SIGNIFICANT IMPROVEMENTS IN PATIENT SAFETY USING HIGH 5S SOPs (STANDARD OPERATING PROTOCOLS) IN HOSPITALS WORLDWIDE

The High 5s Project was launched in 2006 by WHO and the WHO Collaborating Center on Patient Safety – TJC to address three specific patient safety problems around the world.

High 5s Steering Group Members
20th International Forum on Quality and Safety in Healthcare
21-24 April 2015, London, UK
HIGH 5s PROJECT

www.who.int/patientsafety/implementation/solutions/high5s/en/

Australia
France
Germany
The Netherlands
Singapore
Trinidad & Tobago
United Kingdom
United States of America

Canadian Patient Safety Institute & Institute for Safe Medication Practices Canada
Agency for Healthcare Research and Quality
WHO Collaborating Centre for Patient Safety – The Joint Commission
WHO
SESSiON GOALS

1. Overview of the **High 5s SOP materials** for your country and local hospital/healthcare setting

2. Strategy to **adapt the High 5s SOPs** in your country/healthcare setting in collaboration with relevant stakeholders

3. Action plan to **implement the High 5s SOPs** in your local healthcare setting and involve patients as partners to optimize significant impact of SOPs on patient safety
SESSION ADVISORS

Claire Chabloz          Haute Autorité de Santé, France
Rick Croteau          American College of Surgeons, USA
Anupam Dayal          The Joint Commission, USA  @Adayaljcr
Carolyn Hoffman      Alberta Health Services, Canada  @carolyn0715
Agnès Leotsakos       World Health Organization, Switzerland
Erica vdS-de Loos     CBO  @PatVei
                                  Dutch Institute for Healthcare Improvement, NL
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A. STANDARD OPERATING PROTOCOL (SOP) INSTRUCTION
STANDARD OPERATING PROTOCOL (SOP)

Set of instructions for implementing a defined process in a consistent and measurable manner by multiple users
SOP INSTRUCTION

1. **Standard Operating Protocols: SOPs**

2. SOP implementation guides

3. Significant improvements in patient safety in 7 countries
SOPs – MISSION

2010-2015: Implementation and Evaluation

Standardized solutions within a global learning community

To achieve measurable, significant, and sustained reductions in challenging patient safety problems

1. Is this feasible?
2. Will it make a difference?
SOPs – 3 Patient Safety Challenges

1. Correct Site Surgery
2. Medication Reconciliation
3. Safe Management of Concentrated Injectable Medicines

Rationale for standardizing
Less variation → Fewer errors → Better outcomes
Comparability and portability
SOPs – Evaluation

Multi-dimensional Approach
Measurement, evaluation, and process management

Quantitative: Process and outcome measures
Qualitative implementation evaluation: questionnaires and interviews

Reporting, feedback, success stories
Culture surveys and event analysis
1. Correct Site Surgery SOP

Problem
Wrong site or procedure/implant/person surgery

Scope
Cases done in an inpatient operating room setting
Site marking requirement limited to cases involving laterality, or multiple surfaces, structures or levels

Solution
Extended preoperative verification process
Surgical site marking
Final “time out” before incision
Pre-Op Verification Check List

Why use a check list?

1. A guide for consistent implementation
2. A documentation tool
3. A data collection tool
2. Medication Reconciliation SOP

Problem
Medication errors at points of transition in patient care process

Scope
All patients at all entry points and all transitions in care

Solution
Complete and accurate list of patients’ home medication, on admission
Using the list when writing medication order
Identify and resolve discrepancies ≤24 hours: safe prescribing
3. **Concentrated Injectable Meds SOP**

**Problem**
Prevention of medication errors associated with preparation, storage and administration of CIM

**Scope**
Concentrated potassium chloride solution
Sodium heparin (>1000 units/milliliter)
Injectable morphine preparations

**Solution**
Minimize look-alike labeling and packaging
Segregate storage from other medicines
Limit amount of CI drugs stored in all clinical areas
B. STANDARD OPERATING PROTOCOL (SOP) IMPLEMENTATION GUIDES
To assist front line hospital staff and leaders in achieving smooth and successful SOP implementation.

Overview
- Issue
- Why Use SOP
- Impact

Who, When, Where & How
- Resources & References

Step by Step & Keep It Stupidly Simple
- Measurement for Improvement
- Lessons Learned

Process Management, Evaluation & Feedback
IMPLEMENTATION GUIDES & SOPs

SOPs
Standardized process
Implementation strategy
Process management strategy

& SOP Process Flow Charts

www.who.int/patientsafety/implementation/solutions/high5s/en/
Seek and investigate events that should have been prevented by the SOP and report specific de-identified information.

Types
- Concise
- Comprehensive

Compiling Events
- Aggregate
- Cluster

Events Identified
- CSS
- Independently reported AEs
- Prospective SOP checklist review
- Med Rec
- Independent reported AEs
- Independent observer chart audits
IMPLEMENTATION GUIDES: EVENT ANALYSIS

Correct Site Surgery: equipment

Med Rec: staffing, policy and procedure, environment

Recommended Change: Clinical Med Review at Time of Med Rec
C. Significant Improvements in Patient Safety in 7 Countries
SIGNIFICANT IMPROVEMENTS

The SOPs are Feasible

Correct Site Surgery: 38 hospitals, 5 countries
Medication Reconciliation: 58 hospitals, 5 countries

Barriers

• Competition with existing patient safety priorities
• Resistance to change
• Insufficient education and training
• Limited resources
• Maintaining engagement

Key Points for Success

• Management buy-in
• Multidisciplinary work
• On site champions: pharmacists, surgeons etc
• Leadership
• Communication
**SIGNIFICANT IMPROVEMENTS**

The SOPs Did Make an Impact

**Correct Site Surgery**

- No wrong-site surgeries reported
- Barriers to measuring outcomes
  
  *Incomplete reporting and infrequent events (Low-N)*

  Positive outcomes (good catches) more useful

**Medication Reconciliation**

- Baseline versus complexity of process (variables) makes measurement of improvement challenging (process)
**Significant Improvements**

**France:** 8 participant hospitals, 10 surgery specialties

- Culture change
- Risk awareness
- Sharing Community
- High 5s is relevant for out patients
- Other safety projects induced
- Quality of wok life improved
SIGNIFICANT IMPROVEMENTS

France Positive Error Culture:
29 good catches in 6 hospitals
**SIGNIFICANT IMPROVEMENTS**

**Netherlands**
From National Patient Safety Program & Guidelines (‘08/’09) to Global High 5s in 2009 to strengthen implementation

Med Rec ≤ 24 hours: 0% → 40% → > 90%: 100%
Reduction of discrepancies: ≥ 75% reduction < 1-5 months

Hospital wide policy on Concentrated Injectable Medicines

VdS-De Loos et al., 2010-2013
Pharmacist-based Med Rec reduces medication discrepancies in acute hospital admissions of elderly patients

“Investment on this staff pays for itself quickly”

“Hospitals require the Med Rec SOP and SOPs are generic enough.”

“The SOP has been totally integrated in the system of our hospital.”

Vd Bemt PM, VdS-dL EM et al. The Dutch CBO WHO High 5s Study Group. Doi 10.1111/jgs.12380
Dutch Inspectorate of Health: IGZ 2012: De Veiligheid telt : p.27, 28} VdS-dL, 2014
SIGNIFICANT IMPROVEMENTS: OVERALL BENEFITS

• SOPs across multiple hospitals and countries with minimal variation improved related hospital processes and patient care

SOP Implementation and Evaluation

• Hospital processes
• Leadership
• Safety culture
SIGNIFICANT IMPROVEMENTS:
OVERALL BENEFITS

• Limited resources and know-how at hospital level
• Implementation and data collection challenges
• Internal and external resistance to change

• Poor providers’ knowledge of existing policies and procedures
• Insufficient education and training, policies/procedures for safety lacking, ineffective teamwork by leaders and providers

• Poor exchange of patient/organizational information and communication
• Competition with existing in-country patient safety priorities
1. Name a **standardization of a care process** applied in your country/facility

   *What positive impact has it had on patient safety?*

   *What were the challenges?*

   *If standard of care processes have not been applied in your facility, what potential benefits/challenges do you anticipate?*

2. How would you **integrate the SOPs** into the existing processes of care in your country/facility?

   *How do you anticipate the challenges and opportunities?*

With Use of the SOP Flow Charts  
[bmj.co/handouts](http://bmj.co/handouts)
What resonated with you?

SOP ADAPTATION WRAP UP

www.who.int/patientsafety/implementation/solutions/high5s/en/

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#E5 #Quality2015
1. What are the **first steps** to initiate an action plan in your facility for implementing the SOPs?

2. How can the **action plans** be integrated within existing resource, processes, and stakeholders in your country/facility?

With Use of the High 5s Action Plan Template
bmj.co/handouts
What did you hear in the discussion that you will remember to take home?

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