

Patient Safety Culture Instruments used in Member States





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Preface

One of the aims of the EUNetPaS project was “Promoting a Culture of Patient Safety”, and this aim was approached in Work Package 1 (WP1).

The catalogue in hand provides information on part of the tasks to be carried out within WP1, viz. the work performed by the European Society for Quality in Healthcare (ESQH) in Denmark regarding project delivery number D26: a “*validated questionnaire to measure patient safety culture in hospitals through health care professionals at the ward level*”. This catalogue is accompanied by a report describing recommendation on the use of patient safety culture instruments

It is important to note that the content of the catalogue reflects *only* the patient safety culture instruments used in MS in spring and summer 2009, and that it is based solely on information feedback from MS. Thus the information presented here should not be regarded as an exhaustive account of activities promoting patient safety culture in MS, as there is no way of knowing how exhaustive the information collection performed in the individual MS through the project’s National Contact Points (NCP) has been. However, all informants and WP1 partners were given the opportunity to comment on and correct the content of this catalogue, and it is our belief that it reflects the level of activity fairly well.

The content of this catalogue should be seen in close connection with other work done within EUNetPaS, especially the work of WP1 regarding a literature review on usability and utility/actionability, also performed by ESQH, Denmark, and a diary describing the experiences gained while piloting two of the recommended instruments in a clinical and political setting where patient safety work is in its early days. This work is performed by the State Health Care Accreditation Agency under the Ministry of Health of the Republic of Lithuania, supervised by the ESQH office in Denmark. These publications are available at the project’s webpage: www.eunetpas.eu, and through the publishing organisations.

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Summary

The aim of the work presented was recommending a set of validated instruments to promote patient safety culture (PSC) in hospitals through healthcare professionals at ward level, and to describe actionability.

The process included the following elements:

- Literature search identifying PSC instruments and their use in the EU
- Establishing an EU-wide network of experts, ministerial NCPs and WP1 partners
- Collecting information from the network on instruments used
- Draft report displaying the information stratified country-wise and recommendations
- Validation by the network of the information in the report
- Assessment of identified instruments according to an approved set of “*instrument criteria*” that an instrument has to fulfil to qualify as an eligible candidate for a recommendable instrument
- Listing candidate instruments for recommendation
- Assessment of candidate instruments according to the “*set criteria*” that a set of 3-4 instruments has to fulfil to make up a set of instruments supplementing each other
- Recommendation of 3-4 instruments applicable for use in MS, and further recommendations.

The collection of information revealed 15 different instruments used in MS; three of them met the first set of criteria. They were also the instruments most frequently used in MS. A number of validation studies regarding these three instruments had either been performed or planned in MS.

The EUNetPaS literature search came up with 19 PSC instruments, four of which have been reported in use in MS, and three of them are the ones most frequently used.

At present, the following three instruments are recommended for internal use in MS, but not for benchmarking:

- **Hospital Survey on Patient Safety Culture** from the Agency for Healthcare Research and Quality (AHRQ) in the USA
- **Manchester Patient Safety Assessment Framework** from the University of Manchester in the UK
- **Safety Attitudes Questionnaire** from the University of Texas / Johns Hopkins University in the USA

In addition, a number of other instruments used were commented on, but not directly recommended.

Two of the recommended instruments were tested at ward level in Lithuanian hospitals, and the experiences gained are shown in a separate diary.

Results of the information collection from MS on PSC instruments used

Austria (A)

Name of the instrument	Clinical Risk Management
By	Hr Dr. Peter Schweppe
Characteristics	Description
Origin and year of launch	Country of origin and year of launch: Austria / Developed since 2003 by a working group (representatives of the Austrian health care system) under HR Dr. Schweppe; incorporating previous knowledge and experience of KAGes; Development of a clinical risk management according to ONR 49000ff of the Austria Standard Institute; training program for “qualified risk managers” since 2005, launch within KAGes in 2007
Language(s)	Original language: German Known translations (as the original instrument and modified): English
Objective(s)	The instrument designed to fulfil the following objectives: <ul style="list-style-type: none"> - Protection of patients against damage or injury - Reduction of complications (frequency of occurrence) - Protection of staff members against criminal or civil liability - Protection of company against dispensable judicial arbitration proceeding - Preventing loss of reputation Characteristics of the instrument: <ul style="list-style-type: none"> - Risk analysis - Risk politics - Searching for solutions - Measure planning - Measure implementation - Risk controlling - System revision
Kind of instrument	The instrument is both qualitative and quantitative; Qualitative: <ul style="list-style-type: none"> - Continuous improvement on the basis of damage assessment - Identification of possible faults by fault management systems/

Name of the instrument	Clinical Risk Management
By	Hr Dr. Peter Schweppe
Characteristics	Description
	<ul style="list-style-type: none"> - to learn from shortcomings that have occurred by validated error lists - Quality management - External consultants and investigators - Internal improvement system - Effectiveness and efficiency <p>Quantitative:</p> <ul style="list-style-type: none"> - Risk costs before - Risk assessment - Intended modification of risk situation - Target figure for risk costs - Optimisation of risk costs - Can the aims be achieved? - If yes: fixing of costs, if -: revision of system <p>The instrument has the following supportive instrument kit:</p> <ul style="list-style-type: none"> - ONR 49000ff:2008, ISO/DIS 31000, Austrian Standards Institute - Planned implementation of risk software and database for risk documentation
Setting for application	<p>Basically all clinical areas/holistic approach, e.g.:</p> <ul style="list-style-type: none"> - Inpatient settings - Primary care settings - Ambulatory care - Ambulance - Acute sector - Mental health services - Intensive care unit - Operating rooms - Hospital hygiene - Infection protection and control (documentation, database) - Medication - Medical devices

Name of the instrument	Clinical Risk Management
By	Hr Dr. Peter Schweppe
Characteristics	Description
	<ul style="list-style-type: none"> - Transit of medical findings - Administrative units - Eco-mic units (e.g. purchasing of medicines and medical devices)
Informants	Recommended informants are: Stakeholders and all persons employed by or acting for KAGes, e.g.: doctors, nurses, attendants, biomedical scientists, radiologists, medical engineers, in house pharmacists
Method of usage	Self completion by the persons stated above, i. e. assigned person within KAGes (“Certified Risk Managers”), via software application; by complaint management (patients), recording in database, continuous training, appointment of risk agents in the different departments
Known usage	Usage according to ONR in Austria, Germany and Switzerland A search in the Pub Med database limited to publications 2004-2009, and performed in April 2008 on “03/04/2009” gave 360 hits. <i>It covered a wide range of studies in patient safety in different specialties. 4 studies were available in German.</i>
Format	<p>Depending on the method of Risk Evaluation, e.g.</p> <ul style="list-style-type: none"> - Scenario planning technique - Process analysis - Problem report systems - Analysis of damage occurrence <p>Total number of items: unlimited, up to the person in charge Number of dimensions/scales:</p> <ol style="list-style-type: none"> 1. Management summary – purpose, targets and results 2. Definition of probability 3. Definition of effects 4. Risk matrix: actual condition/target condition 5. Risk legend 6. Graphical representation 7. Process description and risk/error identification <p>nominal or numerical</p> <ul style="list-style-type: none"> - 2 – 4: numerical

Name of the instrument	Clinical Risk Management
By	Hr Dr. Peter Schweppe
Characteristics	Description
	<ul style="list-style-type: none"> - 1, 5, 7: nominal - 1, 7: possibility to provide comments on open ended questions <p>Likert scale for risk frequency and level of damage</p> <p>Risk matrix</p>
Definition of PSC	Systematic improvement of the risk situation for patients and their family members by risk identification, evaluation and handling
Subjects/scales covered	<p>Structure of the instrument:</p> <ul style="list-style-type: none"> - Definition of actual situation - Risk identification - Risk analysis - Risk evaluation - Risk handling: avoidance/reduction/acceptance - If acceptable: disclosing and monitoring - If not acceptable: Search of solutions <ul style="list-style-type: none"> o Planning of measures o Implementation of measures - Risk controlling/System revision
Typological classification	<p>The instrument identifies the following types of cultures:</p> <ul style="list-style-type: none"> - Pathological - Reactive - Calculative - Proactive (learning by almost-accidents and unexpected mistakes, advance planning) - Generative (workflow improvement)
Developmental process	<p>Development by HR Dr. Peter Schweppe since 2003 according to ONR 49000ff of the Austria Standard Institute; training program for “Qualified Risk Managers” since 2005, learning from experience of other Risk Managers; continuous improvement of system</p> <p>External revision / International quality evaluation via Network Risk Management (“Netzwerk Risikomanagement”) by Dr. Bru-Brühwiler (CH) and Prof. Dr. Andreas Becker (Clinotel GbmH, D);</p> <p>Intended certification by Austrian Standards Institute</p>

Name of the instrument	Clinical Risk Management
By	Hr Dr. Peter Schweppe
Characteristics	Description
Level of assessment and use of results	<p>How is the level of assessment?</p> <ul style="list-style-type: none"> - Individual - Team - Ward - Institution - Region - Nation - Cross-nation <p>Questions are directed towards how the individual experiences PSC within the team unit.</p> <p>The results are recommended used locally and cross-institutional by benchmarking, systematic communication, in-house training and improvement.</p>
Assessment of feasibility	<p>The instrument is feasible, according to:</p> <ul style="list-style-type: none"> - Practical issues regarding application - Recourse; labour – used by informant and rater - Information gained - Economical/recourse issues e.g. expenses and labours - Statistical proceeding of results - Feedback of results - Planning of improvement strategies - Follow-up - Availability <p>Quality management (key figures, performance indicators)</p>
Availability of the instrument, manuals etc.	<p>Training material and data proceeding instruments are available.</p> <p>The instrument is free of charge for users within KAGes, norms (ONR 49000ff) are subject to charge, see Austrian Standards Institute; www.on-norm.at</p>
Test of the instrument	<p>The instrument has been scientifically tested.</p> <p>Certification according to ONR 49000ff:2008, ISO/DIS 31000, Austrian Standards Institute</p> <ul style="list-style-type: none"> - Test method: cross sectional, observational - Nature of test: intra- and cross-institutional

Name of the instrument	Clinical Risk Management
By	Hr Dr. Peter Schweppe
Characteristics	Description
	<ul style="list-style-type: none"> - Country and care /non care setting: Austria/care setting - Test population e.g. profession - - Number of invitees & participants: 90 certified risk managers, all in all about 200 risk experts within KAGes <p>Systematic and continuous improvement of safety for all patients of KAGes</p>
Scientific properties	<p>Results of testing:</p> <ul style="list-style-type: none"> - Number of participants: 200 risk experts - Country and care /non care setting: Austria/care setting - Test method: cross sectional, observational - Nature of test: inter- and cross-institutional - Test population: patients and staff of KAGes (see Informants) - Exploratory factor analysis & confirmatory factor analysis; item factor load, floor/ceiling effects scale reliability, inter factor, correlation etc. - Variation - Content validity (refers to the extent to which the measure represents relevant facets of PSC) includes all dimensions of PSC - Construct validity (the measure is related to other similar measures of PSC and not related to other characteristics) all PCS measures are interrelated and the knowledge gained is regularly exchanged within KAGes; there is continuous adaptation and completion of theorised constructs by practical use and experience - Intra rater reliability (degree of agreement over time; test-retest)
Ability to predict an outcome associated with PSC	<p>The instrument is suitable for tracking changes in PSC over time by statistics, QM, known risks (structure, process, results)</p> <p>Criterion validity (refers to the measurements capacity to predict an outcome associated with PSC): high standard by well-established instruments (certified, scientifically approved)</p>
Issues regarding modification and	<p>Easy implementation of modifications/improvements within the process by reporting, statistics and QM</p>

Name of the instrument	Clinical Risk Management
By	Hr Dr. Peter Schweppe
Characteristics	Description
translation	Translation: - implications foreseeable/possible application on international level
Main source and contact to know more about the instrument	Name: HR Dr. Peter Schweppe Address: Steiermärkische Krankenanstaltenges. m.b.H. Tel.: 0043 316 3434-5110 Mail: peter.schweppe@kages.at www.kages.at www.medrisk.at
Contact information – who filled in this scheme?	Name: Kristin Grandl Address: Steiermärkische Krankenanstaltenges. m.b.H. Tel.: 0043 316 34-5269 Mail: kristin.grandl@kages.at

Austrian (cont.)

Name of the instrument	Wiener Sicherheitskultur Fragebogen (WSF) Vienna Safety Culture Questionnaire
By	Research Institute of Health Care Management and Health Care Economics – WU (Vienna University of Economics and Business)
Characteristic	Description
Origin and year of launch	Austria, 2008
Language(s)	Original language: German
Objective	To measure the dimensions of patient safety culture
Kind of instrument	The instrument is qualitative. It is a web based survey, with a short description of the instrument at the beginning. Automatic feed back on an individual basis is given after filling in the survey in the web afterwards a feed back on unit level is given.
Setting for application	The appropriate settings for application are: <ul style="list-style-type: none"> - Inpatient settings - Primary care settings - Ambulatory care - Ambulance - Acute sector

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By	Research Institute of Health Care Management and Health Care Economics – WU (Vienna University of Economics and Business)
Characteristic	Description
	<ul style="list-style-type: none"> - Intensive care unit - Operating rooms - Long term care - Nurses homes
Informants	Recommended informants are: doctors and nurses
Method of usage	The instrument is paper-pencil or web based by self completion, immediate feedback on individual level after filling in the web version,
Known usage	At this stage (march 2009), the instrument is used in Austria, but planned for use in other German language spoken countries. The instrument aimed to regard the specialities of the hospital landscape.
Format	<ul style="list-style-type: none"> - Total number of items: 158 - Number of dimensions/scales: 10 - 4 point-Likert scale (from “apply not at all” to “apply complete” or alternatively “- known cases” to “known cases”)
Definition of PSC	<p>According to the definition of the International Nuclear Safety Advisory Group (INSAG):</p> <p>Safety culture is “the product of individual and group values, attitudes, perceptions, competencies and patterns of behaviour that determine the commitment to, and the style and proficiency of an organisation’s safety management”(1). In addition, the importance of patterns of behaviour as well as social and technical practices of employees, managers, and other members of the organisation is emphasized by INSAG (1).</p>
Subjects/scales covered	<p>The subjects/scales (number of items pr. scale) covered e.g.:</p> <ul style="list-style-type: none"> - Active learning from mistakes/errors - Importance of patients safety for management - Demands and work load - Communication and cooperation regarding patient safety - Attitude toward safety management - Error Fatalism

Name of the instrument	Wiener Sicherheitskultur Fragebogen (WSF) Vienna Safety Culture Questionnaire
By	Research Institute of Health Care Management and Health Care Economics – WU (Vienna University of Economics and Business)
Characteristic	Description
	<ul style="list-style-type: none"> - Personal acceptance of responsibility - Appraisal of safety efforts - Processes and equipment - Number of actual problem areas
Typological classification	The instrument is not typological.
Developmental process	<p>Basis</p> <p>Based on an intensive literature research 44 surveys with 320 scales, of which 255 are not identical, have been identified. 31 respondents have sorted these 255 scales to five dimensions. On the other hand 9 expert-interviews have been conducted, transcribed and 251 relevant statements have been identified. Subsequently 30 respondents have sorted these 251 statements to 6 dimensions. After a comparison of both approaches 9 different dimensions were identified.</p> <p>Item-Pool</p> <p>Based on definitions of the 9 dimensions a set of more than 700 Items was generated. Most of the items were newly developed. If possible, items from existing questionnaires were included too. Afterwards each item was rated by seven experts independently for its feasible discriminatory power for safety culture (four-category rating scale from “selective” to “not feasible”). This rating results in a reduced pool of 326 items in total. Additional 23 items were added as “validation-items”.</p> <p>Item Selection</p> <p>Altogether 107 experts from Austrian hospitals were enlisted to fill in this lengthy test version as a pretest.</p> <p>A first preliminary item selection was performed, resulting in a set of 135 Items plus the 23 validation-items.</p> <p>The item selection was based firstly on an explorative factor analysis and then on an item selection with respect to the validity index of each item, its discrimination index, and its difficulty. Validity of each scale, Cronbachs Alpha, and normal distribution were tried to be optimized by this selection process.</p> <p>Stability and norming</p>

Name of the instrument	Wiener Sicherheitskultur Fragebogen (WSF) Vienna Safety Culture Questionnaire
By	Research Institute of Health Care Management and Health Care Economics – WU (Vienna University of Economics and Business)
Characteristic	Description
	Based on a sample of more than 500 Pbn the stability of the factor solution, internal consistency, validity and normal distribution was tested, with good results. Norms so fare are based on 538 data-sets.
Level of assessment and use of results	The level of assessment is <ul style="list-style-type: none"> - Individual - Team - Institution <p>Questions are directed towards how the Individual experiences as well as the experiences in his team/work unit.</p> <p>The results are planned to benchmark other institutions.</p>
Assessment of feasibility	The instrument is feasible, according to: <ul style="list-style-type: none"> - Practical issues regarding application - Information gained - Statistical proceeding of results - Feed back of results - Planning of improvement strategies - Follow up - Availability
Availability of the instrument, manuals etc.	The instrument is free of charge. And available from: http://www.complexity-research.com/wsf/
Test of the instrument	The instrument has been scientifically tested. <ul style="list-style-type: none"> - Test method: cross sectional and longitudinal design - Nature of test: inter and cross institutional - Austrian Hospitals - Test population: medicine and care - Number participants: More than 500
Scientific properties	Results of testing: <ul style="list-style-type: none"> - Exploratory factor analysis (item factor load), inter correlation matrix - no floor/ceiling effects

Name of the instrument	Wiener Sicherheitskultur Fragebogen (WSF) Vienna Safety Culture Questionnaire
By	Research Institute of Health Care Management and Health Care Economics – WU (Vienna University of Economics and Business)
Characteristic	Description
	<ul style="list-style-type: none"> - scale reliability: Alpha = 0.8-0.95 - normal distribution is tested of being sufficient for most of the scales - Content validity was assessed by experts ratings - Construct validity was tested by quasi experimental designs (extreme group comparison) - Empirical validity was measured by a multiple correlation with a validation scale “Number of actual problem areas”. Validity is above 0.5 - Intra rater reliability, is actually tested, at present no measures available - Is the instrument is thought (at present) to be suitable for tracking changes in PSC over time? Evidence is to be established in the autumn of 2009.
Ability to predict an outcome associated with PSC	Empirical validity was measured by a multiple correlation with a validation scale “Number of actual problem areas”. Validity is above 0.5
Issues regarding modification and translation	<p>The instrument is still under development. Items selection is not finally closed at the present state.</p> <p>Based on own experiences and the opinion of other scholars we think that it is not possible to translate a psychometric based instrument without a new validation process (item selection, factor analysis, reliability and validity testing)</p>
Main source and contact to know more about the instrument	<p>Name: Dipl.-Psych. Dr. Dr. Guido Strunk</p> <p>Address: Research Institute for Health Care Management and Health Economics.</p> <p>Althanstrasse 51, 1090 Vienna, Austria</p> <p>Tel.: +43 / 1 / 31336 4010</p> <p>Mail: guido.strunk@wunowien.ac.at</p> <p>www: http://www.wunowien.ac.at/healthcare/en</p>
Contact information – who filled in this questionnaire?	Dipl.-Psych. Dr. Dr. Guido Strunk (please see above)

Belgium (B)

Name of the instrument	Belgian version of the Hospital Survey on Patient Safety Culture by the Agency for Healthcare Research and Quality (AHRQ)
By	Ziekenhuis Oost-Limburg & University Hasselt, Dept Business Economics, patient safety working group
Characteristic	Description
Origin and year of launch	USA, launched in 2004 Belgium launched in 2005 in Flemish and in 2007 in French
Language(s)	Original language: American Known translations (as the original instrument and modified): <ul style="list-style-type: none">- Croatian- Dutch- Finnish- Flemish- French- Greek- Italian- Mandarin (Chinese)- Norwegian- Portuguese- Serbian- Spanish- Sweden- German- Turkish
Objective	Health care organizations can use the instrument to: <ul style="list-style-type: none">- Assess staff's opinion on patient safety issues, medical error, and event reporting in the hospital- Track changes in patient safety culture over time- Evaluate the impact of patient safety culture interventions.
Kind of instrument	The instrument is a survey assessment instrument (questionnaire), The survey has an accompanying instrument kit - The original instrument has an accompanying manual and excel file to analyze the data. For Belgium this questionnaire was translated in Dutch and

Name of the instrument	Belgian version of the Hospital Survey on Patient Safety Culture by the Agency for Healthcare Research and Quality (AHRQ)
By	Ziekenhuis Oost-Limburg & University Hasselt, Dept Business Economics, patient safety working group
Characteristic	Description
	French and revalidated for each translation. A manual has been written in Dutch and in French, and an MS Access based instrument was designed to standardize data-entry, automated application of the exclusion criteria and analyses.
Setting for application	The described survey is applicable for hospital settings, however another two instrument applicable for Nursing homes (Nursing Home Survey on Patient Safety Culture) and Medical offices (Medical Office Survey on Patient Safety Culture) are available. These have not (yet) been translated/used in Belgium.
Informants	The survey can be completed by all types of hospital staff. However the survey is best suited for the following: <ul style="list-style-type: none"> - Hospital staff who have direct contact or interaction with patients (clinical staff, such as nurses, or non-clinical staff, such as unit clerks); - Hospital staff who may not have direct contact or interaction with patients but whose work directly affects patient care (staff in units such as pharmacy, laboratory/pathology); - Hospital-employed physicians who spend most of their work hours in the hospital (emergency department physicians, hospitalists, pathologists) - Hospital supervisors, managers, and administrators.
Method of usage	The HSPSC is distributed to staff for individual self-completion.
Known usage	A search in the Pub Med database limited to publications 2004-2008, and performed in august 2008 on "Hospital Survey on Patient Safety Culture" gave 128 hits. It covered a wide range of studies in patient safety in different specialties. Roughly half of the studies were in American.
Format	<ul style="list-style-type: none"> - Total number of items; 42 - Number of dimensions/scales measured: 12 - Numerical and possibility providing comments on open ended items - 5 point-Likert scale (from "Strongly Disagree" to "Strongly Agree".)

Name of the instrument	Belgian version of the Hospital Survey on Patient Safety Culture by the Agency for Healthcare Research and Quality (AHRQ)
By	Ziekenhuis Oost-Limburg & University Hasselt, Dept Business Economics, patient safety working group
Characteristic	Description
Definition of PSC	The safety culture of an organization is the product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that determine the commitment to, and the style and proficiency of, an organization's health and safety management. Organizations with a positive safety culture are characterized by communications founded on mutual trust, by shared perceptions of the importance of safety, and by confidence in the efficacy of preventive measures.
Subjects/scales covered	The HSPSC measures the following <u>10 dimensions</u> : <ol style="list-style-type: none"> 1. supervisor expectations and actions promoting safety, 2. organisational learning – continuous improvement, 3. teamwork within hospital units, 4. communication openness, 5. feedback and communication about error, 6. non punitive response to error, 7. staffing, 8. hospital management support for patient safety, 9. teamwork across hospital units, 10. hospital hand-offs and transitions and <u>two outcome dimensions</u> : <ol style="list-style-type: none"> 11. frequency of event reporting 12. overall perceptions of safety
Typological classification	The instrument is not typological.
Developmental process	To develop this survey, the researchers conducted a review of the literature. In addition, the researchers reviewed existing published and unpublished safety culture surveys and conducted in-person and tel. interviews with hospital staff. The survey was pretested with hospital staff to ensure the items were easily understood and relevant to patient safety in a hospital setting.

Name of the instrument	Belgian version of the Hospital Survey on Patient Safety Culture by the Agency for Healthcare Research and Quality (AHRQ)
By	Ziekenhuis Oost-Limburg & University Hasselt, Dept Business Economics, patient safety working group
Characteristic	Description
Level of assessment and use of results	<p>Questions are directed towards the individual related to the general “we” (addressing in 3rd person, e.g. ”we have...” or “Staff in this unit...”).</p> <p>The levels of assessment are:</p> <ul style="list-style-type: none"> - Individual hospital units - Departments - Hospital-wide. <p>The Comparative Database Report provides initial results from U.S. hospitals that can be used as benchmarks.</p> <p>In Belgium a benchmark report provides the results of 132 Belgian hospitals (52.196 respondents – response rate 55%).</p>
Assessment of feasibility	<p>The instrument has the following features:</p> <ul style="list-style-type: none"> - It is easy to use, it can be used in paper form or as a web survey - It takes approximately 10 to 15 minutes to answer - The survey is available free of charge - The survey covers over a dozen areas of patient safety, providing a level of detail that helps hospitals identify specific areas of strength and areas for improvement at both the unit-level and hospital level. - The survey has an accompanying instrument kit with user’s instructions and support instruments for data proceeding and presentation of survey results. - In Belgium 132 hospitals did a hospital wide patient safety culture assessment using this method (52.196 respondents – response rate 55%). This was part of a comprehensive patient safety approach (2007 – 2012) from Belgian federal government.
Availability of the instrument, manuals etc.	<p>The Hospital Survey on Patient Safety Culture, the User's Guide, Feedback Report Templates and Comparative Database information is available in different formats free of charge from AHRQ's webpage at: http://www.ahrq.gov/qual/hospculture/</p> <p>The Belgian versions, manual, validation reports, instruments and</p>

Name of the instrument	Belgian version of the Hospital Survey on Patient Safety Culture by the Agency for Healthcare Research and Quality (AHRQ)
By	Ziekenhuis Oost-Limburg & University Hasselt, Dept Business Economics, patient safety working group
Characteristic	Description
	benchmark report are available from the contact persons.
Test of the instrument	<p>The survey was pilot tested with more than 1,400 hospital employees from 21 hospitals across the United States. The pilot data were analyzed, examining item statistics and the reliability and validity of the safety culture scales, as well as the factor structure of the survey through exploratory and confirmatory factor analyses. Based on the analysis of the pilot data, the survey was revised by retaining only the best items and scales. The Belgian versions, both Dutch and French, were revalidated using the same methods as the validation of the original instrument (Item analysis, exploratory factor analysis, confirmatory factor analysis, reliability analysis, analysis of composite scores and inter correlations), except for test-retest reliability.</p> <p>After revalidation, the Belgian Patient Safety Culture Hospital questionnaire was distributed hospital wide in five general hospitals. The scores were expressed as the percentage of positive answers towards patient safety for each dimension. The survey was conducted from March through November 2005. In total, 3,940 individuals responded (overall response rate = 77 per cent), including 2,813 nurses and assistants, 462 physicians, 397 physiotherapists, laboratory and radiology assistants, social workers and 64 pharmacists and pharmacy assistants. The dimensional positive scores were found to be low to average in all the hospitals. The lowest scores were "hospital management support for patient safety" (35 per cent), "non-punitive response to error" (36 per cent), "hospital transfers and transitions" (36 per cent), "staffing" (38 per cent), and "teamwork across hospital units" (40 per cent). The dimension "teamwork within hospital units" generated the highest score (70 per cent). Although the same dimensions were considered problematic in the different hospitals, important variations between the five hospitals were observed. The results indicate that important aspects of the patient safety culture in these hospitals need improvement.</p>

Name of the instrument	Belgian version of the Hospital Survey on Patient Safety Culture by the Agency for Healthcare Research and Quality (AHRQ)
By	Ziekenhuis Oost-Limburg & University Hasselt, Dept Business Economics, patient safety working group
Characteristic	Description
Scientific properties	<p>The draft survey was piloted a cross 21 U.S. hospitals to multidisciplinary informants. The pilot data were analyzed to refine the instrument and determine its psychometric properties. The responds rate in the pilot test was 29 %.</p> <p>The testing included:</p> <ul style="list-style-type: none"> – Item analysis – Exploratory factor analysis – Confirmatory factor analysis using structural equation models – Reliability analysis – Analysis of composite scores – Inter-correlations. <p>In the process of refining the instrument, 26 of the originally piloted items were dropped. All dimensions have acceptable levels of reliability defined as Cronbach’s alpha equal to or greater than 0.60.</p> <p>All of the psychometric analyses - from the confirmatory factor analysis results and reliabilities to the inter-correlations among the dimensions and the analysis of variance results - provide solid evidence supporting the final dimensions and items that were retained.</p> <p>The HSPSC has been thorough tested and validated in one Belgian hospitals according to the method used in U.S, except for the test-retest reliability. Hellings et al. conclude: “The Belgian HSPSC instrument version seems robust. An exploratory factor analysis confirms the existence of multiple underlying dimensions and shows that most items group into the intended dimensions. “Feedback and communication about error” and “communication openness” group into the same factor, unsurprising since both deal with communication. “Teamwork across hospital units” and “hospital transfers and transitions” also share the same factor, although the latter also groups into a distinct factor. Since both are strongly related this does not surprise us either” (2-4).</p>

Name of the instrument	Belgian version of the Hospital Survey on Patient Safety Culture by the Agency for Healthcare Research and Quality (AHRQ)
By	Ziekenhuis Oost-Limburg & University Hasselt, Dept Business Economics, patient safety working group
Characteristic	Description
Ability to predict an outcome associated with PSC	
Issues regarding modification and translation	The survey was developed to be general enough for use in most hospitals. However modifications to suit special needs may be required. Anticipating the need for some modification or customization of the survey, the survey form and feedback report templates are available as modifiable electronic files at the AHRQ website and AHRQ has suggestions regarding modifications to the survey in their Surveys User's guide. AHRQ recommends making only those changes to the survey that are absolutely necessary, because changes may affect the reliability and overall validity of the survey, and may make comparisons with other hospitals difficult .
Main source and contact to know more about the instrument	Dr Johan Hellings and Dr Ward Schrooten MD MSc PhD Ziekenhuis Oost-Limburg & University Hasselt Schiepse Bos 6 3600 Genk, Belgium johan.hellings@zol.be or johan.hellings@uhasselt.be ward.schrooten@zol.be or ward.schrooten@uhasselt.be
Contact information – who filled in this questionnaire	Dr Johan Hellings and Dr Ward Schrooten MD MSc PhD Please see above.

Bulgaria (BG)

Currently the health care establishment in Bulgaria does not have experience in using PSC instruments. There are regularly surveys on patient satisfaction but they do not include questions related to PSC.

Croatia (HR)

Name of the instrument	Croatian version of the Hospital Survey on Patient Safety (“Upitnik o kulturi sigurnosti pacijenata u bolnici”) (5;6)
By	Croatian Society for quality Improvement in Health Care (Translated By Ivan Sklebar)
Characteristic	Description
Origin and year of launch	USA, 2004. AHRQ 2008. in Croatia
Language(s)	Original language: English Translated into Croatian in 2008.
Objective	Describe strength and weakness in PS culture Test the tool
Kind of instrument	The instrument is qualitative. Data entry and survey analysis using original software by AHRQ
Setting for application	Inpatient settings
Informants	Recommended informants are: doctors and nurses
Method of usage	Self-completion questionnaire
Known usage	Used in Croatia as a pilot test in general Hospital Bjelovar in 2008.
Format	Original AHRQ Survey form was applied
Definition of PSC	The definition of patient safety culture used in the instrument is the same as in the original instrument.
Subjects/scales covered	The subjects/scales (number of items pr. scale) covered are the same as in the original survey
Typological classification	The instrument is not typological
Developmental process	The instrument is translated into Croatian in 2008. and tested on 40 employees in general Hospital Bjelovar
Level of assessment and use of results	<ul style="list-style-type: none">- Individual- Team- Ward- Institution

Name of the instrument	Croatian version of the Hospital Survey on Patient Safety (“Upitnik o kulturi sigurnosti pacijenata u bolnici”) (5;6)
By	Croatian Society for quality Improvement in Health Care (Translated By Ivan Sklebar)
Characteristic	Description
Assessment of feasibility	The instrument is feasible according pilot test results and it is recommended for use by Croatian Society for Improvement in Health Care
Availability of the instrument, manuals etc.	The instrument is free of charge
Test of the instrument	The instrument has not been scientifically tested yet.
Scientific properties	Results of testing: see above
Ability to predict an outcome associated with PSC	Criterion validity has not been studied yet.
Issues regarding modification and translation	The origin was not modified
Main source and contact to know more about the instrument	Name: Croatian Society for Improvement in Health Care Address: Zagreb 10 000, Subiceva 9, Croatia Mail: jasn.mesaric@mef.hr www.zdravstvo-kvaliteta.org
Contact information – who filled in this questionnaire?	Name: Ivan Sklebar Address: General Hospital Bjelovar A. Mihanovica 8, 43000 Bjelovar, Croatia Tel.: +385 912792203 Mail: ivan.sklebar@obj.hr www.obj.hr

Cyprus (CY)

The NCP of Cyprus has informed that there is currently no use of PSCI.

Czech Republic (CZ)

There is currently no reported use of PSCI in the Czech Republic.

Denmark (DK)

Name of the instrument	The Danish Patient Safety Culture Questionnaire (7-9)
By	Marlene Dyrlov Madsen, Forskningscenter Risø, Denmark
Characteristic	Description
Origin and year of launch	<p>Denmark, 2002, 2003, 2006</p> <p>The survey instrument was developed as part of a Ph.D. dissertation and can be retrieved through the following link: http://www.risoe.dk/rispubl/SYS/ris-phd-25.htm.</p> <p>The Danish Patient Safety Culture/Climate (DPSCQ) questionnaire consists of 42 questions, where 8 are translated from ARQH. The survey was carried out among all clinical staff members (21.123) from all the hospitals in the Capital Region of Denmark in September 2006. It was meant to be repeated every 2 years, but this has now been set to</p> <p>The survey was first time launched in 2003 in Frederiksborg County in nine wards and consisted of 122 questions. Second time in 2004 in Copenhagen County Amt in 4 departments consisting of 71 questions. Third and final launch in 2006 Capital Region 2006, see above.</p>
Language(s)	Original language: Danish. Partly translated into English.
Objective	<p>Health care organizations can use the instrument for:</p> <ul style="list-style-type: none"> - Assessment: Assess staff's opinion on safety culture and patient safety issues, medical error, and event reporting in the hospital - Profiling (diagnosis): An assessment may aid in determining the specific safety culture or climate profile of the unit, including the identification of "strong" and "weak" points. - Awareness enhancement: It may serve to raise staff awareness, typically when conducted in parallel with other staff-oriented patient safety initiatives. - Measuring change: Assessment may be applied and repeated over time to detect changes in perceptions and attitudes, possibly as part of a "before-and-after intervention" design. - Benchmarking: It may be used to evaluate the standing of the unit in relation to a reference sample (comparable organizations and groups). - Accreditation: It may be part of a possibly mandated safety management review or accreditation program.

Name of the instrument	The Danish Patient Safety Culture Questionnaire (7-9)
By	Marlene Dyrlov Madsen, Forskningscenter Risø, Denmark
Characteristic	Description
Kind of instrument	<p>The instrument is a survey assessment instrument (questionnaire).</p> <p>The instrument has a minor supportive instrument kit explaining characteristics and impact of the different factors and suggestions for interventions according to scores.</p> <p>There is no finished data entry system.</p>
Setting for application	The described survey is applicable only for hospital settings.
Informants	The survey can be completed by all clinical staff with direct patient contact.
Method of usage	The DPSCQ is distributed to staff for individual self-completion.
Known usage	It has presumably been used other places in Denmark, and may have been used in lesser extend in Sweden and Norway.
Format	<p>State:</p> <ul style="list-style-type: none"> - Total number of items is 42 - Number of dimensions/scales 9 - 5 point-Likert scale (from “Strongly Disagree” to “Strongly Agree”.)
Definition of PSC	”Safety culture is the basic assumptions, shared values and attitudes that in connection to the organization’s/department’s structure and measures of control create a specific safety related behavior at the workplace. A department’s safety culture is expressed through the way in which the organization and the individuals in that organization think and act (in relation to safety).”
Subjects/scales covered	<p>The overall subjects covered:</p> <ul style="list-style-type: none"> - Reporting/learning - Confidence/support - Communication/co-operation - Resources/prioritizing - Causes of adverse events - Patient involvement - Individual involvement and reporting, when adverse events had occurred - The managers’ involvement and commitment to patient safety

Name of the instrument	The Danish Patient Safety Culture Questionnaire (7-9)
By	Marlene Dyrlov Madsen, Forskningscenter Risø, Denmark
Characteristic	Description
	<ul style="list-style-type: none"> - Collected experience of safety culture <p>Following sub-themes covered:</p> <ul style="list-style-type: none"> - Attention and priority given to patient safety - Communication - Error management - Change management - Flow of information and processing - Identification of causes of patient safety incidents - Job satisfaction - Leadership - Learning from patient safety incidents - Patients are involved in patient safety - Perception and recognition of stress - Perceptions of causes of patient safety incidents - Reporting of adverse events - Training and education - Work environment - Working as a team
Typological classification	The survey is developed to identify 3 types of safety culture: “Very mature”, “mature”, and “immature culture”.
Developmental process	<p>The construct of the latent structures of the safety culture dimensions was uncovered using exploratory factor analysis. Item-total correlation and Cronbach’s alpha are used to assess the internal consistency and the reliability of the dimensions.</p> <p>The questionnaire has been developed in three stages. The safety culture dimensions and items in the questionnaire were selected on the basis of previous studies, review of existing questionnaires in safety critical domains including healthcare and literature about organisational and safety culture.</p> <p>The questionnaire has been improved through a series of face validity tests in terms of meaningfulness, clearance of misunderstandings and for general usability. Twenty persons, doctors and nurses were asked to fill out the questionnaire and afterwards orally comment on anything that came to mind when filling out the questionnaire. Ten persons were asked to critically</p>

Name of the instrument	The Danish Patient Safety Culture Questionnaire (7-9)
By	Marlene Dyrlov Madsen, Forskningscenter Risø, Denmark
Characteristic	Description
	<p>read while taking notes and making comments for further discussion with an interviewer and as a supplement the interviewer asked specific questions about selected items to test for understanding.</p> <p>An aim for the questionnaire was to reduce the length to focus the content, make it easier accessible and enhance the probability of higher response rates. Therefore items with low discriminating power that did not both show significant difference between units at the level of ($p < 0.01$, using Mann-Whitney rang-sum test), and a size difference of less than a 1/2 point of the ordinal 5-point Likert scale were excluded. Items which were suppose to, but turned out to be substantially vague or ambivalent statements of safety culture were also excluded and if there were a high percentage of neutral answers. The criterion used for excluding ambivalent items was that “any person” a priory should be able to identify the item as corresponding to either strong or poor safety culture.</p> <p>The survey was first time launched in 2003 in Frederiksborg County in nine wards and consisted of 122 questions. Second time in 2004 in Copenhagen County Amt in 4 departments consisting of 71 questions.</p> <p>The third version is the one described in this scheme.</p>
Level of assessment and use of results	<p>Questions partly directed towards how the individual experiences PSC and partly how he or she experiences PSC in the team/work unit/department.</p> <p>The level of assessment is the individual, but results are presented on the aggregated ward-level, department-level, Institution-level and Regional-level.</p> <p>Results are mainly recommended for use locally at the unit-level, but benchmarking within disciplines is possible.</p>
Assessment of feasibility	<p>The instrument is feasible, according to:</p> <ul style="list-style-type: none"> - Practical issues regarding application - Recourse; labour - used by informant and rater - Information gained - Economical/recourse issues e.g. expensive and labours - Statistical proceeding of results - Feed back of results

Name of the instrument	The Danish Patient Safety Culture Questionnaire (7-9)
By	Marlene Dyrlov Madsen, Forskningscenter Risø, Denmark
Characteristic	Description
	<ul style="list-style-type: none"> - Planning of improvement strategies - Follow up - Availability
Availability of the instrument, manuals etc.	<p>The instrument is available on the internet in Danish.</p> <p>The instrument is free of charge.</p>
Test of the instrument	The instrument has been scientifically tested.
Scientific properties	<p>The survey has been tested several times (see earlier description) also using interview with staff and managers in four departments.</p> <ul style="list-style-type: none"> - Number of responses in three test (N=203), (N=322), (N=10.615) - Denmark – hospital setting - Exploratory factor analysis & confirmatory factor analysis; item factor load, floor/ceiling effects scale reliability, inter factor, correlation etc. - Yes - Content validity - Yes - Construct validity - Yes - Intra rater reliability - The instrument is suitable for tracking changes in PSC over time
Ability to predict an outcome associated with PSC	Criterion validity not confirmed as yet.
Issues regarding modification and translation	
Main source and contact to know more about the instrument	<p>Marlene Dyrlov Madsen, PhD., Researcher Danish Institute for Medical Simulation 25. floor Herlev Hospital, Herlev Ringvej 75, 2730 Herlev, Denmark Tel. +45 4488 4488, Mob: +45 5051 0258 Mail: madyma01@heh.regionh.dk</p> <p>It is possible to retrieve the survey instrument, which was developed as part of a Ph.D. dissertation, through the following link: http://www.risoe.dk/rispubl/SYS/ris-phd-25.htm</p>

Name of the instrument	The Danish Patient Safety Culture Questionnaire (7-9)
By	Marlene Dyrlov Madsen, Forskningscenter Risø, Denmark
Characteristic	Description
Contact information – who filled in this questionnaire?	Marlene Dyrlov Madsen, PhD., Researcher Please see above.

Denmark (cont.)

Name of the instrument	Danish version of the Error Orientation Questionnaire (10;11)
By	Unit for Clinical Quality and Patient Safety, Central Denmark Region
Characteristic	Description
Origin and year of launch	Originally launched in Germany, 1999 Denmark: 2007
Language(s)	Original language: Germany Known translations; English, Dutch and Danish
Objective	Survey error management and error aversion
Kind of instrument	The instrument is quantitative - supportive instrument kit exist for the Danish version
Setting for application	Appropriate setting(s) for application in health care: <ul style="list-style-type: none"> - Inpatient settings - Primary care settings - Ambulatory care - Ambulance - Acute sector - Mental health services - Intensive care unit - Operating rooms
Informants	Recommended informants are: both clinical and nonclinical staff
Method of usage	The questionnaire is used for self-completion. Standard epidemiological methods regarding questionnaire surveys apply for data proceeding, feedback and follow up
Known usage	According to the literature it has been used in Denmark, Holland and Germany within health care settings (10;11)

Name of the instrument	Danish version of the Error Orientation Questionnaire (10;11)
By	Unit for Clinical Quality and Patient Safety, Central Denmark Region
Characteristic	Description
Format	State: <ul style="list-style-type: none"> - Total number of items; 28 - Number of dimensions/scales: 2 - Numerical - 5 point-Likert scale
Definition of PSC	The instrument is intended for surveying error orientation in different industries, not specifically for health care (patient safety).
Subjects/scales covered	Scales (number of items pr. scale) covered <ul style="list-style-type: none"> - Error management culture: 17 items - Error Aversion culture: 11 items
Typological classification	The instrument is not typological
Developmental process	Translated according to WHO guidelines (12).
Level of assessment and use of results	The level of assessment is the individual, results are provided on the aggregated level. Questions are directed towards how the individual experiences PSC and how he or she experiences PSC in the team/work unit. Results are recommended used locally.
Assessment of feasibility	The instrument experienced feasible, according to: <ul style="list-style-type: none"> - Practical issues regarding application - Recourses; labour - used by informant and rater - Statistical proceeding of results - Feed back of results - Planning of improvement strategies - Availability
Availability of the instrument, manuals etc.	The instrument free of charge. There is no Danish manual or supportive instrument kit.
Test of the instrument	<ul style="list-style-type: none"> - Two surveys one before and after measurement using participants in a patient safety training course as informants and clinicians from a hospital participating in a project to enhance patient safety culture were performed - Informants were more than 200 clinicians and non-clinicians from the hospital setting - Analysis of results not terminated yet.

Name of the instrument	Danish version of the Error Orientation Questionnaire (10;11)
By	Unit for Clinical Quality and Patient Safety, Central Denmark Region
Characteristic	Description
Scientific properties	Results of testing: please see above.
Ability to predict an outcome associated with PSC	Not established
Issues regarding modification and translation	The questionnaire was translated according to WHO guidelines (12).
Main source and contact to know more about the instrument	Prof. Dr. Michael Frese Department of Work and Organizational Psychology, Justus Leipzig University, Giessen, Germany. michael.frese@psychol.uni-giessen.de http://www.uni-giessen.biz/content.php?cur_page=1&sub_page=0&rout=0&lang=0
Contact information – who filled in this questionnaire?	Solvejg Kristensen Unit for Clinical Quality and Patient Safety Olof Palmes Alle 15, 8200 Aarhus N, Denmark +45 2938 8364 solkri@rm.dk

Denmark (cont.)

Name of the instrument	Hospital staff's evaluation of safety culture in hospitals departments
By	Capital Region of Denmark
Characteristic	Description
Origin and year of launch	Denmark 2006
Language(s)	Original language: Danish Known translations (as the original tool and modified): None
Objective	The objective is to provide a tool to start a dialogue among the staff about what can be done to improve patient safety.
Kind of instrument	Quantitative questionnaire. No supportive toolkit.

Name of the instrument	Hospital staff's evaluation of safety culture in hospitals departments
By	Capital Region of Denmark
Characteristic	Description
Setting for application	State the appropriate setting(s) for application All hospital settings: <ul style="list-style-type: none"> - Inpatient settings - Ambulatory care - Acute sector - Mental health services - Intensive care unit - Operating rooms
Informants	Hospital staff with patient contact
Method of usage	Standard survey methods regarding application (self-completion), data proceeding, feedback and follow up.
Known usage	Poster presentation at international patient safety conference in Porto 2008.
Format	54 questions on a 5 point-Likert scale (from "Fully agree" to "fully disagree"). Possibility to provide comments on open ended questions:. Total number of scales are 9 comprising: <ol style="list-style-type: none"> 1. Reporting/learning 2. Confidence/support 3. Communication/co-operation 4. Resources/prioritizing 5. Causes of adverse events 6. Patient involvement 7. Individual involvement and reporting, when adverse events had occurred 8. The managers' involvement and commitment to patient safety Experience of safety culture
Definition of PSC	Based on Diana Parkers five step model with pathological, reactive, calculative, proactive and generic culture.
Subjects/scales covered	State the subjects/scales (number of items pr. scale) covered e.g.: <ul style="list-style-type: none"> - Attention and priority given to patient safety

Name of the instrument	Hospital staff's evaluation of safety culture in hospitals departments
By	Capital Region of Denmark
Characteristic	Description
	<ul style="list-style-type: none"> - Communication - Error management - Change management - Resistance - Flow of information and processing - Identification of causes of patient safety incidents - Leadership - Learning from patient safety incidents - Perception and recognition of stress - Perceptions of causes of patient safety incidents - Personnel management - Reporting of adverse events - Working as a team
Typological classification	<p>If the instrument is typological, which types of PSC does it identify?</p> <ul style="list-style-type: none"> - Pathological - Reactive - Calculative - Proactive - Generative
Developmental process	<p>Experts on designing questionnaires and experts on patient safety and safety culture developed the questionnaire. The work was inspired by national (Dyrløv Madsen) and international experiences (AHRQ) on measuring safety culture.</p>
Level of assessment and use of results	<p>How is the level of assessment?</p> <ul style="list-style-type: none"> - Ward - Institution - Region <p>The questions were directed towards the individual experiences on PSC and how the staff experiences PSC the team/work.</p> <p>How are results recommended used e.g. locally, benchmarking, other? It was the Board of Directors at each hospital responsibility to make sure that the resultants was discussed and used to</p>

Name of the instrument	Hospital staff's evaluation of safety culture in hospitals departments
By	Capital Region of Denmark
Characteristic	Description
	<p>increase the level of patient safety culture. This responsibility was carried out very differently.</p> <p>A follow up paper with different suggestions how to react on the results was developed and distributed to all the leaders</p>
Assessment of feasibility	<p>Is the instrument feasible, according to:</p> <ul style="list-style-type: none"> - Information gained - Statistical proceeding of results
Availability of the instrument, manuals etc.	<p>www.patientoplevelser.dk > temaer / forsknings og udviklingsprojekter > Patientsikkerhedskultur i Region Hovedstaden.</p> <p>http://www.patientoplevelser.dk/index.asp?id=366&sub1=365</p> <p>Free of charge.</p>
Test of the instrument	<p>The instrument has been scientifically tested.</p> <p>Prior to the survey the questions was tested among several clinicians from different specialities and departments to se how the questions was interpreted. The test has not been published.</p>
Scientific properties	<p>Results of testing:</p> <ul style="list-style-type: none"> - Number of participants: 21123 - Country and care /non care setting: Capital Region Of Denmark, Hospitals - Test method: cross sectional - Nature of test: cross institutional - Test population: Physicians, nurses, nurses aid, PT, OT and other staff with patient contact. <p>The instrument is suitable for tracking changes in PSC over time.</p>
Ability to predict an outcome associated with PSC	No recorded outcome.
Issues regarding modification and translation	Can be use without chances in Denmark. Used in other cultures is has to be tested how the question is interpreted.

Name of the instrument	Hospital staff's evaluation of safety culture in hospitals departments
By	Capital Region of Denmark
Characteristic	Description
Main source and contact to know more about the tool	<p>Content and patient Safety issues:</p> <ul style="list-style-type: none"> - Peter Skjøt, Patient Safety Manager Tel: +45 36 32 31 87 mail: peter.skjoet@regionh.dk web: www.regionh.dk/patientsikkerhed Unit for Patient Safety, Capital Denmark Region Hvidovre Hospital, afsnit 023, 2650 Hvidovre, Denmark - Marlene Dyrlov Madsen, PhD., Researcher Danish Institute for Medical Simulation 25. floor Herlev Hospital, Herlev Ringvej 75, 2730 Herlev, Denmark Tel.: +45 4488 4488, Mob: +45 5051 0258 Mail: madyma01@heh.regionh.dk <p>Statistics and questionnaire issues</p> <ul style="list-style-type: none"> - Carsten Biering-Sørensen, Evaluation expert Tel: +45 35 31 21 57 Mail: carsten.bs@regionh.dk www.patientoplevelser.dk Region Hovedstaden Enheden for Brugerundersøgelser (Unit for Patient-Perceived Quality) Bispebjerg Hospital Opgang 20C, 2. sal København NV, Denmark
Contact information – who filled in this scheme?	Peter Skjøt og Carsten Biering-Sørensen

Denmark (cont.)

Name of the instrument	Danish version of the Hospital Survey on Patient Safety Culture; Spørgeskema om Patientsikkerhedskultur på hospitaler
By	Unit for Clinical Quality and Patient Safety, Central Denmark Region
Characteristic	Description
Origin and year of launch	USA, launched in 2004 Danamrk launched in 2009
Language(s)	Original language: American - Known translations, please se Belgium
Objective	Health care organizations can use the instrument to: - Assess staff's opinion on patient safety issues, medical error, and event reporting in the hospital - Track changes in patient safety culture over time - Evaluate the impact of patient safety culture interventions.
Kind of instrument	The instrument is a survey assessment instrument (questionnaire). The survey has an accompanying tool kit (Danish manual and data entry program, excel file to analyze the data and a power point presentation)
Setting for application	The described survey is applicable for hospital setting.
Informants	The survey can be completed by all types of hospital staff. However the survey is best suited for the following: - Hospital staff who have direct contact or interaction with patients (clinical staff, such as nurses, or non-clinical staff, such as unit clerks); - Hospital staff who may not have direct contact or interaction with patients but whose work directly affects patient care (staff in units such as pharmacy, laboratory/pathology); - Hospital-employed physicians who spend most of their work hours in the hospital (emergency department physicians, hospitalists, pathologists) - Hospital supervisors, managers, and administrators.
Method of usage	Paper or electronic. It can be used in a ward/clinic, unit, and department or in an entire healthcare organization.
Known usage	Please see Belgium..
Format	- 51 items

Name of the instrument	Danish version of the Hospital Survey on Patient Safety Culture; Spørgeskema om Patientsikkerhedskultur på hospitaler
By	Unit for Clinical Quality and Patient Safety, Central Denmark Region
Characteristic	Description
	<ul style="list-style-type: none"> - 16 dimensions - 5-point Likert scale, some items open ended
Definition of PSC	Attitudes and patterns of behavior that determine the commitment to patient safety on individual and group levels.
Subjects/scales covered	<p>Subjects/scales covered:</p> <ol style="list-style-type: none"> 1. Attention and priority given to patient safety 2. Communication 3. Reporting of adverse events 4. Error management 5. Resistance 6. Flow of information and processing 7. Identification of causes behind adverse events 8. Leadership 9. Learning from patient safety incidents 10. Patient involvement 11. Perception and recognition of stress 12. Perceptions of causes of patient safety incidents 13. Personnel management 14. Training and education 15. Work environment 16. Working as a team
Typological classification	The instrument is not typological.
Developmental process	The instrument and the tool kit was translated, piloted and adjusted, where after it was released for usage.

Name of the instrument	Danish version of the Hospital Survey on Patient Safety Culture; Spørgeskema om Patientsikkerhedskultur på hospitaler
By	Unit for Clinical Quality and Patient Safety, Central Denmark Region
Characteristic	Description
Level of assessment and use of results	<p>Questions are directed towards the individual related to the general “we” (addressing in 3rd person, e.g. ”we have...” or “Staff in this unit...”).</p> <p>The levels of assessment are:</p> <ul style="list-style-type: none"> - Individual hospital units - Departments - Hospital-wide.
Assessment of feasibility	<p>The instrument has the following features:</p> <ul style="list-style-type: none"> - It is easy to use, it can be used in paper form or as a web survey - It takes approximately 10 to 15 minutes to answer - The survey is available free of charge - The survey covers over a dozen areas of patient safety, providing a level of detail that helps hospitals identify specific areas of strength and areas for improvement at both the unit-level and hospital level. - The survey has an accompanying tool with user’s instructions and support instruments for data proceeding and presentation of survey results and presentation.
Availability of the instrument, manuals etc.	<p>The Danish tool kit comprises:</p> <ul style="list-style-type: none"> - paper survey form - electronic survey form (data entry) - Excel sheet for automatic generated data analysis - Power point presentation or automatic generated data presentation - Manual.
Test of the instrument	The tool kit is piloted in 2010, and introduced following the pilot
Scientific properties	Please see Belgium. Danish scientific properties not yet established.
Ability to predict an outcome associated with	Not yet established for Denmark.

Name of the instrument	Danish version of the Hospital Survey on Patient Safety Culture; Spørgeskema om Patientsikkerhedskultur på hospitaler
By	Unit for Clinical Quality and Patient Safety, Central Denmark Region
Characteristic	Description
PSC	
Issues regarding modification and translation	The survey was translated and piloted according to guidelines from WHO. A number of questions were added to gain information about patient's involvement, and handling of patients harmed and staff.
Main source and contact to know more about the instrument	Solvejg Kristensen Unit for Clinical Quality and Patient Safety Olof Palmes Alle 15, 8200 Aarhus N, Denmark +45 2938 8364 solkri@rm.dk
Contact information – who filled in this questionnaire	Please see above.

England, Scotland & Wales (UK)

Name of the instrument	Hospital Survey on Patient Safety Culture
By	Agency for Healthcare Research and Quality (AHRQ) (5;6)
Characteristic	Description
Origin and year of launch	USA, launched in 2004
Language(s)	Original language: American. Please see Belgium for known translations
Objective	Health care organizations can use the instrument to: <ul style="list-style-type: none"> - Assess staff's opinion on patient safety issues, medical error, and event reporting in the hospital - Track changes in patient safety over time - Evaluate the impact of patient safety interventions.
Kind of instrument	The instrument is a survey assessment instrument (questionnaire), The survey has an accompanying instrument kit which contains the following support instruments: <ol style="list-style-type: none"> 1. <u>A Survey User's Guide</u>: Gives step-by-step instructions on

Name of the instrument	Hospital Survey on Patient Safety Culture
By	Agency for Healthcare Research and Quality (AHRQ) (5;6)
Characteristic	Description
	<p>how to select a sample, administer the survey and obtain high response rates, and how to analyze and report results.</p> <ol style="list-style-type: none"> 2. <u>An Excel data entry and survey analysis instrument</u> that is downloadable for free from the Web site of the Safety Institute of Premier Inc. The instrument enables hospitals to enter their survey data and it automatically produces graphs and charts of the survey results. 3. <u>A template to display survey results</u>: A Power Point presentation template is included that can be customized to display survey results to administrators and staff throughout the hospital 4. <u>A comparative database</u> displaying anonymous aggregated American hospital-level statistics is accessible for comparison with own survey results.
Setting for application	The described survey is applicable for hospital settings, however another two instrument applicable for Nursing homes (Nursing Home Survey on Patient Safety Culture) and Medical offices (Medical Office Survey on Patient Safety Culture) are available.
Informants	<p>The survey can be completed by all types of hospital staff. However the survey is best suited for the following:</p> <ul style="list-style-type: none"> - Hospital staff who have direct contact or interaction with patients (clinical staff, such as nurses, or non-clinical staff, such as unit clerks); - Hospital staff who may not have direct contact or interaction with patients but whose work directly affects patient care (staff in units such as pharmacy, laboratory/pathology); - Hospital-employed physicians who spend most of their work hours in the hospital (emergency department physicians, hospitalists, pathologists) - Hospital supervisors, managers, and administrators.
Method of usage	<p>The HSPSC is distributed to staff for individual self-completion. In the User's Guide the process of surveying is described in details and outlines as:</p> <ul style="list-style-type: none"> - Planning (Resources, scope, schedule, us an outside vendor, project team) - Selecting a Sample (Whom, size etc.)

Name of the instrument	Hospital Survey on Patient Safety Culture
By	Agency for Healthcare Research and Quality (AHRQ) (5;6)
Characteristic	Description
	<ul style="list-style-type: none"> - Determining data collection methods (Distribution and returning e.g. web bases or not? & points-of-contact) - Establishing and performing data collection - Preparing and analyzing data - Producing feed back reports and broad feed back.
Known usage	A search in the Pub Med database limited to publications 2004-2008, and performed in august 2008 on “Hospital Survey on Patient Safety Culture” gave 128 hits. It covered a wide range of studies in patient safety in different specialties. Roughly half of the studies were non American.
Format	<ul style="list-style-type: none"> - Total number of items; 42 - Number of dimensions/scales measured: 12 - Numerical and possibility providing comments on open ended items - 5 point-Likert scale (from “Strongly Disagree” to “Strongly Agree”.)
Definition of PSC	The safety culture of an organization is the product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that determine the commitment to, and the style and proficiency of, an organization’s health and safety management. Organizations with a positive safety culture are characterized by communications founded on mutual trust, by shared perceptions of the importance of safety, and by confidence in the efficacy of preventive measures.
Subjects/scales covered	The survey measures the following dimensions (no of items): <ol style="list-style-type: none"> 1. Work Area/Unit: 18 2. Supervisor/Manager: 4 3. Communication: 6 4. Frequency of Event Reporting: 3 5. Your hospital: 11
Typological classification	The instrument is not typological.
Developmental process	To develop this survey, the researchers conducted a review of the literature. In addition, the researchers reviewed existing published and unpublished safety culture surveys and conducted in-person and tel. interviews with hospital staff. The survey was

Name of the instrument	Hospital Survey on Patient Safety Culture
By	Agency for Healthcare Research and Quality (AHRQ) (5;6)
Characteristic	Description
	pre tested with hospital staff to ensure the items were easily understood and relevant to patient safety in a hospital setting.
Level of assessment and use of results	<p>The levels of assessment are:</p> <ul style="list-style-type: none"> - Individual hospital units - Departments - Hospital wide. <p>The Comparative Database Report provides initial results from U.S. hospitals that can be used as benchmarks.</p>
Assessment of feasibility	<p>The instrument has the following features:</p> <ul style="list-style-type: none"> - It is easy to use, it can be used in paper form or as a web survey - It takes approximately 10 to 15 minutes to answer - The survey is available free of charge - The survey covers over a dozen areas of patient safety, providing a level of detail that helps hospitals identify specific areas of strength and areas for improvement at both the unit-level and hospital level. - The survey has an accompanying instrument kit with user's instructions and support instruments for data proceeding and presentation of survey results.
Availability of the instrument, manuals etc.	The Hospital Survey on Patient Safety Culture, the User's Guide, Feedback Report Templates and Comparative Database information is available in different formats free of charge from AHRQ's webpage at: http://www.ahrq.gov/qual/hospculture/
Test of the instrument	The survey was pilot tested with more than 1,400 hospital employees from 21 hospitals across the United States. The pilot data were analyzed, examining item statistics and the reliability and validity of the safety culture scales, as well as the factor structure of the survey through exploratory and confirmatory factor analyses. Based on the analysis of the pilot data, the survey was revised by retaining only the best items and scales.
Scientific properties	The draft survey was piloted a cross 21 U.S. hospitals to multidisciplinary informants. The pilot data were analyzed to refine the instrument and determine its psychometric properties. The responds rate in the pilot test was 29 %.

Name of the instrument	Hospital Survey on Patient Safety Culture
By	Agency for Healthcare Research and Quality (AHRQ) (5;6)
Characteristic	Description
	<p>The testing included:</p> <ul style="list-style-type: none"> - Item analysis - Exploratory factor analysis - Confirmatory factor analysis using structural equation models - Reliability analysis - Analysis of composite scores - Inter-correlations. <p>In the process of refining the instrument, 26 of the originally piloted items were dropped. All dimensions have acceptable levels of reliability defined as Cronbach's alpha equal to or greater than 0.60.</p> <p>All of the psychometric analyses - from the confirmatory factor analysis results and reliabilities to the inter-correlations among the dimensions and the analysis of variance results - provide solid evidence supporting the final dimensions and items that were retained (5).</p>
Ability to predict an outcome associated with PSC	
Issues regarding modification and translation	<p>The survey was developed to be general enough for use in most hospitals. However modifications to suit special needs may be required. Anticipating the need for some modification or customization of the survey, the survey form and feedback report templates are available as modifiable electronic files at the AHRQ website and AHRQ has suggestions regarding modifications to the survey in their Surveys User's guide. AHRQ recommends making only those changes to the survey that are absolutely necessary, because changes may affect the reliability and overall validity of the survey, and may make comparisons with other hospitals difficult (5).</p>
Main source and contact to know more about the instrument	<p>Agency for Healthcare Research and Quality (AHRQ), 540 Gaither Road Rockville, MD 20850, USA. Tel.: +1 (301) 427-1364 Mail: safetyculturesurveys@ahrq.hhs.gov. www.ahrq.gov/qual/hospculture/</p>

Name of the instrument	Hospital Survey on Patient Safety Culture
By	Agency for Healthcare Research and Quality (AHRQ) (5;6)
Characteristic	Description
Contact information	Professor Rhona Flin, Industrial Psychology Research Centre, University of Aberdeen, King's College, Old Aberdeen AB242UB Mail: r.flin@abdn.ac.uk

England, Scotland & Wales (UK) (cont.)

Name of the instrument	Manchester Patient Safety Assessment Framework (13;14)
By	University of Manchester
Characteristic	Description
Origin and year of launch	UK, 2007
Language(s)	English
Objective	To assess achievement of safety culture through self-reflection
Kind of instrument	Quantitative (ordinal scale) Manuals available
Setting for application	Primary care, acute, ambulance, mental health
Informants	Team-members (management and clinical)
Method of usage	Self-reflective, filled in privately
Known usage	1 hit on Pub Med (13)
Format	The format is: <ul style="list-style-type: none"> - 9 or 10 dimensions depending on sector - Ordinal range; 1 to 5.
Definition of PSC	The definition of patient safety culture is through the presence / absence / maturity on the dimensions
Subjects/scales covered	Commitment to continuous improvement Priority given to patient safety What causes patient safety incidents? How are they identified Investigating patient safety incidents Organisational learning following a patient safety incident Communication

Name of the instrument	Manchester Patient Safety Assessment Framework (13;14)
By	University of Manchester
Characteristic	Description
	Staff and safety issues Staff education and training about safety issues Team and partnership working
Typological classification	It identifies <ul style="list-style-type: none"> - Pathological - Reactive - Bureaucratic - Proactive - Generative
Developmental process	Based on non-healthcare instruments, through in-depth interviews and focus groups
Level of assessment and use of results	Team / Organisation Used to stimulate discussion
Assessment of feasibility	Research is due to be published on this.
Availability of the instrument, manuals etc.	Instrument is free and readily available http://www.npsa.nhs.uk/nrls/improvingpatientsafety/humanfactors/mapsaf/
Test of the instrument	One test published – one is due to be published (15)
Scientific properties	Acceptability, face validity, and feasibility have been tested
Ability to predict an outcome associated with PSC	Probably not predictive
Issues regarding modification and translation	None known
Main source and contact to know more about the instrument	Professor Dianne Parker University of Manchester, Manchester. Stopford Building Oxford Road, Manchester M13 9PT, UK Tel.: +44 (0)161 275 2411 Mail: dianne.parker@safety-culture.co.uk

Name of the instrument	Manchester Patient Safety Assessment Framework (13;14)
By	University of Manchester
Characteristic	Description
Contact information – who filled in this questionnaire?	Dr Melinda Lyons National Patient Safety Agency, 4-8 Maple Street, London Tel.: + 44 (0)20 7927 9559 melinda.lyons@npsa.nhs.uk

England, Scotland & Wales (UK) (cont.)

Name of the instrument	Safety Attitudes Questionnaire (SAQ) (16;17)
By	University of Texas / Johns Hopkins University
Characteristic	Description
Origin and year of launch	USA, 2003
Language(s)	American English, English (other languages available)
Objective	To assess attitudes towards safety
Kind of instrument	Quantitative results on each factor calculated centrally
Setting for application	Intensive care, operating rooms, wards, ambulatory clinics, pharmacy, emergency departments, labor units.
Informants	Care-givers
Method of usage	Self-reflective, filled in privately, sent by mail for analysis
Known usage	Used in Provonost's studies (18-20) – now under test for Intensive care research in UK
Format	<ul style="list-style-type: none"> - Demographic data - 6 dimensions of attitudes measured in 60 questions - Ordinal range – 1 to 5 Likert scale of agreement/disagreement and “not applicable” - Open ended section for comments
Definition of PSC	The definition of patient safety culture is “the way we do things here” – making reference to behaviours, attitudes, values, norms
Subjects/scales covered	<ul style="list-style-type: none"> - Teamwork climate - Job satisfaction - Perceptions of management - Safety climate - Working conditions

Name of the instrument	Safety Attitudes Questionnaire (SAQ) (16;17)
By	University of Texas / Johns Hopkins University
Characteristic	Description
	- Stress recognition
Typological classification	Scores on local climate by provider type / clinical area
Developmental process	Developed from Flight Management Attitudes Questionnaire (used in aviation) through factor analysis, focus-groups with clinical teams, literature reviews and discussions.
Level of assessment and use of results	Team / Organisation Used to provide snapshot of climate (collective attitude of team members)
Assessment of feasibility	Used in several studies so appears feasible – unknown how feasible this would be without external support
Availability of the instrument, manuals etc.	The survey in its different formats and guidance for its use (including facilitator guides) are free and readily available on the web. The analysis of the questionnaire is done by the developers – cost unknown!
Test of the instrument	As below
Scientific properties	Internal consistency, construct validity and reliability have been tested but only by the developers (19).
Ability to predict an outcome associated with PSC	This instrument has been linked with reduction of catheter-related bloodstream infections (21)
Issues regarding modification and translation	This has been reduced to a “light” version and translated.
Main source and contact to know more about the instrument	Name: Dr Bryan Sexton Address. Dept of Anaesthesiology and Critical Care Medicine, The Johns Hopkins University, Baltimore, USA. Tel.: 001 410 241 4073
Contact information – who filled in this scheme?	Name Dr Melinda Lyons Address National Patient Safety Agency, 4-8 Maple Street, London, GB Tel.: 020 7927 9559 Mail: melinda.lyons@npsa.nhs.uk

Estonia (EE)

Estonia has at present time no national plan for PS. Risk assessment is in very early stages but slowly beginning. Up until now there have been no initiatives to measure PSC. However there is a yearly patient satisfactory survey, which does give information on some issues of PS.

Finland (FIN)

Name of the instrument	TUKU – Safety culture in health care survey
By	VTT (Technical research centre of Finland) Reiman, T, Pietikäinen, E. & Oedewald, P. (22-27)
Characteristic	Description
Origin and year of launch	Finland 2007
Language(s)	Original language: Finnish Translated into Swedish
Objective	To evaluate the organizational potential for safe performance
Kind of instrument	Quantitative with a qualitative assessment process. A report of the theoretical background and the purpose of evaluation has been published (in Finnish)
Setting for application	Entire healthcare organizations and their sub units. Mainly used in inpatient settings.
Informants	Recommended informants are the health care professionals and administrative personnel
Method of usage	Self completion of the survey, interviews and feedback
Known usage	Piloted in Finland in 4 hospitals, modified version to be used in Finnish hospitals
Format	State: <ul style="list-style-type: none"> - Total number of items (modified version around 60) - Number of unit level dimensions 10 - numerical, and possibility to provide comments on open ended questions 6 point Likert scale
Definition of PSC	<ul style="list-style-type: none"> - an ability and willingness of an organization to understand safety, hazards and how they can be prevented and - the ability and willingness of an organization to act safely and prevent the actualization of hazards (24)
Subjects/scales covered	Subjects/scales covered: <ul style="list-style-type: none"> - management system - safety communication

Name of the instrument	TUKU – Safety culture in health care survey
By	VTT (Technical research centre of Finland) Reiman, T, Pietikäinen, E. & Oedewald, P. (22-27)
Characteristic	Description
	<ul style="list-style-type: none"> - Change management - Flow of information - Leadership - Learning from patient safety incidents & Reporting of adverse events - Personnel management - Training and education - Managing third parties <p><u>Individual level scales</u></p> <ul style="list-style-type: none"> - understanding of the risks - understanding of the systemic nature of safety - responsibility for safety - motivation - controllability of the work (stress etc)
Typological classification	The instrument is typological
Developmental process	<p>The developers have long experience from safety culture in nuclear industry.</p> <p>In depth literature survey on nuclear and health care theories and methods in assessing safety culture.</p> <p>Organisational culture assessments in health care organisations before finalising the theoretical model behind the survey.</p> <p>Health care professional commented the model and the survey items before the pilot survey.</p>
Level of assessment and use of results	<p>The level of assessment;</p> <ul style="list-style-type: none"> - Ward - Institution <p>Questions are directed towards how the individual experiences dimensions in the unit that we consider to be part of PSC. Results are recommended to be used both locally and in the future also nationally as an indicator of the level of safety in health care</p>
Assessment of feasibility	<p>Is the instrument feasible, according to:</p> <ul style="list-style-type: none"> - Practical issues regarding application - Recourse; labour - used by informant and rater

Name of the instrument	TUKU – Safety culture in health care survey
By	VTT (Technical research centre of Finland) Reiman, T, Pietikäinen, E. & Oedewald, P. (22-27)
Characteristic	Description
	<ul style="list-style-type: none"> - Information gained - Economical/recourse issues e.g. expensive and labours - Statistical proceeding of results - Feed back of results - Planning of improvement strategies - Follow up - Availability - Other
Availability of the instrument, manuals etc.	Available freely if the results can be used for scientific purposes by VTT, but only in Finnish and Swedish at the moment.
Test of the instrument	<p>The instrument has been scientifically tested.</p> <ul style="list-style-type: none"> - Test method e.g. cross sectional, interviews - inter and cross institutional - Finland, hospital setting - Volunteer units and hospitals, health care professional and the administrative personnel
Scientific properties	<p>Results of testing:</p> <ul style="list-style-type: none"> - Number of participants 1515 - Finland, 4 hospitals - Test method e.g. cross sectional, observational - Nature of test; inter institutional - Test population e.g. profession - Exploratory factor analysis & confirmatory factor analysis; item factor load, floor/ceiling effects scale reliability, inter factor, correlation etc. is performed - Test of variation is performed - Content validity has proven high. - Construct validity is checked a job satisfaction scale - Intra rater reliability has not been tested - The instrument has proven suitable for tracking changes in PSC over time

Name of the instrument	TUKU – Safety culture in health care survey
By	VTT (Technical research centre of Finland) Reiman, T, Pietikäinen, E. & Oedewald, P. (22-27)
Characteristic	Description
Ability to predict an outcome associated with PSC	Criterion validity to be tested in the future
Issues regarding modification and translation	
Main source and contact to know more about the tool	Name Teemu Reiman Mail: teemu.reiman@vtt.fi
Contact information – who filled in this questionnaire?	Name Pia Oedewald Tel.: +358 50 3407090 Mail: pia.oedewald@vtt.fi

Finland (Cont.)

Name of the instrument	Finnish versions of the Hospital Survey on Patient Safety Culture originally by AHRQ (5;6;28)
By	Professor (acting); PhD Hannele Turunen and Senior Researcher, PhD Pirjo Partanen, University of Kuopio, Finland
Characteristic	Description
Origin and year of launch	USA, launched in 2004 Finland, launched in 2007
Language(s)	Original language: American, please see Belgium for known translations
Objective	Health care organizations can use the instrument to: <ul style="list-style-type: none"> - Assess staff's opinion on patient safety issues, medical error, and event reporting in the hospital - Track changes in patient safety over time Evaluate the impact of patient safety interventions.
Kind of instrument	The instrument is a survey assessment tool that can be easily used as a web-based questionnaire. The survey has an accompanying toolkit
Setting for application	<ul style="list-style-type: none"> - Hospital as a whole or specific unit within hospital
Informants	The survey can be completed by all types of hospital staff. However the survey is best suited for the following: <ul style="list-style-type: none"> - Hospital staff who have direct contact or interaction with patients (clinical staff, such as nurses, or non-clinical staff, such as unit clerks); - Hospital staff who may not have direct contact or interaction with patients but whose work directly affects patient care (staff in units such as pharmacy, laboratory/pathology); - Hospital-employed physicians who spend most of their work hours in the hospital (emergency department physicians, hospitalists, pathologists) Hospital supervisors, managers, and administrators:
Method of usage	The HSPSC is distributed to staff for individual self-completion.
Known usage	Please see Belgium & Scotland, England & Wales
Format	<ul style="list-style-type: none"> - Total number of items; 42 - Number of dimensions/scales measured: 12 - Numerical and possibility providing comments on open ended items - 5 point-Likert scale (from "Strongly Disagree" to "Strongly Agree")

Name of the instrument	Finnish versions of the Hospital Survey on Patient Safety Culture originally by AHRQ (5;6;28)
By	Professor (acting); PhD Hannele Turunen and Senior Researcher, PhD Pirjo Partanen, University of Kuopio, Finland
Characteristic	Description
	<p>Agree”.</p> <ul style="list-style-type: none"> - Background variables: 6 +1 (primary work are) - additionally in the Finnish version: gender, opinion of opportunities to up-date one's professional competency
Definition of PSC	The safety culture of an organization is the product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that determine the commitment to, and the style and proficiency of, an organization’s health and safety management. Organizations with a positive safety culture are characterized by communications founded on mutual trust, by shared perceptions of the importance of safety, and by confidence in the efficacy of preventive measures
Subjects/scales covered	State the subjects/scales (number of items pr. scale) covered e.g.: <ul style="list-style-type: none"> - Work Area/Unit: (1) +18 - Supervisor/Manager: 4 - Communication: 6 - Frequency of Event Reporting: 3 - (Patient safety Grade: 1) - Your hospital: 11 - (Number of Events Reported in the past 12 months: 1)
Typological classification	<ul style="list-style-type: none"> - The instrument is not typological.
Developmental process	<p>The development process and the psychometric features of the Instrument are well described http://www.ahrq.gov/qual/patientsafetyculture/hospindex.htm</p> <ul style="list-style-type: none"> - A review of the literature and existing published and unpublished safety culture surveys, in-person and tel. interviews with hospital staff. - The survey was pre-tested with hospital staff to ensure the items were easily understood and relevant to patient safety in a hospital setting
Level of assessment and use of results	<p>The levels of assessment are:</p> <ul style="list-style-type: none"> - Individual hospital units - Departments

Name of the instrument	Finnish versions of the Hospital Survey on Patient Safety Culture originally by AHRQ (5;6;28)
By	Professor (acting); PhD Hannele Turunen and Senior Researcher, PhD Pirjo Partanen, University of Kuopio, Finland
Characteristic	Description
	<ul style="list-style-type: none"> - Hospital wide. <p>The Comparative Database Report provides initial results from U.S. hospitals that can be used as benchmarks</p>
Assessment of feasibility	<ul style="list-style-type: none"> - The instrument is easy to use also as a web-questionnaire, takes about 10-15 minutes to fill out - Good manual how to implement
Availability of the instrument, manuals etc.	<ul style="list-style-type: none"> - It is available free of charge on AHRQ web site http://www.ahrq.gov/qual/patientsafetyculture
Test of the instrument	<ul style="list-style-type: none"> - The survey was pretested with hospital staff (understanding items, relevance of items) - Next the survey was pilot tested with more than 1400 hospital employees from 21 hospital across the USA, reliability and validity were examined and the instrument was revised - The resulting HSPSC has sound psychometric properties for the included items and scales.
Scientific properties	<ul style="list-style-type: none"> - The psychometric properties and the development process of the HSPSC is well described and is a valid and reliable scale http://www.ahrq.gov/qual/patientsafetyculture - In Finland a web-survey was carried out in January-February 2008 in four hospitals. Altogether 1064 responded (78 % nurses, 10% nurse managers, 7% physicians, 5 % others e.g. pharmacist), the analysis of the data has been done and reports / articles are quite soon ready to be published.
Ability to predict an outcome associated with PSC	Criterion validity (refers to the measurements capacity to predict an outcome associated with PSC)
Issues regarding modification and translation	The survey was developed to be general enough for use in most hospitals. Only those changes are recommended to make that are absolutely necessary, because of the reliability and validity issues.

Name of the instrument	Finnish versions of the Hospital Survey on Patient Safety Culture originally by AHRQ (5;6;28)
By	Professor (acting); PhD Hannele Turunen and Senior Researcher, PhD Pirjo Partanen, University of Kuopio, Finland
Characteristic	Description
Main source and contact to know more about the tool	U.S. Department of Health & Human Services Agency for Healthcare Research and Quality, 540 Gaither Road Rockville, MD 20850, USA Mail: safetyculturesurveys@ahrq.hhs.gov www. http://www.ahrq.gov/qual/patientsafetyculture/usergd.htm
Contact information – who filled in this questionnaire?	Professor (acting) Hannele Turunen University of Kuopio, Dep. Nursing Science, POBox 1627, 70211 Kuopio, Finland. Tel.: +358 403552629 Mail: hannele.turunen@uku.fi www.http://www.uku.fi/hoitot/henkilokohtaiset_sivut/turunen/index.htm

France (F)

Name of the instrument	French version of the Hospital Survey on Patient Safety Culture originally by AHRQ – TYP-MESS project (5;6;28)
By	Dr Jean-Luc Quenon, Comité de Coordination de l'Évaluation Clinique et de la Qualité en Aquitaine (CCECQA), France
Characteristic	Description
Origin and year of launch	USA, launched in 2004 France, launched in 2007
Language(s)	Original language: American - Known translations please see Belgium.
Objective	- Assess staff's opinion on patient safety issues, medical error, and event reporting in hospital - Follow changes in patient safety over time - Evaluate the impact of patient safety interventions.
Kind of instrument	The instrument is quantitative. The French version of the instrument has not a supportive instrument kit.
Setting for application	The instrument is applicable for hospital settings: - Inpatient settings

Name of the instrument	French version of the Hospital Survey on Patient Safety Culture originally by AHRQ – TYP-MESS project (5;6;28)
By	Dr Jean-Luc Quenon, Comité de Coordination de l'Évaluation Clinique et de la Qualité en Aquitaine (CCECQA), France
Characteristic	Description
	<ul style="list-style-type: none"> - Ambulatory care - Acute sector - Mental health services - Intensive care unit - Operating rooms - Rehabilitation care
Informants	Recommended informants are: hospital staff who have direct contact or interaction with patients (clinical staff such as physicians, nurses and assistants, physiotherapists).
Method of usage	The instrument is distributed to staff for individual self-completion
Known usage	None for the French version.
Format	<ul style="list-style-type: none"> - Total number of items: 42 - Number of dimensions/scales: 12 - Numerical and possibility to provide comments on open ended questions - 5 point-Likert scale (from “Strongly Disagree” to “Strongly Agree”)
Definition of PSC	The safety culture of an organization is the product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that determine the commitment to, and the style and proficiency of, an organization’s health and safety management (definition of the Advisory Committee on the Safety of Nuclear Installations).
Subjects/scales covered	<p>The French version measures the following dimensions:</p> <ol style="list-style-type: none"> 1. Overall perceptions of safety (4 items) 2. Frequency of events reported (3 items) 3. Supervisor/manager expectations and actions promoting safety (4 items) 4. Organizational learning-Continuous improvement (3 items) 5. Teamwork within units (4 items) 6. Communication openness (3 items) 7. Feedback and communication about error (3 items)

Name of the instrument	French version of the Hospital Survey on Patient Safety Culture originally by AHRQ – TYP-MESS project (5;6;28)
By	Dr Jean-Luc Quenon, Comité de Coordination de l'Évaluation Clinique et de la Qualité en Aquitaine (CCECQA), France
Characteristic	Description
	<p>8. non-punitive response to error (3 items)</p> <p>9. Staffing (4 items)</p> <p>10. Hospital management support for patient safety (3 items)</p> <p>11. Teamwork across hospital units (4 items)</p> <p>12. Hospital handoffs and transitions (4 items)</p>
Typological classification	The instrument is not typological.
Developmental process	The steps of the developmental process of the instrument were: a review of the literature by the researchers, French translation separately by two researchers groups, and a pre test in a group of health care professionals.
Level of assessment and use of results	The levels of assessment in the French project were individual hospital units. Results were used locally.
Assessment of feasibility	<p>The instrument has the following features:</p> <ul style="list-style-type: none"> - The instrument covers several dimensions of patient safety culture. - It was already tested and validated in others countries. - The instrument was developed to be general: it can be used in most hospitals - It is easy to use - It takes approximately 10 to 15 minutes to answer
Availability of the instrument, manuals etc.	<p>The Hospital Survey on Patient Safety Culture (HSPSC) by the Agency for healthcare research and quality has an accompanying instrument kit with user's instructions and support instruments for data proceeding and presentation of survey results.</p> <p>The French version of the instrument is not yet available because further study of psychometric properties is in process.</p>
Test of the instrument	<p>The instrument has been scientifically tested and validated in other countries (E.g. United States, Belgium, Norway, and Netherlands).</p> <p>In France the hospital survey on patient safety culture (TYP-MESS project) was conducted from November through December 2007 in 20 voluntary care units from 6 hospitals located in Aquitaine. In total, 507 individuals responded (overall response</p>

Name of the instrument	French version of the Hospital Survey on Patient Safety Culture originally by AHRQ – TYP-MESS project (5;6;28)
By	Dr Jean-Luc Quenon, Comité de Coordination de l'Évaluation Clinique et de la Qualité en Aquitaine (CCECQA), France
Characteristic	Description
	rate = 65 per cent), including 268 nurses and 73 assistants, 49 physicians and 98 others health care professionals. Variations between hospitals and between units in the same hospital were observed. The lowest scores were “non punitive response to error” (34 per cent), “staffing” (38 per cent), “hospital management support for patient safety” (32 per cent), “hospital handoffs and transitions” (47 percent). The highest scores were “supervisor/manager expectations and actions promoting safety” (65 per cent) and “communication openness” (66 percent). The results indicate that important aspects of the patient safety culture in these units need improvement.
Scientific properties	<p>In France the hospital survey on patient safety culture (TYP-MESS project) has been tested and validated in 20 care units from 6 hospitals.</p> <p>The testing included :</p> <ul style="list-style-type: none"> - Item analysis - Inter-correlations analysis - Exploratory factor analysis based on 12 factors hypothesis - Reliability analysis <p>The exploratory factor analysis shows that most items group into the intended dimensions.</p> <p>The results in two care units were similar at those given by a socio-anthropological study (observation and interviews during one month).</p> <p>In total, this first version of the French HSPSC seems robust.</p>
Ability to predict an outcome associated with PSC	
Issues regarding modification and translation	<p>Some modifications could be required to use in some areas like pharmacy departments.</p> <p>In a new project (DECLICS project), we test 3 new items exploring education and learning about patient safety in the unit.</p> <p>But changes may affect the internal validity of the instrument, the feasibility in case of addition of new items, and may make</p>

Name of the instrument	French version of the Hospital Survey on Patient Safety Culture originally by AHRQ – TYP-MESS project (5;6;28)
By	Dr Jean-Luc Quenon, Comité de Coordination de l'Évaluation Clinique et de la Qualité en Aquitaine (CCECQA), France
Characteristic	Description
	<p>comparisons with others hospitals difficult. Changes need to be tested and a new validation of the instrument is in process.</p> <p>In the new project, the foreseen testing includes :</p> <ul style="list-style-type: none"> - Item analysis - Inter-correlations analysis - Exploratory factor analysis (with - hypothesis on the number of factors) - Confirmatory factor analysis - Reliability : consistency, intra-rater reliability - Ability for tracking changes in patient safety culture after a specific intervention promoting safety culture.
Main source and contact to know more about the instrument	<p>For the French version:</p> <p>Dr Jean-Luc Quenon, Chef de Projet Gestion des Risques Comité de Coordination de l'Évaluation Clinique et de la Qualité en Aquitaine, Hôpital Xavier Ar-zan, 33604 Pessac, France Tel : 33 5 57 65 61 44 - Fax : 33 5 57 65 61 36 Mail : jean-luc.quenon@ccecqa.asso.fr www.ccecqa.asso.fr</p>
Contact information – who filled in this questionnaire?	Dr Jean-Luc Quenon - Please see above

Germany (D)

Name of the instrument	Frankfurter Patientensicherheitsmatrix; FraTrix (Frankfurt Patient Safety Matrix) German version of the Manchester Patient Safety Framework (14).
By	Institute for General Practice, University Frankfurt, Germany
Characteristic	Description
Origin and year of launch	Original: UK, 2007 (15) and German version: Germany, 2009
Language(s)	Original language English. Known translations: German & Dutch (please see developmental process)
Objective	Self-assessment of patient safety culture in general practices To raise awareness of patient safety To develop an action plan for improving safety culture
Kind of instrument	Qualitative Instrument. Guidance for practice teams.
Setting for application	Primary care settings, general practice in particular
Informants	Doctors and practice nurses or practice assistants
Method of usage	Self-completion, discussion of results within the team
Known usage	FraTrix has been used in a pilot study. MaPSaF and similar instruments have been developed in the UK (MaPSaF), and the Netherlands (Zelf Evaluatie van de Patiëntveiligheidscultuur (IZEP) (29)
Format	<ul style="list-style-type: none"> - 9 dimensions - 5 items (levels of safety culture) for each dimension - Ordinal scale from “ablehnend” (dismissive) to “zukunftsweisend” (forward-looking)
Definition of PSC	Shared attitudes, beliefs, values and assumptions that underlie how people perceive and act on safety issues in their organisations and on the potential importance of these shared characteristics to initiating fundamental and sustained changes to patient safety.
Subjects/scales covered	<ul style="list-style-type: none"> - Overall commitment to quality - Priority given to patient safety - Perceptions of the causes of patient safety incidents and their identification - Investigating patient safety incidents - Organisational learning following a patient safety incident - Communication on safety issues - Personnel management and safety issues

Name of the instrument	Frankfurter Patientensicherheitsmatrix; FraTriX (Frankfurt Patient Safety Matrix) German version of the Manchester Patient Safety Framework (14).
By	Institute for General Practice, University Frankfurt, Germany
Characteristic	Description
	<ul style="list-style-type: none"> - Staff education and training in safety issues - Teamwork on safety issues
Typological classification	<p>Modified typologies from Westrum (30)</p> <ul style="list-style-type: none"> - Dismissive - Reactive - Bureaucratic - Proactive - Forward-looking
Developmental process	<p>For the original development process of MaPSaF please see (14). Translation of the German version by two translators working independently, consensus of translation and initial adaptation to German context by project team; pilot testing with focus groups and secondary adaptation; field testing (10 practices), tertiary adaptation and repeat of field testing (9 practices) with final version.</p>
Level of assessment and use of results	The level of assessment is the individual – results are used by the local team.
Assessment of feasibility	See below.
Availability of the instrument, manuals etc.	To be determined.
Test of the instrument	<p>The instrument has been scientifically tested.</p> <ul style="list-style-type: none"> - Observational test - Inter-institutional testing: face validity, feasibility - questionnaire to all participants, tel. interviews with 20 participants, focus groups - German general practices - Doctors, practice nurses (relevant health professionals in German general practices)
Scientific properties	<p>Results of testing:</p> <ul style="list-style-type: none"> - 100 participants, 19 practices - Instrument is feasible and usable in this care setting for discussion of patient safety issues, raising awareness and

Name of the instrument	Frankfurter Patientensicherheitsmatrix; FraTriX (Frankfurt Patient Safety Matrix) German version of the Manchester Patient Safety Framework (14).
By	Institute for General Practice, University Frankfurt, Germany
Characteristic	Description
	improving patient safety.
Ability to predict an outcome associated with PSC	No knowledge on this subject yet, but probably not.
Issues regarding modification and translation	Instrument must be modified and adapted to suit the respective setting.
Main source and contact to know more about the instrument	Dr. Barbara Hoffmann, MPH Institut für Allgemeinmedizin, Johann Wolfgang Goethe-Universität Frankfurt am Main, Theodor-Stern-Kai 7, D-60590 Frankfurt Tel.: +49(0)69-6301-7152 Mail: Hoffmann@allgemeinmedizin.uni-frankfurt.de http://www.allgemeinmedizin.uni-frankfurt.de/
Contact information – who filled in this questionnaire?	Name Dr. Barbara Hoffmann, MPH Please see above.

Germany (cont.)

Name of the instrument	Frankfurter Fragebogen zum Sicherheitsklima in Hausarztpraxen (FraSiK) (Frankfurt Questionnaire on patient safety climate in General Practice) German version of the Safety Attitude Questionnaire Ambulatory (16;31-33)
By	Institute for General Practice, University Frankfurt, Germany
Characteristic	Description
Origin and year of launch	USA, 2006
Language(s)	Original language: English translated into German 2009
Objective	Assessment of patient safety climate in small-scale general practices
Kind of instrument	Quantitative instrument

Name of the instrument	Frankfurter Fragebogen zum Sicherheitsklima in Hausarztpraxen (FraSiK) (Frankfurt Questionnaire on patient safety climate in General Practice) German version of the Safety Attitude Questionnaire Ambulatory (16;31-33)
By	Institute for General Practice, University Frankfurt, Germany
Characteristic	Description
Setting for application	<ul style="list-style-type: none"> - Primary care settings - General practice - Ambulatory care
Informants	All clinical staff: doctors, practice nurses, practice assistants
Method of usage	Self-administered questionnaire
Known usage	No use yet (see below)
Format	<ul style="list-style-type: none"> - Total number of items 68 - Number of dimensions 12 - Nominal data - Opportunity to provide comments on open ended questions - 5 point-Likert scale (from “trifft voll und ganz zu” to “trifft überhaupt nicht zu” = strongly agree to strongly disagree) - Plus when appropriate dichotomous items (yes/No)
Definition of PSC	The product of individual and group values, attitudes and beliefs, competencies and patterns of behavior that determine the commitment to, and the style and proficiency of, an organization's health and safety management (34).
Subjects/scales covered	<p>State the subjects/scales (No. of items per scale) covered e.g.:</p> <ul style="list-style-type: none"> - Priority given to patient safety: 4 - Error management: 6 - Job satisfaction: 3 - Leadership: 5 - Patient involvement in patient safety: 5 - Perception and recognition of stress: 3 - Training and education: 2 - Work environment: 7 - Working as a team: 9 - Rules and regulations: 4 - Communication: 3

Name of the instrument	Frankfurter Fragebogen zum Sicherheitsklima in Hausarztpraxen (FraSiK) (Frankfurt Questionnaire on patient safety climate in General Practice) German version of the Safety Attitude Questionnaire Ambulatory (16;31-33)
By	Institute for General Practice, University Frankfurt, Germany
Characteristic	Description
	- Organisation: 3
Typological classification	Not applicable
Developmental process	Based on the Safety Attitude Questionnaire (SAQ ambulatory version)(31) initial translation and adaptation (two translators translated the questionnaire independently, consensus). Interviews with German experts on quality and patient safety in order to evaluate the content validity of the questionnaire. Secondary adaptation of content, items and dimensions. Cognitive testing and tertiary adaptation of the instrument. Pilot testing in a sample of 400 general practices.
Level of assessment and use of results	The level of assessment is the individual. Results are provided on an aggregate level.
Assessment of feasibility	To be determined
Availability of the instrument, manuals etc.	Instrument currently undergoing psychometric evaluation
Test of the instrument	The instrument has been scientifically tested. <ul style="list-style-type: none"> - Cognitive testing in the developmental process (10 health professionals in German general practices - Pilot testing in 400 general practices in the state of Hessen - 1200 invitees (three professionals per practice)
Scientific properties	Results of tests: <ul style="list-style-type: none"> - Number of participants 451 (response rate 37.8%) - Germany, general practice - Cross-sectional - Inter- or cross-institutional - Doctors, practice nurses (Medizinische Fachangestellte bzw. Arzthelfer/innen) - Planned: Item analysis, exploratory factor analysis & confirmatory factor analysis; item factor load, reliability, correlation

Name of the instrument	Frankfurter Fragebogen zum Sicherheitsklima in Hausarztpraxen (FraSiK) (Frankfurt Questionnaire on patient safety climate in General Practice) German version of the Safety Attitude Questionnaire Ambulatory (16;31-33)
By	Institute for General Practice, University Frankfurt, Germany
Characteristic	Description
Ability to predict an outcome associated with PSC	Instrument currently in the process of psychometric evaluation
Issues regarding modification and translation	Instrument should be modified and retested if it is to be used in a different care setting (e.g. variations in practice ownership and size; composition of practice team)
Main source and contact to know more about the instrument	Dr. Barbara Hoffmann, MPH Institut für Allgemeinmedizin, Johann Wolfgang Goethe-Universität Frankfurt am Main, Theodor-Stern-Kai 7, D-60590 Frankfurt Tel.: ++49(0)69-6301-7152 Mail: Hoffmann@allgemeinmedizin.uni-frankfurt.de http://www.allgemeinmedizin.uni-frankfurt.de/
Contact information – who filled in this questionnaire?	Name Dr. Barbara Hoffmann, MPH Please see above

Greece (GR)

Greece has no activities using PSCI currently.

Iceland (IS)

Name of the instrument	Hospital Survey on Patient Safety Culture (HSPSC) by the Agency for Healthcare Research and Quality (AHRQ) (5;6)
By	Áslaug S. Svavarsdóttir, RN, B.Sc., Laura Sch. Thorsteinsson, RN, M.Sc., Eva Björk Aðalgeirsdóttir, RN, B.Sc., Bjarney María Hallmannsdóttir RN, B.Sc., Magnea Gunnarsdóttir RN, B.Sc. and Silja Björg Róbertsdóttir, RN, B.Sc.
Characteristic	Description
Origin and year of launch	USA, launched in 2004 Iceland, launched in 2005, 2006 and 2007
Language(s)	Original language: American. - Icelandic 2005 - Please see Belgium for other known translations.
Objective	Health care organizations can use the instrument to: <ul style="list-style-type: none"> - Assess staff's opinion on patient safety issues, medical error, and event reporting in the hospital - Track changes in patient safety over time - Evaluate the impact of patient safety interventions. - Find strength and weakness in PS culture - Comparison between units and professional groups
Kind of instrument	The instrument is a survey assessment instrument (questionnaire). The survey has an accompanying instrument kit which contains the following support instruments: <ol style="list-style-type: none"> 1. <u>A Survey User's Guide</u>: Gives step-by-step instructions on how to select a sample, administer the survey and obtain high response rates, and how to analyze and report results. 2. <u>An Excel data entry and survey analysis instrument</u> that is downloadable for free from the Web site of the Safety Institute of Premier Inc. The instrument enables hospitals to enter their survey data and it automatically produces graphs and charts of the survey results. 3. <u>A template to display survey results</u>: A PowerPoint presentation template is included that can be customized to display survey results to administrators and staff throughout the hospital 4. <u>A comparative database</u> displaying anonymous aggregated American hospital-level statistics is accessible for comparison with own survey results.

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Characteristic	Description
Setting for application	The instrument is applicable for hospital settings
Informants	Healthcare staff with direct and indirect contacts with patients.
Method of usage	Paper. The HSPSC is distributed to staff for individual self-completion. It was used in a different ward's and hospitals.
Known usage	In Iceland it has been used in four surveys with 360 participants. Two more surveys are in planning for winter 2009.
Format	<ul style="list-style-type: none"> - 45 + 4 items - 13 + 1 dimensions - In the end of the survey there is one possibility to make comments - 5 point-Likert scale (from "Strongly Disagree" to "Strongly Agree".)
Definition of PSC	The safety culture of an organization is the product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that determine the commitment to, and the style and proficiency of, an organization's health and safety management. Organizations with a positive safety culture are characterized by communications founded on mutual trust, by shared perceptions of the importance of safety, and by confidence in the efficacy of preventive measures.
Subjects/scales covered	<p>The survey measures 14 dimensions.</p> <p>Seven unit-level aspects of safety culture:</p> <ol style="list-style-type: none"> 1. Supervisor/Manager Expectations & Actions Promoting Safety (4 items) 2. Organizational Learning - Continuous Improvement (3 items) 3. Teamwork Within Units (4 items) 4. Communication Openness (3 items), 5. Feedback and Communication About Error (3 items) 6. Non-punitive Response to Error (3 items) 7. Staffing (4 items).

Name of the instrument	Hospital Survey on Patient Safety Culture (HSPSC) by the Agency for Healthcare Research and Quality (AHRQ) (5;6)
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Characteristic	Description
	<p>Three hospital-level aspects of safety culture:</p> <ul style="list-style-type: none"> 8. Hospital Management Support for Patient Safety (3 items) 9. Teamwork Across Hospital Units (4 items) 10. Hospital Handoffs and Transitions (4 items). <p>Four outcome variables:</p> <ul style="list-style-type: none"> 11. Overall Perceptions of Safety (4 items) 12. Frequency of Event Reporting (<u>5 items</u>) 13. Patient Safety Grade (of the Hospital Unit) (1 item) 14. Number of Events / Incident Reported (1 item).
Typological classification	The instrument is not typological.
Developmental process	The HSOPSC survey was translated from English to Icelandic and back to English. It was then adapted and pre tested with hospital staff to ensure the items were easily understood and relevant to patient safety in a hospital setting.
Level of assessment and use of results	<p>Questions are directed towards the individual related to the general “we” (addressing in 3rd person, e.g. ”we have...” or “Staff in this unit...”).</p> <p>The levels of assessment were:</p> <ul style="list-style-type: none"> - Individual hospital units - Departments - Hospital wide. <p>The Comparative Database Report provides initial results from U.S. hospitals that can be used as benchmarks.</p>
Assessment of feasibility	<p>The instrument has the following features:</p> <ul style="list-style-type: none"> - It is easy to use, it can be used in paper form or as a web survey - It takes approximately 10 to 15 minutes to answer - The survey is available free of charge - The survey covers over a dozen areas of patient safety, providing a level of detail that helps hospitals identify specific areas of strength and areas for improvement at

Name of the instrument	Hospital Survey on Patient Safety Culture (HSPSC) by the Agency for Healthcare Research and Quality (AHRQ) (5;6)
By	Áslaug S. Svavarsdóttir, RN, B.Sc., Laura Sch. Thorsteinsson, RN, M.Sc., Eva Björk Aðalgeirsdóttir, RN, B.Sc., Bjarney María Hallmannsdóttir RN, B.Sc., Magnea Gunnarsdóttir RN, B.Sc. and Silja Björg Róbertsdóttir, RN, B.Sc.
Characteristic	Description
	<p>both the unit-level and hospital level.</p> <ul style="list-style-type: none"> - The survey has an accompanying instrument kit with user's instructions and support instruments for data proceeding and presentation of survey results.
Availability of the instrument, manuals etc.	<p>The Hospital Survey on Patient Safety Culture, the User's Guide, Feedback Report Templates and Comparative Database information is available in different formats free of charge from AHRQ's webpage at: http://www.ahrq.gov/qual/hospculture/</p> <p>The Icelandic version of HSPSC is available from the contact persons.</p>
Test of the instrument	<p>The survey was pilot tested with more than 1,400 hospital employees from 21 hospitals across the United States. The pilot data were analyzed, examining item statistics and the reliability and validity of the safety culture scales, as well as the factor structure of the survey through exploratory and confirmatory factor analyses. Based on the analysis of the pilot data, the survey was revised by retaining only the best items and scales.</p>
Scientific properties	<p>The draft survey was piloted a cross 21 U.S. hospitals to multidisciplinary informants. The pilot data were analyzed to refine the instrument and determine its psychometric properties. The responds rate in the pilot test was 29 %.</p> <p>The testing included:</p> <ul style="list-style-type: none"> - Item analysis - Exploratory factor analysis - Confirmatory factor analysis using structural equation models - Reliability analysis - Analysis of composite scores - Inter-correlations. <p>In the process of refining the instrument, 26 of the originally piloted items were dropped. All dimensions have acceptable levels of reliability defined as Cronbach's alpha equal to or</p>

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Characteristic	Description
	greater than 0.60. All of the psychometric analyses - from the confirmatory factor analysis results and reliabilities to the inter-correlations among the dimensions and the analysis of variance results - provide solid evidence supporting the final dimensions and items that were retained (5).
Ability to predict an outcome associated with PSC	The ability to predict an outcome associated with PSC was not tested in the Icelandic version. On the other hand the surveys in Iceland have brought forth discussions regarding PSC and how to enhance it as well as discussions regarding incidents and incident reporting.
Issues regarding modification and translation	The survey was developed to be general enough for use in most hospitals. There has been a slight modification compared with the original. Icelandic version has added 2 new questions regarding Frequency of Event / Incident Reporting.
Main source and contact to know more about the instrument	Áslaug S. Svavarsdóttir Stuðlaseli 33. 109 Reykjavík, Iceland Mail: aslaugsv@landspitali.is Laura Sch. Thorsteinsson Landlæknisembættið - Austurströnd 5 - 170 Seltjarnarnes, Iceland Mail: laura@landlaeknir.is
Contact information – who filled in this questionnaire?	Name: Áslaug S. Svavarsdóttir Address: Stuðlaseli 33 109 Reykjavík, Iceland Mail: aslaugsv@landspitali.is

Hungary (H)

Name of the instrument	Hungarian version of the Safety Attitude Questionnaire (16;31-33)
By	Agnes Bognar – Institute for Healthcare Quality Improvement and Hospital Engineering
Characteristic	Description
Origin and year of launch	USA, Safety Attitude Questionnaire was modified into a Hungarian version in a research project
Language(s)	Original language is English. A modified Hungarian translation exists
Objective	The instrument is intended to survey error perceptions of medical personnel
Kind of instrument	The instrument is quantitative. There is no Hungarian supportive instrument kit at present (e.g. a manual for us, data entry and survey analysis instruments, database)
Setting for application	The appropriate setting for application is the operating room
Informants	Recommended informants are: clinical leaders and staff in the surgical filed.
Method of usage	The instrument is used in a paper version
Known usage	The instrument has been used in Hungary
Format	<ul style="list-style-type: none"> - Total number of items 65 - Number of dimensions/scales 2 - nominal or numerical, possibility to provide comments on open ended questions YES - 4 point-Likert scale: agree strongly - agree slightly - disagree slightly - disagree strongly
Definition of PSC	The definition used is: “Culture can be defined as the collection of individual and group values, attitudes, and practices that guide the behaviour of group members. Characteristics of a strong safety culture include a commitment to discuss and learn from errors, recognition of the inevitability of errors, proactive identification of latent threats and incorporating non-punitive systems for reporting and analyzing adverse events”
Subjects/scales covered	The dimensions/scales covered are: <ul style="list-style-type: none"> - Safety culture - Error perception by medical personnel
Typological classification	The instrument is not typological
Developmental process	The developmental process of the instrument was:

Name of the instrument	Hungarian version of the Safety Attitude Questionnaire (16;31-33)
By	Agnes Bognar – Institute for Healthcare Quality Improvement and Hospital Engineering
Characteristic	Description
	Scaled questions were taken from validated studies to explore areas of known importance described in the safety culture literature. In addition, new areas were described, and scaled questions were formulated based on the clinical experience of our research team members.
Level of assessment and use of results	The level of assessment is the team and the institution. Questions are directed towards how the individual experiences PSC and how he or she experiences PSC in the team/work unit
Assessment of feasibility	Is the instrument feasible, according to: <ul style="list-style-type: none"> - Practical issues regarding application - Recourse; labour - used by informant and rater - Information gained - Economical/recourse issues e.g. expensive and labours - Statistical proceeding of results - Availability - and possible also planning of improvement strategies - at a later stage it will be determined if the instrument is feasible according to feed back of results and follow up
Availability of the instrument, manuals etc.	Information not available yet.
Test of the instrument	The instrument has been scientifically tested in a paediatric cardiac surgery team
Scientific properties	Results of testing: <ul style="list-style-type: none"> - Number of participants 84 - Test method: cross sectional survey - Involving 4 academic canthers - Test population: surgeons, anaesthesiologists, or nurses, pump technicians - Exploratory factor analysis & confirmatory factor analysis; item factor load, floor/ceiling effects scale reliability, inter factor, correlation has been performed - Variation is tested

Name of the instrument	Hungarian version of the Safety Attitude Questionnaire (16;31-33)
By	Agnes Bogнар – Institute for Healthcare Quality Improvement and Hospital Engineering
Characteristic	Description
	<ul style="list-style-type: none"> - Content validity is established - Construct validity is tested - The instrument is suitable for tracking changes in PSC over time
Ability to predict an outcome associated with PSC	The Hungarian study did not connect PSC with outcome but there are resorts in Johns Hopkins connecting PSC with outcome. Can you provide references? also link to web pages is ok
Issues regarding modification and translation	No problems with translation, however it has to done by professionals to keep the original information and I translation retranslation is recommend.
Main source and contact to know more about the instrument	Name Agnes Bogнар Address 6725 Szeged Korányi Faszor 10-11. Hungary Tel.: + 36 30 488 7993 Mail: abognar@med.miami.edu
Contact information – who filled in this questionnaire?	Name Agnes Bogнар Please see above

Ireland (IRL)

Ireland does not have or use a standardised PSCI.

Italy (I)

Name of the instrument	Healthcare workers perception of adverse events and incident reporting
By	Centre for Clinical Risk Management and Patient Safety, Tuscany Region Department of Health
Characteristic	Description
Origin and year of launch	2005
Language(s)	Original language: Italian Known translations (as the original instrument and modified): non
Objective	To know healthcare workers perception of adverse events and incident reporting before and after the adoption of a formal incident reporting system
Kind of instrument	The instrument is quantitative The instrument does not have a supportive instrument kit e.g. a manual for us, data entry and survey analysis instruments, database, other
Setting for application	The appropriate setting(s) for application <ul style="list-style-type: none"> - Inpatient settings - Ambulance - Acute sector - Mental health services - Intensive care unit - Operating rooms
Informants	Recommended informants are: clinicians
Method of usage	Self completion, then data are analyzed in terms of simple frequency distribution and eventually correlation with socio demographic and professional status, and finally feedback is given to the participants through meetings or written report
Known usage	Only in Italy
Format	State: <ul style="list-style-type: none"> - Total number of items 16 - Number of dimensions/scales 5 - nominal scale
Definition of PSC	The definition of patient safety culture used in the instrument Proactive attitude toward adverse events and incident reporting (not formally defined but implied)
Subjects/scales covered	The subjects/scales (number of items pr. scale) covered e.g.:

Name of the instrument	Healthcare workers perception of adverse events and incident reporting
By	Centre for Clinical Risk Management and Patient Safety, Tuscany Region Department of Health
Characteristic	Description
	<ul style="list-style-type: none"> - Error management - Resistance - Flow of information and processing - Learning from patient safety incidents - Perceptions of causes of patient safety incidents - Reporting of adverse events - Training and education
Typological classification	<p>The instrument identifies the following types of PSC</p> <ul style="list-style-type: none"> - Reactive - Proactive
Developmental process	It was an adaptation on the basis of the AHRQ patient safety culture instrument and the IHI safety climate instrument, originally pilot tested with a small sample of Italian clinicians
Level of assessment and use of results	<p>The level of assessment is the</p> <ul style="list-style-type: none"> - Individual - Ward - Institution - Region - Nation <p>Are questions directed towards how the individual experiences PSC or how he or she experiences PSC in the team/work unit? Yes, the instrument considers mutual trust between the reporter and the collector of reports</p> <p>How are results recommended used e.g. locally, benchmarking, other? Both locally in a pre-post modality and for benchmarking</p>
Assessment of feasibility	<p>Is the instrument feasible, according to:</p> <ul style="list-style-type: none"> - Practical issues regarding application - Information gained - Statistical proceeding of results - Feed back of results - Planning of improvement strategies - Follow up

Name of the instrument	Healthcare workers perception of adverse events and incident reporting
By	Centre for Clinical Risk Management and Patient Safety, Tuscany Region Department of Health
Characteristic	Description
	- Availability
Availability of the instrument, manuals etc.	The instrument is free of charge but it does not have a manual
Test of the instrument	The instrument is based on standard instruments
Scientific properties	
Ability to predict an outcome associated with PSC	
Issues regarding modification and translation	It can be easily translated and modified as items explore individual perceptions; therefore they are general and not related to a specific health service.
Main source and contact to know more about the instrument	Name Tommaso Bellandi Address via Alderotti 26n, 50139 Firenze, Italy Tel.: +390554383826 Mail: tommaso.bellandi@regione.toscana.it http://www.salute.toscana.it/sst/grc/rischio-clinico.shtml
Contact information – who filled in this scheme?	Name Tommaso Bellandi Address via Alderotti 26n, 50139 Firenze, Italy Tel.: +390554383826 Mail: tommaso.bellandi@regione.toscana.it http://www.salute.toscana.it/sst/grc/rischio-clinico.shtml

Latvia (LV)

Latvia has no activities using PSCI currently.

Lithuania (LT)

In Lithuania the Safety Attitudes Questionnaire (in different versions) and the Hospital Survey on Patient Safety Culture have been applied in a EUNetPaS pilot in 20 hospitals. The experiences gained are described in a diary.

Luxemburg (L)

Luxemburg has not feed any information back on PSCI currently used.

Malta (MT)

Malta has not feed any information back on PSCI currently used.

The Netherlands (NL)

Name of the instrument	COMPaZ the Dutch version of the Hospital Survey on Patient Safety Culture (5;6)
By	EMGO and NIVEL
Characteristic	Description
Origin and year of launch	Origin America. Netherlands; year of launch was 2005
Language(s)	Dutch. Please see information on other translation under Belgium.
Objective	Health care organizations can use the instrument to: <ul style="list-style-type: none">- Assess staff's opinion on patient safety issues, medical error, and event reporting in the hospital- Track changes in patient safety over time- Evaluate the impact of patient safety interventions.
Kind of instrument	The instrument is a survey assessment instrument (questionnaire),
Setting for application	State the appropriate setting(s) for application <ul style="list-style-type: none">- Inpatient settings- Acute sector- Mental health services

Name of the instrument	COMPaz the Dutch version of the Hospital Survey on Patient Safety Culture (5;6)
By	EMGO and NIVEL
Characteristic	Description
	<ul style="list-style-type: none"> - Intensive care unit - Operating rooms
Informants	Recommended informants are:
Method of usage	Self-completion; It is now available as online instrument.
Known usage	
Format	<ul style="list-style-type: none"> - Total number of items = 54 - Number of dimensions/scales = 11 - nominal or numerical, possibility to provide comments on open ended questions = last question is open - 5 point-Likert scale
Definition of PSC	The definition of patient safety culture used in the instrument “The safety culture of an organization is the product of individual and group values, attitudes, perceptions, competencies, and patterns of behaviour that determine the commitment to, and the style and proficiency of, an organization’s health and safety management. Organizations with a positive safety culture are characterized by communications founded on mutual trust, by shared perceptions of the importance of safety and by confidence in the efficacy of preventive measures” (35).
Subjects/scales covered	The subjects/scales (number of items pr. scale) covered.: <ul style="list-style-type: none"> - Attention and priority given to patient safety - Communication - Change management - Flow of information and processing - Identification of causes of patient safety incidents - Leadership - Learning from patient safety incidents - Perceptions of causes of patient safety incidents - Personnel management - Reporting of adverse events - Work environment - Working as a team

Name of the instrument	COMPaZ the Dutch version of the Hospital Survey on Patient Safety Culture (5;6)
By	EMGO and NIVEL
Characteristic	Description
Typological classification	<p>It covers to some extent all types of the beneath, but it is difficult to assign questions and answers directly to one of the types.</p> <ul style="list-style-type: none"> - Pathological - Reactive - Calculative - Proactive - Generative
Developmental process	Translation process: forward and backward, validation. The developmental process has been described in two articles (36;37)
Level of assessment and use of results	<p>The level of assessment is</p> <ul style="list-style-type: none"> - Individual (assessment) - Team (analysis) (reporting) - Ward (analysis) (reporting) - Institution (analysis) (reporting) - Region (reporting) - Nation (reporting) - Cross nation (reporting) <p>The results are recommended for used locally and nationally</p>
Assessment of feasibility	<p>The instrument is feasible, according to:</p> <ul style="list-style-type: none"> - Practical issues regarding application - Recourse; labour - used by informant and rater - Information gained - Economical/recourse issues e.g. expensive and labours - Statistical proceeding of results - Feed back of results - Planning of improvement strategies - Follow up - Availability
Availability of the instrument, manuals etc.	The instrument is free of charge.
Test of the instrument	The instrument has been scientifically tested. Further information

Name of the instrument	COMPaZ the Dutch version of the Hospital Survey on Patient Safety Culture (5;6)
By	EMGO and NIVEL
Characteristic	Description
	is found in (36;37)
Scientific properties	Information is found in (36;37)
Ability to predict an outcome associated with PSC	Criterion validity is not established yet, but it is in progress.
Issues regarding modification and translation	
Main source and contact to know more about the instrument	Name Dr. Cordula Wagner Address PO BOX 1568 Tel.: +31 30 2729700 or +31 6 30649813 Mail: c.wagner@nivel.nl www.nivel.nl
Contact information – who filled in this questionnaire?	Name Dr. Cordula Wagner Please see above.

In NL further instruments are used, but no information was provided other than:

- SCOPE for GP organizations
- IZEP, a workshop to discuss PS culture at ward or department level. The instrument is based on the Manchester Patient Safety Framework (MAPSAF) by Diane Parker, UK and Prof. Hudson, Hearts and Minds program of Shell.

Norway (N)

Name of the instrument	Norwegian version of the Safety Attitudes Questionnaire, Short Form 2006 (5;6)
By	University of Texas/Johns Hopkins University
Characteristic	Description
Origin and year of launch	USA launched in 2006 (many earlier versions coexisting). First used in Norway: 2006
Language(s)	Original language: American Known translations (as the original instrument and modified):

Name of the instrument	Norwegian version of the Safety Attitudes Questionnaire, Short Form 2006 (5;6)
By	University of Texas/Johns Hopkins University
Characteristic	Description
	<ul style="list-style-type: none"> - Chinese - German - Italian - Norwegian - Portuguese - Swedish - Spanish - Turkish
Objective	<p>Health care organizations can use the instrument to:</p> <ul style="list-style-type: none"> - Identify unsafe care-giving units - Assess staff's opinion on patient safety issues, medical error, and event reporting in the hospital - Track changes in patient safety over time - Evaluate the impact of patient safety interventions
Kind of instrument	Questionnaire
Setting for application	<p>Hospital settings. The SAQ Short Form 2006 is generic. Earlier versions were tailored to specified kinds of units (maternity wards, ICUs etc).</p> <ul style="list-style-type: none"> - The following instruments exists; - Safety Attitude Questionnaire-teamwork and Safety Climate - Safety Attitude Questionnaire-Ambulatory Version - Safety Attitude Questionnaire-ICU Version - Safety Attitude Questionnaire-Labor and Delivery Version - Safety Attitude Questionnaire-Operating Room Version - Safety Attitude Questionnaire-Pharmacy Version - Safety Climate Survey <p>Available tracking Forms and Miscellaneous Documents:</p> <ul style="list-style-type: none"> - Safety Attitude Survey Response Rate Tracking Form-ICU Example - Safety Attitude Questionnaire User's Guide - Scale Computation Instructions - OB Response Rate Tracking Form

Name of the instrument	Norwegian version of the Safety Attitudes Questionnaire, Short Form 2006 (5;6)
By	University of Texas/Johns Hopkins University
Characteristic	Description
	<ul style="list-style-type: none"> - Ambulatory Survey Tracking Form - Inpatient Tracking Form - Safety Climate Test Retest Technical Report
Informants	The survey can be completed by all types of hospital staff who are in the position to be (or who should be) familiar with the patient safety culture in a care-giving unit
Method of usage	The SAQ is distributed to staff for individual self-completion
Known usage	A search in the Pub Med database limited to publications 2004-2009, and performed in March 2009 on “Safety Attitudes Questionnaire” returned 11 hits (but this grossly underestimates the use of the instrument, as earlier versions were known by other names). One of the 11 studies was non-American.
Format	<p>Total number of items: 41</p> <p>Number of dimensions/scales measured: 7</p> <p>5 point-Likert scale (from “Disagree Strongly” to “Agree Strongly (plus “not Applicable”)</p>
Definition of PSC	Perceptions of a strong and proactive organizational commitment to patient safety (38)
Subjects/scales covered	<p>The survey measures 7 dimensions:</p> <ol style="list-style-type: none"> 1) Teamwork Climate 2) Safety Climate 3) Stress Recognition 4) Job Satisfaction 5) Perceptions of Unit Management 6) Perceptions of Hospital Management 7) Work Conditions
Typological classification	The instrument is typological.
Developmental process	To develop this survey, the researchers conducted a review of the literature. In addition, the researchers reviewed existing published and unpublished safety culture surveys and conducted in-person and tel. interviews with hospital staff. The survey was pre tested with hospital staff to ensure the items were easily understood and relevant to patient safety in a hospital setting. The SAQ Short Form 2006 was preceded by a number of earlier versions, the first

Name of the instrument	Norwegian version of the Safety Attitudes Questionnaire, Short Form 2006 (5;6)
By	University of Texas/Johns Hopkins University
Characteristic	Description
	ones developed for aviation safety and cockpit crew management (39).
Level of assessment and use of results	<p>Questions ask for individual assessment of his/her place of work (“In this clinical area it is ...”)</p> <p>Assessments can be broken down by</p> <ul style="list-style-type: none"> - Individual hospital units - Departments - Hospitals <p>Documentation includes results from US hospitals that can be used as benchmarks: http://www.uth.tmc.edu/schools/med/imed/patient_safety/SAQ_norms_and_Psychometric_Properties_for_Website.pdf</p>
Assessment of feasibility	<p>The instrument has the following features:</p> <ul style="list-style-type: none"> - It is easy to use, it can be used in paper form or as a web survey - It takes approximately 10 to 15 minutes to answer - The survey is available free of charge - It is validated for identifying care giving units that have a higher risk for patient harm - The survey covers a wide range of aspects of patient safety, providing a level of detail that helps hospitals identify specific areas of strength and areas for improvement at both the unit level and hospital level.
Availability of the instrument, manuals etc.	<p>The SAQ and relevant documentation is available free of charge from the webpage of the University of Texas: http://www.uth.tmc.edu/schools/med/imed/patient_safety/survey&instruments.htm.</p> <p>As stated at the above-mentioned website, the developers ask to be informed about where, when and by whom the questionnaire will be used</p> <p>The following document contains more practical advice about survey administration: (17)</p>
Test of the instrument	The survey has been extensively piloted. The response rate of the Norwegian testing was 68 %. Pilot data were analyzed, examining item statistics and the reliability and validity of the safety culture

Name of the instrument	Norwegian version of the Safety Attitudes Questionnaire, Short Form 2006 (5;6)
By	University of Texas/Johns Hopkins University
Characteristic	Description
	scales, as well as the factor structure of the survey through multilevel confirmatory factor analyses. Based on the analysis of the pilot data, the survey was revised by retaining only the best items and scales
Scientific properties	The pilot data were analyzed to refine the instrument and determine its psychometric properties. Details are given in (38;39)
Ability to predict an outcome associated with PSC	Solid evidence presented in (38;40), preliminary Norwegian evidence also in (39).
Issues regarding modification and translation	The survey was originally developed to suit the special needs of a number of clinical areas. The SAQ Short Form 2006 is generic.
Main source and contact to know more about the instrument	Webpage of the University of Texas: http://www.uth.tmc.edu/schools/med/imed/patient_safety/survey&instruments.htm . Also: The Johns Hopkins Quality and Safety Research Group, 1909 Thames (Suite 200), Baltimore, MD 21231, USA, Bryan Sexton at jsexton2@jhmi.edu Christen Fullwood at cfullwo1@jhmi.edu and Sarah Grillo at Spgrillo1@aol.com
Contact information – who filled in this scheme?	Name: Dag Hofoss / Ellen Deilkås Address: Health Services Research Unit, Akershus University Hospital, PO Box 95, --1478 Lorenskog, Norway Tel.: 67 96 87 24 / 67 96 87 25/ +47 91548202 Mail: dag.hofoss@ahus.no / ellen.deilkaas@ahus.no http://www.hokh.no/

Norway (cont.)

The Hospital Survey on Patient Safety Culture originally from AHRQ has been translated into Norwegian, and used. Please see below.

Comment: One outcome measure was added to the instrument: Stop working in dangerous situations (dimension consisting of 3 items).

Test of the instrument: Used at two measures in Norway (hospital: specialized health care):

First measure: The response rate was 55 percent (N=1919)

Second measure: The response rate was 49 percent (N=1703) with the second sample (T1) two years later.

Validity: Confirmatory factor analysis demonstrated that the HSOPSC factor structure was replicated at both measures separately. The psychometric properties (incl. reliability and prediction of outcome measures) of the instrument were considered satisfactory. The results indicate that HSOPSC can be used in a Norwegian hospital setting.

Trend between measures: Results demonstrate that the safety climate level was relatively stable during the period under study, suggesting that implemented interventions have had relatively little impact on the safety climate dimensions. Three safety climate dimensions were improved, two were reduced, and five did not significantly change. However, small significant improvements on two of the three outcome measures were observed in regards to patient safety grade and stop working in dangerous situations.

Source of information/Contact information

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Poland (PL)

Poland has no currently activities using PSCI.

Portugal (P)

Name of the instrument	World Alliance for Patient Safety Hand Hygiene Campaigns Healthcare - Units Survey on Patient Safety Culture
By	World Health Organization (WHO)
Characteristic	Description
Origin and year of launch	WHO, 2006/2007
Language(s)	Original language: English Known translation: Portuguese (modified)
Objective	Healthcare units can use this instrument to: <ul style="list-style-type: none">- Analyse the unit level situation on the following patient safety issues: leadership and strategy; reporting and learning systems; education and training and monitoring and assessment.- Evaluate the impact of patient safety interventions.

Name of the instrument	World Alliance for Patient Safety Hand Hygiene Campaigns Healthcare - Units Survey on Patient Safety Culture
By	World Health Organization (WHO)
Characteristic	Description
Kind of instrument	<p>The instrument is a quantitative assessment instrument (questionnaire)</p> <p>This questionnaire is one of the 7th questionnaires belonging to the national pilot implementation pack of the Portuguese Hand Hygiene Campaign. The Manual for Observers, the Guide to Implementation and the given training are the instrument supportive instrument kit.</p> <p>The questionnaire is a web based instrument that allows analysis and report results at local, regional and national level.</p> <p>This instrument is on a free basis for the National Hand Hygiene Campaign adherent Units.</p>
Setting for application	Hospital settings.
Informants	The survey is addressed to the board of directors and Infection Control Committees.
Method of usage	This is a self-completion questionnaire on a web based support that allows feed back reports and follow up.
Known usage	Over 110 WHO Member States (30 of them in Europe) have adhered to World Alliance for Patient Safety Hand Hygiene Campaigns, so, probably a great percentage of them have used this questionnaire.
Format	<ul style="list-style-type: none"> - Total number of items: 43 - Number of dimensions/scales. 7 - 5 point scale (from “totally implemented” to “no implementation previewed”).
Definition of PSC	The instrument doesn’t use a PSC definition.
Subjects/scales covered	<p>The survey measures 7 dimensions, but only 4 are connected to patient safety culture:</p> <ul style="list-style-type: none"> - leadership and strategy: 2 items - reporting and learning system: 3 items - education and training: 3 items and - monitoring and assessment: 3 items.
Typological classification	The instrument is not typological.
Developmental process	The Local Coordinators of the National Hand Hygiene Campaign have to assure that the board of the hospitals receive and fulfil this

Name of the instrument	World Alliance for Patient Safety Hand Hygiene Campaigns Healthcare - Units Survey on Patient Safety Culture
By	World Health Organization (WHO)
Characteristic	Description
	questionnaire what is supposed to happen in the beginning of the campaign and at the end of it (the steps of the campaign are to be repeated over again)
Level of assessment and use of results	Questions are related to institutional and ward assessment. The results are to be used locally but it is possible to use them at regional and national level.
Assessment of feasibility	The instrument is: <ul style="list-style-type: none"> - Easy to use; - Web based; - It takes - more than 15 minutes to answer; - It's available for national hand hygiene campaign adherent units. - The system has an analytical component so; it gives feed back results and helps in the planning of improvement strategies.
Availability of the instrument, manuals etc.	The instrument is free of charge for National Hand Hygiene Campaign adherent Units as well as all the documents that support the use of the questionnaire (Manual for Observers and Guide to Implementation). All the Local Coordinators of the Hand Hygiene Campaign receive training to use the instrument.
Test of the instrument	The instrument has been used by all the Health Care Units that joined the WHO Hand Hygiene Campaign. In Portugal, we have 804 Health Care Units from 115 Hospitals that are using the instrument. It was initially tested by some adherent institutions.
Scientific properties	The main result of testing pointed out that the instrument was suitable for tracking changes in PSC over time.
Ability to predict an outcome associated with PSC	
Issues regarding modification and translation	The questionnaire was translated and adapted to national features. More issues on PSC were also included.

Name of the instrument	World Alliance for Patient Safety Hand Hygiene Campaigns Healthcare - Units Survey on Patient Safety Culture
By	World Health Organization (WHO)
Characteristic	Description
Main source and contact to know more about the instrument	World Alliance for Patient Safety Information, Evidence and Research (IER/PSP) World Health Organization Avenue Appia 20, CH-1211 Geneva 27, Switzerland Mail: patientsafety@who.int www.who.int/patientsafety
Contact information – who filled in this questionnaire?	Name: Ana Cristina Costa Address: Al. D. Afonso Henriques, 45, 1049-005 Lisboa, Portugal Tel.: (+351) 21.843 05 00 Mail: cristinacosta@dgs.pt www.dgs.pt

Romania (RO)

Romania has no activities using PSCI currently.

Slovakia (SK)

Name of the instrument	Drug risk perception - with respect to NSAIDs
By	Department of Pharmacology and Clinical Pharmacology, Comenius University, Bratislava
Characteristic	Description
Origin and year of launch	2002 introduced in the Slovak Rep (41-48)
Language(s)	Slovakian
Objective	To promote the safety of therapy (49) focus on communication inside SR between patients and doctors.
Kind of instrument	The instrument is a combination of questionnaire and VAS can be qualitative and partially quantitative
Setting for application	The appropriate setting(s) for application <ul style="list-style-type: none"> - Inpatient settings - Primary care settings - Ambulatory care

Name of the instrument	Drug risk perception - with respect to NSAIDs
By	Department of Pharmacology and Clinical Pharmacology, Comenius University, Bratislava
Characteristic	Description
Informants	GP's, rheumatologist, patients and students
Method of usage	Self completion
Known usage	Before 2002 used in UK and from 2002 also in France.
Format	Total number of items: 2 type of structured questionnaire <ul style="list-style-type: none"> - Visual Analogue Scale; 1-10 mostly used. - Likert scale seldom used
Definition of PSC	
Subjects/scales covered	The subjects/scales (number of items pr. scale) covered e.g.: <ul style="list-style-type: none"> - Attention and priority given to patient safety - Change management (doctors prescribing habit, patients self treatment, OTC usage) - Reporting of adverse events - Training and education
Typological classification	The instrument is typological, it identifies the following PSCs: <ul style="list-style-type: none"> - Reactive - Generative
Developmental process	Interview only with 15 MD, 30 pt
Level of assessment and use of results	The level of assessment is: <ul style="list-style-type: none"> - Institution - Region - Nation <p>Results are recommended used nationally.</p>
Assessment of feasibility	The instrument is feasible, according to: <ul style="list-style-type: none"> - Information gained - Feed back of results - Planning of improvement strategies
Availability of the instrument, manuals etc.	Pilot studies were provided free of charges to patients and doctors, project were supported by NTL research agency VEGA
Test of the instrument	The instrument has been scientifically tested (43;46) in a cross sectional survey according to: <ul style="list-style-type: none"> - Nature of test; inter or cross institutional - Number participants ca 500 doctors, 1000 patients, 500

Name of the instrument	Drug risk perception - with respect to NSAIDs
By	Department of Pharmacology and Clinical Pharmacology, Comenius University, Bratislava
Characteristic	Description
	students in SR, 300 patients in CR
Scientific properties	Results of testing: <ul style="list-style-type: none"> - Nature of test; inter or cross institutional - Test population e.g. profession MD, pharmacist - Exploratory factor analysis & confirmatory factor analysis; item factor load, floor/ceiling effects scale reliability, inter factor, correlation etc: not yet established - Is the instrument is probably suitable for tracking changes in PSC over time Article in press.
Ability to predict an outcome associated with PSC	Criterion validity not completed
Issues regarding modification and translation	The translation might vary from the original.
Main source and contact to know more about the instrument	Prof Milan Kriska, MD Dept. Pharmacology and Clin. Pharmacol. Comenius University, Sasinkova 4, Bratislava, 811 08 Tel: +421 2 59357 220, Mail: milan.kriska@fmed.uniba.sk, milan.kriska@gmail.com
Contact information – who filled in this questionnaire?	Roman Hudec, MD, PhD Dept. Pharmacology and Clin. Pharmacol. Comenius University, Sasinkova 4, Bratislava, 811 08 Tel.: +421 2 59357 511 Mail: roman.hudec@fmed.uniba.sk , dr.hudec@gmail.com

Slovenia (SL)

Slovenia has no activities using PSCI currently.

Spain (E)

Name of the instrument	Patient safety care in hospitals - Quality Standards SENECA Project
By	Project Management Emilio Ignacio García, José Rodríguez Escobar and 20 researchers more
Characteristic	Description
Origin and year of launch	Spain 2008
Language(s)	Spanish
Objective	Care-practices assessing, based on EFQM (SENECA 100) quality levels, according a PS care quality model in hospitals, it's related with PS improvement in Spanish National Health System
Kind of instrument	1 st step: qualitative method 2 nd and 3 rd steps: quantitative CD ROM available with safety care model, ready to be used.
Setting for application	All hospital areas
Informants	This instrument has standards reviewed with patient medical records, another one coming from patient and professional questionnaires, and another one from management organization sowing evidences required.
Method of usage	Firstly a self-assessment by using the Safety Model and afterwards an external assessment.
Known usage	The use of this instrument is now been spreading along Spain. 3 rd step will be use in 35 hospitals.
Format	<ul style="list-style-type: none"> - 100 standards/indicators - 9 dimensions
Definition of PSC	Process where the organization provides cares seeking minimise patient harm on primary care settings, which may result from the processes of care delivery.
Subjects/scales covered	Number of items pr. scale covered: <ul style="list-style-type: none"> - 10 Leadership standards - 8 Policy and Strategy standards - 9 People management standards - 9 Partnership and resources standards - 20 Processes standards - 10 Customer Results or Satisfaction indicators on Safety perception - 9 People (professionals) Results indicators

Name of the instrument	Patient safety care in hospitals - Quality Standards SENECA Project
By	Project Management Emilio Ignacio García, José Rodríguez Escobar and 20 researchers more
Characteristic	Description
	<ul style="list-style-type: none"> - 6 Society Results standards - 19 Key Results standards
Typological classification	<p>This instrument is typological</p> <ul style="list-style-type: none"> - Reactive - Estimative
Developmental process	1st By reviewing patient records 2nd questionnaires to professional and patients, 3rd management questionnaire.
Level of assessment and use of results	<p>How is the level of assessment?</p> <ul style="list-style-type: none"> - By hospital relative to 35 Spanish public hospitals - Results can be compared with whichever European hospital.
Assessment of feasibility	This instrument is feasible, cheap to use and it allows improvement plans
Availability of the instrument, manuals etc.	Instrument owner is SMOH and availability is free of charge.
Test of the instrument	<p>This instrument has been scientifically tested.</p> <ul style="list-style-type: none"> - 5 hospitals have been tested - Technical report available
Scientific properties	<p>Results of testing:</p> <ul style="list-style-type: none"> - Number of participants: 5 hospitals - Technical report available - Validity and reliability tests performed
Ability to predict an outcome associated with PSC	This instrument detects a lot of improvement areas
Issues regarding modification and translation	Instrument not translated, it has been written in Spanish
Main source and contact to know more about the instrument	<p>Emilio Ignacio García</p> <p>Escuela Universitaria de Ciencias de la Salud. Avda Ana de Viya 52. -11010 Cádiz, Spain</p> <p>Tel.: (+34)956 01 90 61 or (+34) 610 71 10 79</p>

Name of the instrument	Patient safety care in hospitals - Quality Standards SENECA Project
By	Project Management Emilio Ignacio García, José Rodríguez Escobar and 20 researchers more
Characteristic	Description
	Mail: Emilio.ignacio@uca.es www.msc.es
Contact information – who filled in this questionnaire?	Name: Emilio Ignacio García Please see above

Spain (cont.)

Name of the instrument	Patient perception of safety in health services. CASSES Questionnaire
By	Project Management Yolanda Agra, Mar Fernández and teamwork (Spanish Ministry of Health and Social Politic)
Characteristic	Description
Origin and year of launch	Spain Feb - 2009
Language(s)	Spanish and it's been translated to English
Objective	To assess patient perception of safety in hospitalized patients
Kind of instrument	The instrument is quantitative Manual for use and data base
Setting for application	State the appropriate setting(s) for application - Inpatient settings, in general
Informants	Interviewer (facilitator)
Method of usage	Self-completion , data proceeding, feedback
Known usage	The questionnaire (original in Spanish would need adaptation and validation to other languages. Questionnaire was designed based in a bibliographic search on MEDLINE, LILACSSCIELO, IHCD-IME, IBECs AND COCRHANE. From Jan 2000 to Dec 2008
Format	<ul style="list-style-type: none"> - Total number of items= 25 - Number of dimensions/scales = 4 - Nominal and numerical, possibility to provide comments on open ended questions only in one item. - Kind of scale used: Likert scale
Definition of PSC	Not used on questionnaire. Nevertheless questionnaire includes a

Name of the instrument	Patient perception of safety in health services. CASSES Questionnaire
By	Project Management Yolanda Agra, Mar Fernández and teamwork (Spanish Ministry of Health and Social Politic)
Characteristic	Description
	definition of incident according to WHO taxonomy (50;51)
Subjects/scales covered	The subjects/scales covered: <ul style="list-style-type: none"> - Attention and priority given to patient safety - Communication - Error management - Flow of information and processing - Identification of causes of patient safety incidents - Perceptions of causes of patient safety incidents - Working as a team
Typological classification	The instrument is typological, it identifies <ul style="list-style-type: none"> - Reactive - Calculative - Proactive - Estimative
Developmental process	After bibliographic search a group of 89 items were selected. A group of experts and patients identified thought an standardized method the final items to be include in the questionnaire
Level of assessment and use of results	How is the level of assessment? <ul style="list-style-type: none"> - Individual - Locally - Regional - National - Benchmarking
Assessment of feasibility	The instrument feasible, according to: <ul style="list-style-type: none"> - Practical issues regarding application - Recourse; labour - used by informant - Information gained - Economical/recourse issues - Statistical proceeding of results - Feed back of results - Planning of improvement strategies

Name of the instrument	Patient perception of safety in health services. CASSES Questionnaire
By	Project Management Yolanda Agra, Mar Fernández and teamwork (Spanish Ministry of Health and Social Politic)
Characteristic	Description
	<ul style="list-style-type: none"> - Follow up - Availability
Availability of the instrument, manuals etc.	The instrument is free of charge
Test of the instrument	<p>The instrument has been scientifically tested.</p> <ul style="list-style-type: none"> - The validity and reliability of questionnaire were asses thought an observational study over 90 patients in two health regions (pilot study). - Another study with a wider sample (convenient sample of 2000 patients) is been performed at national level.
Scientific properties	<p>Results of testing:</p> <ul style="list-style-type: none"> - Number of participants 90 patients - Country Spain - Test method e.g. cross sectional, observational - Reliability (Cronbach's Alfa > 0.80 all items). - Content validity (refers to the extent to which the measure represents relevant facets of PSC): qualitative method with experts and patients - Construct validity (the measure is related to other similar measures of PSC and not related to other characteristics) Good correlation with a general item about PS - This instrument is suitable for tracking changes in PSC over time. not tested yet
Ability to predict an outcome associated with PSC	Criterion validity (refers to the measurements capacity to predict an outcome associated with PSC) not tested yet
Issues regarding modification and translation	It could be possible to translate into other languages if required.

Name of the instrument	Patient perception of safety in health services. CASSES Questionnaire
By	Project Management Yolanda Agra, Mar Fernández and teamwork (Spanish Ministry of Health and Social Politic)
Characteristic	Description
Main source and contact to know more about the instrument	Name Yolanda Agra Address Paseo del Prado, 18-20. 28071. Madrid, Spain Tel.: +34915964102 Mail: yagra@msc.es http://www.msc.es/seguridaddelpaciente.es
Contact information – who filled in this questionnaire?	Name Yolanda Agra Please see above

Spain (cont.)

Name of the instrument	Information System for Surveillance and Control of Adverse Events (ISSCAE)
By	Jesús M ^a Aranaz, Preventive Medicine and Quality Assistance Service, Sant Joan – Alacant University,
Characteristic	Description
Origin and year of launch	Spain 2009
Language(s)	Spanish and it's been translated in to Portuguese
Objective	To implement Surveillance and Control of adverse events within hospitals.
Kind of instrument	The instrument is quantitative. There are instrument kits available for this instrument, e.g. Handbooks, patterns and data base.
Setting for application	The appropriate setting for application is in-hospital
Informants	Nurse and doctors
Method of usage	Data retrieval coming from patient medical records
Known usage	It has been used in Spain since 2004 and a previous edition in Latin-America 2008
Format	Please se more details about the instrument at: http://proyectoidea.san.gva.es/sivcea/acceso.jsp .
Definition of PSC	All definition are descried on auxiliary menus
Subjects/scales covered	Scales covered: - Essential risk factors

Name of the instrument	Information System for Surveillance and Control of Adverse Events (ISSCAE)
By	Jesús M ^a Aranz, Preventive Medicine and Quality Assistance Service, Sant Joan – Alacant University,
Characteristic	Description
	<ul style="list-style-type: none"> - non essential risk factors - Patient clinical records sum up(Filter criteria) - Module A: Patient information and AE records - Module B : Injury and its effects - Module C: Circumstances where, when, how AE occurred - Module D: Main issues on assistance process. - Other options as Downloads, Help and Project change are also available.
Typological classification	<ul style="list-style-type: none"> - Reactive - Estimative - Proactive
Developmental process	
Level of assessment and use of results	<p>Level of assessment:</p> <ul style="list-style-type: none"> - Individual - Team - Speciality - Institution - Region - Nation <p>Results are recommended used: locally and for benchmarking between two similar units.</p>
Assessment of feasibility	<p>This instrument is feasible, cheap to use and it allows:</p> <ul style="list-style-type: none"> - Information collection - Statistic data processing - Results feed back - Key improvement plan - Follow up
Availability of the instrument, manuals etc.	Instrument and all instruments are available and free of charge.
Test of the instrument	This instrument has been scientifically tested by cross analysis
Scientific properties	Does not apply

Name of the instrument	Information System for Surveillance and Control of Adverse Events (ISSCAE)
By	Jesús M ^a Aranaz, Preventive Medicine and Quality Assistance Service, Sant Joan – Alacant University,
Characteristic	Description
Ability to predict an outcome associated with PSC	Predicted values were calculated on features filter guide.
Issues regarding modification and translation	
Main source and contact to know more about the instrument	Name: Jesús M ^a Aranaz Andrés Address: Preventive Medicine and Quality Assistance Service Sant Joan – Alacant University, Crtra. Alicante- Valencia s/n 03550 San Juan de alicante Tel.: (+34) 965938663 / 965938821 Mail: Emilio. aranaz_jes@gva.es http://www.dsp.umh.es/proyectos/idea/index.html
Contact information – who filled in this questionnaire?	Name: Jesús M ^a Aranaz Andrés Please see above

Spain (cont.)

Name of the instrument	Spanish version of the Hospital Survey on Patient Safety Culture (5;6)
By	Spanish Ministry of Health and Social Politic
Characteristic	Description
Origin and year of launch	2007
Language(s)	Original language: English Translated and adapted into Spanish
Objective	Describe strength and weakness in PS culture Study changes over time after interventions Comparison between units and professional groups
Kind of instrument	Quantitative.
Setting for application	A sample of 22 Hospitals from the NHS (2500 professionals) in 2007 and all the ICU involved in the Matching Michigan Project (Bacteriemia-zero) during 2009 (at the moment 120 ICU and

Name of the instrument	Spanish version of the Hospital Survey on Patient Safety Culture (5;6)
By	Spanish Ministry of Health and Social Politic
Characteristic	Description
	around 1000 professionals).
Informants	Nurses an doctors.
Method of usage	Paper and electronic for the ICU
Known usage	It is been using in all Health Regions in SP(18)
Format	<ul style="list-style-type: none"> - 42 Likert scale (5 possibilities) + 8 items (last item: comments) - Spanish version: 9 additional items Likert scale (5 possibilities)
Definition of PSC	Attitudes that are important for patient safety for individuals and groups
Subjects/scales covered	<p>The subjects/scales covered:</p> <ul style="list-style-type: none"> - Attention and priority given to patient safety - Communication - Error management - Flow of information and processing - Identification of causes of patient safety incidents - Perceptions of causes of patient safety incidents - Working as a team
Typological classification	<p>The instrument is typological, it identifies</p> <ul style="list-style-type: none"> - Reactive - Calculative - Proactive - Estimative
Developmental process	Translation and adaptation by a research team from the Murcia University. Previously tested in 3 hospitals
Level of assessment and use of results	<p>Level of assessment</p> <ul style="list-style-type: none"> - Individual - Team - Ward - Institution - Region - Nation

Name of the instrument	Spanish version of the Hospital Survey on Patient Safety Culture (5;6)
By	Spanish Ministry of Health and Social Politic
Characteristic	Description
Assessment of feasibility	The instrument is feasible, according to: <ul style="list-style-type: none"> - Practical issues regarding application - Recourse; labour - used by informant - Planning of improvement strategies - Follow up - Availability
Availability of the instrument, manuals etc.	The instrument and the manual is available free of charge. The instrument is available at: http://www.seguridaddelpaciente.es/index.php/investigacion/financiacion-estudios/percepcion-opinion.html
Test of the instrument	The instrument has been scientifically tested in the Spanish NHS.
Scientific properties	Results of testing: <ul style="list-style-type: none"> - Reliability - Construct validity according to hospital characteristics
Ability to predict an outcome associated with PSC	Criterion validity has not been tested yet
Issues regarding modification and translation	Addition of 9 items regarding good practices as an ANEX at the end of the questionnaire.
Main source and contact to know more about the instrument	Pedro Saturno Murcia University, Department of Preventive medicine psaturno@um.es
Contact information – who filled in this questionnaire?	Name Yolanda Agra Address Paseo del Prado, 18-20. 28071. Madrid Tel.: +34915964102 Mail: yagra@msc.es http://www.msc.es/seguridaddelpaciente.es

Sweden (S)

Name of the instrument	Swedish version of the Hospital Survey on Patient Safety Culture originally by AHRQ (5;6)
By	A project group from six County Councils in Sweden and The National Board of Health and Welfare
Characteristic	Description
Origin and year of launch	USA, 2004. Launch in Sweden in 2008 by a pilot test.
Language(s)	Original language: English. Translated into Swedish
Objective	Assess staff and leaders' opinions. Describe strengths and weaknesses in PS culture. Study cultural changes over time after interventions. Comparison between units and professional groups.
Kind of instrument	Quantitative; questionnaire. Supportive tool kit including a handbook, a data entry and a survey analysis instrument. A database has been developed.
Setting for application	All health care settings in Swedish healthcare.
Informants	All healthcare staff with direct and indirect contacts with patients. Administrators, supervisors and leaders.
Method of usage	Paper or electronic. It can be used in a ward/clinic, unit, and department or in an entire healthcare organization.
Known usage	It has been used by 6 county councils in Sweden with about 3000 participants.
Format	<ul style="list-style-type: none"> - 75 items - 17 dimensions - and possibilities for free comments - Likert scale (5 points)
Definition of PSC	Attitudes and patterns of behavior that determine the commitment to patient safety on individual and group levels.
Subjects/scales covered	Subjects/scales covered: <ul style="list-style-type: none"> - Attention and priority given to patient safety - Communication - Error management - Resistance - Flow of information and processing

Name of the instrument	Swedish version of the Hospital Survey on Patient Safety Culture originally by AHRQ (5;6)
By	A project group from six County Councils in Sweden and The National Board of Health and Welfare
Characteristic	Description
	<ul style="list-style-type: none"> - Identification of causes behind adverse events - Leadership - Learning from patient safety incidents - Patient involvement - Perception and recognition of stress - Perceptions of causes of patient safety incidents - Personnel management - Reporting of adverse events - Training and education - Work environment - Working as a team
Typological classification	The instrument is not typological
Developmental process	In order to facilitate the conduct of the patient safety culture survey, as well as calculation of results and make it possible to compare results by use of a common data base, an agreement was made with indicator, a firm specialised in surveys. A steering committee has been constituted in order to promote a standardised use of the survey and national database. Participation is open to all health care organisations in Sweden and has also been offered to other Nordic countries.
Level of assessment and use of results	<p>Level of assessment</p> <ul style="list-style-type: none"> - Individual - Team - Ward - Institution - Region - Nation - Cross nation is being considered <p>Results are recommended to be used locally but it is to possible use them for benchmarking. The use of patient safety surveys is being considered as a Swedish as well as Nordic patient safety indicator.</p>

Name of the instrument	Swedish version of the Hospital Survey on Patient Safety Culture originally by AHRQ (5;6)
By	A project group from six County Councils in Sweden and The National Board of Health and Welfare
Characteristic	Description
Assessment of feasibility	The instrument is feasible, according to: <ul style="list-style-type: none"> - Practical issues regarding application - Resource; labour - used by informant and rater - Planning of improvement strategies - Follow up - Availability
Availability of the instrument, manuals etc.	Availability is gained by buying the manual from Socialstyrelsen (The National Board of Health and Welfare): socialstyrelsen@strd.se or at website: www.socialstyrelsen.se/Publicerat. There is a fee to be connected to the database at Indikator Info@indikator.org
Test of the instrument	A pilot test was done in six county councils (3.100 participants from hospital, primary care, geriatric and psychiatric settings. Pilot data were analyzed, examining item statistics and the reliability and validity of the safety culture scales. Based on the analysis of the pilot data, the survey was revised.
Scientific properties	The pilot data were analyzed to refine the instrument and determine its psychometric properties. A scientific article describing the testing procedures will be published.
Ability to predict an outcome associated with PSC	Criterion validity has not been studied yet
Issues regarding modification and translation	There has been a slight modification compared to the original version. The Swedish version includes 7 additional questions. Information and support to patients and personnel involved in adverse events and reporting of risks". These questions have been added under separate chapters in the survey.
Main source and contact to know more about the instrument	Marion Lindh, marion.lindh@sll.se Jessica Lindberg, jessica.lindberg@sll.se Produktionssamordning - Övergripande vårdfrågor, Box 17533, 118 91 Stockholm, Sweden Tel.: +46 70 484 66 06

Name of the instrument	Swedish version of the Hospital Survey on Patient Safety Culture originally by AHRQ (5;6)
By	A project group from six County Councils in Sweden and The National Board of Health and Welfare
Characteristic	Description
Contact information – who filled in this questionnaire?	Marion Lindh as above We can also help you to get in contact with the other counties that have tested this survey besides Stockholm (Östergötland, Sörmland, Västmanland, Värmland, Blekinge)

Switzerland (CH)

Name of the instrument	Hospital Survey On Patient Safety Culture originally by AHRQ (5;6) – The German version: PaSKI, Patientensicherheitsklima-Inventar (52)
By	Tanja Manser, PD PhD, Yvonne Pfeiffer, Dipl. Psych.
Characteristic	Description
Origin and year of launch	Original version: U.S - please see information provided under Belgium Year of launch in Switzerland: 2006
Language(s)	please see information provided under Belgium and Scotland
Objective	The instrument designed to fulfil the following purposes <ul style="list-style-type: none"> - diagnosing and improving patient safety - results of the survey are the starting point from which action and patient safety changes or initiatives will be taken - longitudinal measurement allows evaluation safety of improvement initiatives
Kind of instrument	The instrument is quantitative The German version of the instrument has a supportive instrument kit e.g. a manual, data entry and survey analysis instruments, database.
Setting for application	The appropriate settings for application are: <ul style="list-style-type: none"> - Inpatient settings - Primary care settings - Ambulatory care - Ambulance

Name of the instrument	Hospital Survey On Patient Safety Culture originally by AHRQ (5;6) – The German version: PaSKI, Patientensicherheitsklima-Inventar (52)
By	Tanja Manser, PD PhD, Yvonne Pfeiffer, Dipl. Psych.
Characteristic	Description
	<ul style="list-style-type: none"> - Acute sector - Mental health services - Intensive care unit - Operating rooms <p>Can be used in the whole hospital, but for non-clinical staff there will be items that can't be answered, because they do not apply to non-clinical work.</p>
Informants	The survey is designed for surveying staff working in hospitals
Method of usage	PaSKI is a self-report survey. After distribution of the surveys among the whole staff, reminders are used in order to raise the response rate.
Known usage	PaSKI has been used once in Switzerland, it will be used again Switzerland for a project in 2009 and was once applied in a project in Germany, University of Köln.
Format	<ul style="list-style-type: none"> - Total number of items: 49 - Number of dimensions/scales: 14 - It is possibility to provide comments on one open ended questions - Answers are given a Likert Scale from “disagree strongly” (=1) to “agree strongly” (=5).
Definition of PSC	The definition of patient safety culture used in the instrument: “The safety culture of an organization is the product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that determine the commitment to, and the style and proficiency of, an organization’s health and safety management. Organizations with a positive safety culture are characterized by communications founded on mutual trust, by shared perceptions of the importance of safety and by confidence in the efficacy of preventive measures.” (34)
Subjects/scales covered	The subjects/scales (number of items pr. scale) covered e.g.: <u>Unit-level Scales</u> <ul style="list-style-type: none"> - Supervisor, Manager Expectations & Actions Promoting Safety (4 items)

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By	Tanja Manser, PD PhD, Yvonne Pfeiffer, Dipl. Psych.
Characteristic	Description
	<ul style="list-style-type: none"> - Organizational Learning – Continuous Improvement (3 items) - Teamwork within units (4 items) - Communication Openness (3 items) - Feedback and Communication about Error (3 items) - non punitive Response to Error (3 items) - Staffing (4 items) - Unit Management Support for Patient Safety (new) (4 items) - Unit Handoffs and Transitions (new) (4 items) <p><u>Hospital-level Scales</u></p> <ul style="list-style-type: none"> - Hospital Management Support for Patient Safety (3 items) - Teamwork across Hospital Units (4 items) - Hospital Handoffs and Transitions (4 items) <p><u>Subjective Outcome Variables</u></p> <ul style="list-style-type: none"> - Overall Perceptions of Safety (4 items) - Frequency of Event Reporting (3 items) - Patient Safety Grade (1 item) - Number of Events Reported (1 item)
Typological classification	It is not typological
Developmental process	Adaptation of the HSOPSC to German language, pre testing, validation with subjective outcome variables being part of the instrument, analysing whether the same scales emerge as for the original instrument (52)
Level of assessment and use of results	<p>The level of assessment is the individual, but results are presented on the aggregated team level.</p> <p>Questions partly directed towards how the individual experiences PSC and partly how he or she experiences PSC in the team/work unit.</p> <p>Results are recommended for used both locally, benchmarking within disciplines or hospital types. We do not recommend to benchmark work units of one hospital.</p>

Name of the instrument	Hospital Survey On Patient Safety Culture originally by AHRQ (5;6) – The German version: PaSKI, Patientensicherheitsklima-Inventar (52)
By	Tanja Manser, PD PhD, Yvonne Pfeiffer, Dipl. Psych.
Characteristic	Description
Assessment of feasibility	<p>There exists a manual describing how to apply the German version. The instrument is feasible, according to:</p> <ul style="list-style-type: none"> - Practical issues regarding application - Recourse; labour - used by informant and rater - Information gained - Economical/recourse issues e.g. expensive and labours - Statistical proceeding of results - Feed back of results - Planning of improvement strategies - Follow up - Availability - Other
Availability of the instrument, manuals etc.	<p>Instrument is free of charge; manual can be used without fee. When there is a wish to use data proceeding instruments, we can also provide SPSS-Syntax files for statistical analyses. In exchange, we will negotiate on the shared use of data.</p>
Test of the instrument	<p>The instrument has been scientifically tested as follows:</p> <ul style="list-style-type: none"> - cross sectional - inter institutional; cross institutional - care /non care setting - Test population e.g. profession - we have actually data of about 3000 respondents - validation: 1) in comparing resulting factor structures with original version 2) prediction of subjective outcome measures assessed also by the instrument
Scientific properties	<p>Results of testing please see (52) for more details. Scientific manuscript on the development of the PaSKI is in preparation:</p> <ul style="list-style-type: none"> - Number of participants= N=2989 - Country: Switzerland, Teaching Hospital - cross sectional survey - inter institutional - Test population professions: physicians, registered nurses,

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By	Tanja Manser, PD PhD, Yvonne Pfeiffer, Dipl. Psych.
Characteristic	Description
	<p>nurse-assistants, medical & technical staff, management & administration</p> <ul style="list-style-type: none"> - A paper is in preparation which reports: Exploratory factor analysis & confirmatory factor analysis that have been analysed; item factor load will be reported in the paper. floor/ceiling effects were found, scale reliability was analysed, inter factor correlation was investigated. For more information on the paper, please contact: ypfeiffer@ethz.ch - Variation - In progress: Content validity (refers to the extent to which the measure represents relevant facets of PSC) - Still pending: Construct validity (the measure is related to other similar measures of PSC and not related to other characteristics) - In progress: Intra rater reliability (degree of agreement over time; test-retest) - Still pending: Is the instrument suitable for tracking changes in PSC over time?
Ability to predict an outcome associated with PSC	Criterion validity (refers to the measurements capacity to predict an outcome associated with PSC): safety culture dimensions predicting subjective outcomes will be reported in the paper in preparation and is reported in (52).
Issues regarding modification and translation	<p>Two new dimensions were added to the questionnaire for following reasons:</p> <ul style="list-style-type: none"> - New dimension “Unit Management Support for Patient Safety”: In Swiss university hospitals, the unit management (i.e. the management of the various services such as anaesthesia, cardiology, and radiology) takes on many tasks that may be handled by hospital management in other, smaller hospitals. We assumed that unit management has other influences on patient safety related attitudes than hospital management has. Thus, we decided to cover both management levels and introduced a new dimension “Unit Management Support for Patient Safety” in

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By	Tanja Manser, PD PhD, Yvonne Pfeiffer, Dipl. Psych.
Characteristic	Description
	<p>addition to “Hospital Management Support for Patient Safety”. Therefore, we used two items of the hospital-level dimension: F9 + F1. Instead of item F8 (“The actions of hospital management show that patient safety is a top priority.”), we adapted two items of the “Patient Safety Climate in Healthcare Organizations Survey” in order to cover more specifically the priority unit management accords to safety (Si1: “Unit management has a clear picture of the risk associated with patient care.”; Si2: “Unit management considers patient safety when program changes are discussed.”).</p> <ul style="list-style-type: none"> - New dimension “Unit Handoffs and Transitions”: Because in Swiss, large hospitals, handoffs and transitions are likely to occur not only between, but also within hospital units, for example between wards, we adapted the dimension “Hospital Handoffs and Transitions” to the unit level (i.e. duplication except for two items that were specific to the hospital level).
Main source and contact to know more about the instrument	<p>Tanja Manser PD & Yvonne Pfeiffer Dipl. Psych. Kreuzplatz 5, 8032 Zürich Tel.: +41 44 632 7071 Mail: tmanser@ethz.ch or ypfeiffer@ethz.ch www.pda.ethz.ch/people/Oberassistenten/mansert</p>
Contact information – who filled in this questionnaire?	<p>Yvonne Pfeiffer Kreuzplatz 5, 8032 Zurich Tel.: +41 44 632 70 71 Mail: ypfeiffer@ethz.ch www.pda.ethz.ch/people/Doktoranden/yvonnep</p>

The European Federation of Nurses (EFN)

Name of the instrument	Safety Climate Assessment Tool (53-55)
By	Royal College of Nursing of the United Kingdom
Characteristic	Description
Origin and year of launch	UK, launched 2008
Language(s)	Original language: English
Objective	Healthcare organisations can use the instrument to : <ul style="list-style-type: none"> - assess staffs' perceptions of safety climate - track patterns and trends in perceptions of safety climate over time - use findings to target interventions aimed at improving patient safety
Kind of instrument	The instrument is a survey assessment tool (questionnaire). It was adapted for use in the UK NHS from the original tool developed by the University of Loughborough for use in the UK petrochemical industry. The original Loughborough instrument has a full user guide and toolkit which is freely available from the University of Loughborough website: www.lboro.ac.uk/departments/safety/documents.pdf .
Setting for application	The instrument can be used in: <ul style="list-style-type: none"> - All inpatient settings - Primary care settings - Ambulatory care - Ambulance - Acute sector - Mental health services - Intensive care unit - Theatres - Nursing and residential homes
Informants	The survey can be completed by all staff including, clinical, non-clinical, managerial, support, administrative, technical, maintenance.
Method of usage	The instrument can be completed by all staff using either a paper version or via a web-based application.
Known usage	The instrument has been used in a number of UK National Health care (NHS) settings including acute care, primary care and mental health. It has also been used in an independent nursing home for patients with severe learning disabilities.

Name of the instrument	Safety Climate Assessment Tool (53-55)
By	Royal College of Nursing of the United Kingdom
Characteristic	Description
Format	<p>Total numbers of items: 41</p> <p>Number of dimensions measured; 9</p> <p>All questions are closed questions, some questions are worded positively and some are worded negatively.</p> <p>A five point Likert Scale is used ranging from Strongly Agree to Strongly Disagree</p>
Definition of PSC	<p>Safety climate is defined as “the way people working in an organisation perceive and describe the importance given to safety issues by the organisation at a particular point in time, and how local arrangements affect such perceptions. It exists at a more local level and provides a tangible focus for the assessment of some aspects of safety culture. It is the shared perceptions of policies, practices and procedures, and it describes an aspect of the organisation which is influenced by the way people behave and how they think and feel about safety”.</p>
Subjects/scales covered	<p>Management commitment – 7 items</p> <p>Communication – 5 items</p> <p>Priority of safety – 4 items</p> <p>Safety rules and procedures – 3 items</p> <p>Supportive environment – 5 items</p> <p>Involvement – 3 items</p> <p>Personal priorities and need for safety – 5 items</p> <p>Personal appreciation of risk – 4 items</p> <p>Work environment – 5 items</p>
Typological classification	In the instrument is typological.
Developmental process	<p>The instrument was adapted from an original tool developed by the University of Loughborough (55). We tested the tool for use in the NHS to ensure all the items were easily understand and relevant to patient safety in an acute hospital setting.</p>
Level of assessment and use of results	<p>All questions are directed towards the individual with some using the first person ‘I’ and others using the third person ‘We’. The levels of assessment include</p> <ul style="list-style-type: none"> - across whole organisations - directorate level - unit level

Name of the instrument	Safety Climate Assessment Tool (53-55)
By	Royal College of Nursing of the United Kingdom
Characteristic	Description
	<ul style="list-style-type: none"> - ward level - team level <p>It is envisaged that as the data pool expands we will be able to use comparative results as benchmarks of best practice.</p>
Assessment of feasibility	<p>The instrument has the following features:</p> <ul style="list-style-type: none"> - it is easy to use - it takes about 10-15 minutes to complete - is available as both a paper-based questionnaire and a web-based questionnaire. The paper based questionnaire is available free of charge and the primer web-based questionnaire is free of charge - the instrument covers a wide range of issues that are fundamental to the effective management of patient safety and the findings can help organisations target effective interventions at any particular area(s) that may not have scored well - full instructions on using the instrument are available
Availability of the instrument, manuals etc.	<p>The paper version and instructions are free of charge. The primer web-based application is free of charge. A more specialised organisation-wide survey which includes presentations, analysis, feedback, facilitated seminars aimed at targeting interventions aimed at improving patient safety, and final report are available, but this service is charged.</p>
Test of the instrument	<p>The adapted tool was tested in one large acute NHS trust in England.</p>
Scientific properties	<p>The draft instrument was piloted across a random selection of all hospital staff, including both clinical and non-clinical staff (n=650) Data were analysed to refine the instrument. The response rate was 37%. As a result of the testing two of the original 43-items were dropped. The original tool has been through considerable psychometric testing carried out by researchers at the University of Loughborough</p>
Ability to predict an outcome associated with PSC	
Issues regarding	<p>The instrument was developed to be of general use across a wide</p>

Name of the instrument	Safety Climate Assessment Tool (53-55)
By	Royal College of Nursing of the United Kingdom
Characteristic	Description
modification and translation	range of care settings in both the public and the private sectors. We do not recommend making any modifications to the survey because such changes may affect the reliability and overall validity of the instrument, making comparisons and benchmarking difficult.
Main source and contact to know more about the tool	Linda Watterson, Programme Manager Evaluating & Improving, RCN Institute, 20 Cavendish Square London. Email: Linda.watterson@rcn.org.uk
Contact information – who filled in this questionnaire?	Lynne Currie, Project Manager Evaluating & Improving, RCN Institute, Whichford House Building 1400 Parkway Court, Oxford Business Park, Oxford OX4 2JY Email: lynne.currie@rcn.org.uk.

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The catalogue in hand provides information patient safety culture instruments used in member states at time of information collection in 2009.

This catalogue accompanies a report with recommendations for a “Validated questionnaire to measure patient safety culture in Hospitals through health care professionals at the ward level”.



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