di cuore per il loro sostegno.

L'interesse dello studio è rivolto alla checklist di sicurezza per i blocchi operatori, sviluppata dall'OMS - the WHO Surgical Safety Checklist. Per checklist si intende una lista dei controlli da effettuare nel blocco operatorio prima (Sign In, Time Out) e dopo (Sign Out) un intervento chirurgico (per esempio: identità del paziente, marcatura del sito, lato, tipo di intervento, ordini postoperatori, ecc.) con l'obiettivo di migliorare la qualità e la sicurezza delle cure.

Questo studio persegue l'obiettivo di valutare l'utilizzo tra i chirurghi e gli anestesisti svizzeri di una checklist ispirata al modello dell'OMS e di meglio comprendere le attitudini di questi professionisti nei confronti di un tale strumento, ma anche nei confronti del funzionamento all'interno dell'equipe e della sicurezza in generale. Nel contempo, lo studio intende esplorare i casi di errore di sito operatorio vissuti nel corso della loro carriera da chirurghi e anestesisti.

La compilazione del questionario necessita all'incirca 8 minuti. Vi ringraziamo già sin d'ora per la vostra collaborazione. Una volta compilato, consegnate il questionario a una persona incaricata della raccolta (riconoscibile da una T-shirt "Surgical Safety Checklist" di colore verde).

Le risposte raccolte saranno trattate in modo **confidenziale** e i risultati saranno **anonimi** (questo significa che si riferiranno a **gruppi** e non a singoli individui).

Dr. med. Marc-Anton Hochreutener
Direttore, Fondazione per la Sicurezza dei Pazienti

Adriana Degiorgi
Presidente, FoQual

Prof. Dr. med. Othmar Schöb
Presidente, Società Svizzera di Chirurgia

Dr. med. Tiziano Cassina
Presidente, Società Svizzera di Anestesia e Rianimazione

Dr. med. Pierre Chopard
Medico aggiunto responsabile di servizio, Ospedali Universitari di Ginevra

Qualche informazione importante per compilare questo questionario:

a) una sola persona può rispondere al questionario,
b) non esistono risposte corrette o sbagliate; conta soltanto il suo parere,
c) per domande relative al *suo ospedale o alla sua clinica*:
   a. se lavora in più ospedali e/o cliniche, si riferisca al luogo nel quale lavora principalmente o più spesso, oppure quello che per lei è più importante,
   b. se lavora in uno studio medico, risponda pensando all'ospedale o alla clinica nel quale/nella quale esegue più interventi chirurgici.

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La checklist di sicurezza nel vostro ospedale o nella vostra clinica

1) L'istituto nel quale erogate i vostri interventi chirurgici è un… (*una sola risposta possibile*)
❑ ospedale universitario ❑ ospedale pubblico non universitario ❑ ospedale o clinica privato/a

2) Nel vostro ospedale o nella vostra clinica, è stata messa in atto una checklist per gli interventi nel blocco operatorio ispirata al modello dell'OMS?

1. sì..... ❑ ☞ *passare alla domanda n°**3***
2. no ..... ❑ ☞ *passare alla domanda n°**6***
3. non saprei..... ❑ ☞ *passare alla domanda n°**6***
4. non conosco questa checklist per la sicurezza ..... ❑ ☞ *passare alla domanda n°**7***

3) In quale anno questa checklist è stata messa in atto? .....

4) Secondo lei, in quale misura la messa in atto di questa checklist è stata sostenuta da…
(*per ogni linea, apponga una crocetta sulla casella adeguata*)

	nessun sostegno		sostegno medio		sostegno molto forte	senza opinione
1. la direzione del/la suo/a ospedale/clinica	1	2	3	4	5	❑
2. la direzione del Dipartimento di chirurgia	1	2	3	4	5	❑
3. la direzione del Dipartimento di anestesia	1	2	3	4	5	❑
4. la direzione infermieristica / degli strumentisti	1	2	3	4	5	❑

5) Questa checklist è composta dalle seguenti parti: (*per ogni linea, apponga una crocetta sulla casella adeguata*)

	no	sì
1. Sign In (prima dell'induzione anestesiologica)	❑	❑ ☞
2. Time Out (prima dell'incisione)	❑	❑ ☞
3. Sign Out (dopo l'intervento)	❑	❑ ☞
4. altra/e parte/i, precisare:	❑	❑ ☞

☞ Per tutte le caselle crociate "sì", precisi se all'interno della *sua equipe anestesiologica-chirurgica* (quella con la quale opera più di frequente), queste parti della checklist sono, applicate in nessun caso, raramente, mediamente, molto spesso o quasi sistematicamente:

	in nessun caso (0%)	raramente (1-29%)	mediamente (30-59%)	molto spesso (60-90%)	quasi sistematicamente (>90%)
1. Sign In	❑	❑	❑	❑	❑
2. Time Out	❑	❑	❑	❑	❑
3. Sign Out	❑	❑	❑	❑	❑
4. altra/e	❑	❑	❑	❑	❑

La sua opinione sulla checklist

6) Relativamente all'utilizzo della checklist nei blocchi operatori, in quale misura è d'accordo con i seguenti aspetti: *(per ogni aspetto, apponga una crocetta sulla cifra adeguata)*

La checklist…

	per niente d'accordo		mediamente d'accordo		completamente d'accordo	senza opinione
1. migliora la sicurezza degli interventi (anestesia e chirurgia)	1	2	3	4	5	❑
2. fa perdere tempo	1	2	3	4	5	❑
3. migliora la comunicazione (correlata alla sicurezza) nell'equipe	1	2	3	4	5	❑
4. non porta nulla di più rispetto ai controlli di sicurezza *già messi in atto* nel mio ospedale o nella mia clinica *prima* della sua attuazione	1	2	3	4	5	❑
5. sviluppa una cultura della sicurezza nelle equipe chirurgiche	1	2	3	4	5	❑
6. la sua efficacia non è stata dimostrata nella letteratura scientifica	1	2	3	4	5	❑
7. facilita il lavoro di gruppo	1	2	3	4	5	❑
8. elimina (durante i controlli) la gerarchia tra i professionisi (medici, infermieri, ecc.)	1	2	3	4	5	❑

9. se ha un'altra opinione, la indichi qui di seguito:

_____

La sua opinione sulla cultura della sicurezza

7) Se pensa alla *sua equipe anestesiologica - chirurgica*, in quale misura è d'accordo con le opinioni seguenti:
(per ogni opinione, apponga una crocetta sulla cifra adeguata)

	per niente d'accordo		mediamente d'accordo		completamente d'accordo	senza opinione
1. I membri dell'equipe discutono regolarmente sulle modalità per impedire che gli incidenti riaccadano	1	2	3	4	5	❑
2. La cultura è quella del miglioramento continuo	1	2	3	4	5	❑
3. L'equipe ha una concezione comune dei problemi di sicurezza; tutti sono apprezzati in modo equivalente e si sentono autorizzati a fornire il loro contributo	1	2	3	4	5	❑
4. I membri dell'equipe si sentono liberi di mettere in dubbio le decisioni o le azioni dei loro superiori gerarchici	1	2	3	4	5	❑
5. Esiste una "cultura del biasimo", che rende i membri dell'equipe restii a segnalare gli incidenti	1	2	3	4	5	❑

6. Se desidera indicare un'altra opinione, la precisi qui di seguito:

_____

8) In rapporto alla sicurezza delle cure *nel blocco operatorio*, in quale misura è d'accordo con le opinioni seguenti: *(per ogni opinione, apponga una crocetta sulla cifra adeguata)*

	per niente d'accordo		mediamente d'accordo		completamente d'accordo	senza opinione
1. La sicurezza è innanzitutto una questione individuale e soltanto in minor misura una questione d'equipe	1	2	3	4	5	❑
2. La sicurezza dipende sia dalla responsabilità dei medici sia da quella dei professionisti para-medici (infermieri, aiuti, ecc.)	1	2	3	4	5	❑

3. Se desidera indicare un'altra opinione, la precisi qui di seguito:

_____

Gli errori di sito chirurgico

9) Ha partecipato ad un intervento chirurgico durante il quale si è verificato un errore di sito chirurgico (di lato, di livello, di procedura o di paziente), con conseguenze per il paziente *(poco importa chi era /erano il/i responsabile/i)*, negli ultimi tre anni? Nel corso della sua carriera?

	tra il 2007 e il 2009			**nel corso della sua carriera (fino al 2006)**		
	no	sì	quanti?	no	sì	quanti?
Un errore…						
1. di lato	❑	❑	.....	❑	❑	.....
2. di livello	❑	❑	.....	❑	❑	.....
3. di procedura	❑	❑	.....	❑	❑	.....
4. di identità del paziente	❑	❑	.....	❑	❑	.....

Qualche informazione su di lei

10) Lei è… ❑ uomo ❑ donna

11) Il suo anno di nascita: .....

12) Lei è… ❑ chirurgo ☞ ❑ anestesista ☞ ❑ infermiere ❑ altro, precisare: .....

☞ La/le sua/e specialità chirurgica/che o anestesiologica/che: .....

☞ I suoi anni di pratica in chirurgia o in anestesia: .....

13) Il numero medio di interventi / procedure che pratica all'anno: .....

14) Lei è… ❑ indipendente (studio medico, proprio o con altri medici)
❑ impiegato, presso un ☞ ❑ ospedale universitario
❑ ospedale pubblico non universitario
❑ ospedale o clinica privato/a

15) Dopo il diploma FMH, ha conseguito una parte della sua formazione all'estero?
❑ no ❑ sì, in quale paese? ..... ❑ non applicabile

Grazie di cuore per la sua preziosa collaborazione!

Questionnaire – English version – (Geneva)

Stiftung für Patientensicherheit
Fondation pour la Sécurité des Patients
Fondazione per la Sicurezza dei Pazienti
Patient Safety Foundation

foQual
forum de la qualité

Utilization and Opinion on the World Health Organization (WHO) Surgical Safety Checklist for Operating Theatres:

Survey of Delegates attending the 45th Annual Congress of the European Society of Surgical Research (Geneva, 9-12 June 2010)

June 2010

Dear Sir/Madam,
Dear Colleague,

The Swiss Foundation for Patient Safety and the Quality Forum (foQual) are participating in the conduct of a survey of delegates attending the 45th Annual Congress of the European Society of Surgical Research in collaboration with the University Hospitals of Geneva. This study has received formal approval by the local organizing committee of ESSR 2010.

This study concerns the safety checklist developed by WHO for operating theatres ("WHO Surgical Safety Checklist"). The safety checklist comprises a list of controls to be carried out in the operating theatre before (Sign In, Time Out) and after (Sign Out) a surgical intervention (e.g., patient identity, site marking, side, type of intervention, postoperative management issues, etc.). The goal of this checklist is to improve the quality and safety of patient care.

The aim of this survey is to evaluate the use of a checklist, based on the WHO model, among surgeons and anaesthetists as well as to better understand attitudes towards this checklist, teamwork functioning and the issue of safety in general. In addition, it aims to explore the number of wrong site surgery experienced by surgeons and anaesthetists during their career.

This questionnaire takes approximately only 10 minutes to complete and we would like to thank you in advance for your collaboration. Once completed, please place it in one of the boxes with the mention "Surgical Checklist Survey" in the front desk.

Data collected will be treated as **strictly confidential** and results **anonymized** (i.e., they will be presented as groups and not individually).

Dr. Marc-Anton Hochreutener
Director, Swiss Foundation for Patient Safety

Ms Adriana Degiorgi
President, FoQual

Dr. Pierre Chopard
Deputy Director, University Hospitals of Geneva

Dr. Mustafa Cikirikcioglu
President, 45th Annual Congress ESSR

Important instructions for the completion of the questionnaire:

a) Only one person may respond to the questionnaire.
b) There is no right or wrong response to questions; we are only seeking your personal opinion.
c) *For questions concerning your hospital/clinic*:
   a. if you work in several hospitals/clinics, please consider only the one in which you mainly work, or the one you consider to be the most important;
   b. if you work in consulting rooms, please respond according to the hospital/clinic in which you perform most of your surgical interventions.
d) Please do **<u>not complete</u>** this questionnaire if you can tick one of the following boxes:
   - ❑ my main activity is dedicated to research and/or management (not in the clinical field)
   - ❑ I have already participated to this survey (Swiss Surgical Meeting, European Society for Surgical Research)

☎ 🖷 ✉ Stéphane Cullati, Quality of Care Service, University of Geneva Hospitals, Rue Gabrielle-Perret-Gentil 4, 1211 Geneva 14, Phone +41 22 372 90 56, Stephane.Cullati@hcuge.ch

The surgical safety checklist in your healthcare institution

1) The institution in which you perform your surgical procedures is a … (*please tick one box only*)
❑ university hospital ❑ non-university public hospital ❑ private hospital/clinic

2) Has a surgical safety checklist similar to the one proposed by the World Health Organization been implemented in your hospital/clinic for procedures carried out in operating theatres?

1. Yes ..... ❑ ☞ *go directly to question **3***
2. No ..... ❑ ☞ *go directly to question **6***
3. Don't know ..... ❑ ☞ *go directly to question **6***
4. I don't know this surgical safety checklist ..... ❑ ☞ *go directly to question **7***

3) In which year was the checklist introduced? .....

4) In your opinion, to what extent was the implementation of the checklist supported by…
(*please tick the corresponding box for each line*)

	No support		Medium support		Very strong support	No opinion
1. Your hospital/clinic senior management	1	2	3	4	5	❑
2. The department of surgery senior management	1	2	3	4	5	❑
3. The department of anaesthesiology senior management	1	2	3	4	5	❑
4. The nursing department (including instrumentists) senior management	1	2	3	4	5	❑

5) This checklist is comprised of the following sections: (*please tick the corresponding box for each line*)

	No	Yes
1. Sign In (before induction of anaesthesia)	❑	❑ ☞
2. Time Out (before skin incision)	❑	❑ ☞
3. Sign Out (after the procedure)	❑	❑ ☞
4. Other section/s; please mention:	❑	❑ ☞

☞ For each box ticked "yes", please indicate if these checklist sections are applied either never, rarely, partially, very often, or quasi systematically within *your surgical/anaesthetic team* (i.e., the one with which you operate most often):

	Never (0%)	Rarely (1-29%)	Partially (30-59%)	Very often (60-90%)	Quasi systematically (>90%)
1. Sign In	❑	❑	❑	❑	❑
2. Time Out	❑	❑	❑	❑	❑
3. Sign Out	❑	❑	❑	❑	❑
4. Other	❑	❑	❑	❑	❑

Your opinion of the checklist

6) Regarding the use of the checklist in operating theatres, to what extent are you in agreement with the following opinions: *(please circle a number for each statement)*

The checklist…

	Don't agree at all		Partially agree		Fully agree	No opinion
1. improves the safety of procedures (anaesthetic and surgical)	1	2	3	4	5	❑
2. is a waste of time	1	2	3	4	5	❑
3. improves team communication (related to safety)	1	2	3	4	5	❑
4. brings no extra value to *existing* safety procedures already in place in my hospital/clinic *before* its implementation	1	2	3	4	5	❑
5. helps to develop a safety culture in surgical teams	1	2	3	4	5	❑
6. has not demonstrated its efficacy in the scientific literature	1	2	3	4	5	❑
7. facilitates teamwork	1	2	3	4	5	❑
8. eliminates (during the controls) the hierarchy between healthcare professionals (doctors, nurses, etc.)	1	2	3	4	5	❑

9. If you wish to express another opinion, please mention below:

_____

☞ Please turn the page

Your opinion on safety culture

7) If you think about *your anaesthetic/surgical team*, to what extent are you in agreement with the following opinions: *(please circle a number for each statement)*

	Don't agree at all		Partially agree		Fully agree	No opinion
1. Staff routinely discuss ways to prevent incidents from happening again	1	2	3	4	5	❑
2. The culture is one of continuous improvement	1	2	3	4	5	❑
3. The team has a shared understanding and vision about safety issues; everyone is equally valued and feels free to contribute	1	2	3	4	5	❑
4. Staff feel free to question the decisions or actions of those with more authority	1	2	3	4	5	❑
5. There is a blame culture, so staff are reluctant to report incidents	1	2	3	4	5	❑

6. If you wish to express another opinion, please mention below:

_____

8) Regarding safety of care in the operating theatre, to what extent are you in agreement with the following opinions: *(please circle a number for each statement)*

	Don't agree at all		Partially agree		Fully agree	No opinion
1. Safety is an individual concern above all, and a team concern to a lesser extent	1	2	3	4	5	❑
2. Safety is dependent not only on the responsibility of doctors, but of all healthcare professionals (nurses, auxiliary-nurses, etc)	1	2	3	4	5	❑

3. If you wish to express another opinion, please mention below:

_____

Wrong site surgery

9) Have you participated in a surgical procedure where an operating site error (wrong side, level, procedure, or patient) took place with subsequent consequences for the patient (*no matter who were the persons responsible*) during the last 3 years? during your career?

	Between 2007-2009			**During your career (until end 2006)**		
An error …	No	Yes	How many?	No	Yes	How many?
1. wrong side	❑	❑	.....	❑	❑	.....
2. wrong level	❑	❑	.....	❑	❑	.....
3. wrong procedure	❑	❑	.....	❑	❑	.....
4. wrong patient	❑	❑	.....	❑	❑	.....

Some personal data

10) Are you… ❑ male ❑ female

11) Your date of birth (*year only*): .....

12) You are … ❑ surgeon ☞ ❑ anaesthetist ☞ ❑ nurse ❑ other (define): .....

☞ The number of years you have been practising in surgery/anaesthetics: .....

13) The average number of interventions/procedures that you perform each year: .....

14) Are you… ❑ private practitioner (consulting rooms, either alone or with colleagues)
❑ working in a ☞ ❑ university hospital
❑ non-university public hospital
❑ private hospital/clinic

15) In which country are you working? .....

16) After completing your specialist training, have you followed part of your postgraduate training in another country? ❑ No ❑ Yes, in which country?..... ❑ Not applicable

Thank you for your valuable collaboration !

Pharmacy Safety Climate Questionnaire[15]: 4 selected and adapted items

1. Staff routinely discuss ways to prevent incidents from happening again
2. The team has a shared understanding and vision about safety issues; everyone is equally valued and feels free to contribute
3. Staff feel free to question the decisions or actions of those with more authority
4. There is a blame culture, so staff are reluctant to report incidents

The French translation and the adaptation to all-staff hospital setting of these items are taken from the project "La culture de la sécurité chez les professionnels de soins en milieu hospitalier: traduction et validation d'un questionnaire", P. Chopard, Geneva University Hospitals (Medical Directorate, project 2009-12).