African Partnerships for Patient Safety (APPS): An overview

Dr. Shams Syed

Dr. Edward Kelley

Webinar 1 of 6
APPS Webinar Series

October 3, 2013
Objectives

1. Explore why patient safety is critical to health systems.


3. Provide an overview of how a partnership based approach can be used to improve patient safety.

4. Define clear mechanisms for engagement with the WHO programme, specifically through registration.
What is Patient Safety?
Goes back a long way…

- Hippocrates writes, "I will never do harm to anyone"
- Later translated (& changed) "Primum non nocere"

"First do no harm"

But today…

"Patient safety can, at its simplest, be defined as:

The avoidance, prevention and amelioration of adverse outcomes or injuries stemming from the process of healthcare."

Why Patient Safety?

Burden, interventions & cross cuts
Burden(1): The 1 in 10 argument

1 in 10!

- Clinical problem
- Human problem
- Economic problem
- System problem
- Community problem
Burden(2): WHO EMRO/AFRO Study

- 2005 data – 8 countries / 26 hospitals
- 15,548 records reviewed
- 8.2% showed 1 or more adverse events
- Country variation: 2.5% - 18.4%
- 83% judged to be preventable
- 30% associated with death
- Error types:
  - *Therapeutic* (34%)
  - *Diagnostic* (19%)
  - *Operative* (18%)

"Extrapolating these figures to the activity of the study hospitals yields a calculation that suggests that nearly 2% of their annual about 550,000 admissions, or more than 10,000 patients, would die from adverse events in those 26 hospitals each year." BMJ 2012; 344: e832
Burden(3): Drilling deeper

- HAI pooled prevalence: **15.5 per 100 patients [95% CI 12.6–18.9]** was much higher than proportions reported from Europe & the USA.
- Pooled overall health-care-associated infection density in adult intensive-care units was **47.9 per 1000 patient-days (95% CI 36.7–59.1)**, at least 3 times as high as densities reported from the USA.
- Surgical-site infection was the leading infection in hospitals (pooled cumulative incidence 5.6 per 100 surgical procedures), strikingly higher than proportions recorded in developed countries.

"The burden of health-care-associated infection in developing countries is high."

1995-2009: 19 articles...paucity of evidence!
Hospital-wide HAI prevalence: 2.5% to 14.8%
Surgical ward HAI cumulative incidence: 5.7% to 45.8%
Surgical site infection cumulative incidence: 2.5% to 30.9%
234 million operations are done globally each year

"Using a conservative approach, we estimated that there are at least 43 million injuries each year due to medical care, and that nearly 23 million DALYs are lost as a consequence."

Interventions(1): Hand Hygiene

Making it easier to
- understand
- remember
- practice

My 5 moments for HAND HYGIENE

1. Before touching a patient
2. Before clean/aseptic procedure
3. After body fluid exposure risk
4. After touching a patient
5. After touching patient surroundings

Interventions(2): Safe Surgery

Surgical Safety Checklist

Before induction of anaesthesia
(with at least nurse and anaesthetist)

- Has the patient confirmed his/her identity, site, procedure, and consent?
  - Yes
  - No
  - Not applicable

- Is the site marked?
  - Yes
  - No
  - Not applicable

- Is the anaesthesia machine and medication check complete?
  - Yes
  - No
  - Not applicable

- Is the pulse oximeter on the patient and functioning?
  - Yes
  - No

- Does the patient have a:
  - Known allergy?
    - Yes
    - No
  - Difficult airway or aspiration risk?
    - Yes
    - No
    - Yes, and equipment/assistance available
  - Risk of >500ml blood loss (7ml/kg in children)?
    - Yes
    - No
    - Yes, and two IVs/central access and fluids planned

Before skin incision
(with nurse, anaesthetist and surgeon)

- Confirm all team members have introduced themselves by name and role.
- Confirm the patient's name, procedure, and where the incision will be made.
- Has antibiotic prophylaxis been given within the last 60 minutes?
  - Yes
  - No
  - Not applicable

Anticipated Critical Events

To Surgeon:
- What are the critical or non-routine steps?
- How long will the case take?
- What is the anticipated blood loss?

To Anaesthetist:
- Are there any patient-specific concerns?

To Nursing Team:
- Have sterile (including indicator results) been confirmed?
- Are there equipment issues or any concerns?

To Surgeon, Anaesthetist and Nurse:
- What are the key concerns for recovery and management of this patient?
- Is essential imaging displayed?
  - Yes
  - No
  - Not applicable

This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.

Revised 1/2009
© WHO, 2009
## Interventions(3): Safe Surgery

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Checklist</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases</td>
<td>3733</td>
<td>3955</td>
<td>-</td>
</tr>
<tr>
<td>Death</td>
<td>1.5%</td>
<td>0.8%</td>
<td>0.003</td>
</tr>
<tr>
<td>Any Complication</td>
<td>11.0%</td>
<td>7.0%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>SSI</td>
<td>6.2%</td>
<td>3.4%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Unplanned Reoperation</td>
<td></td>
<td></td>
<td>0.047</td>
</tr>
</tbody>
</table>

- 36% reduction in complications
- 40% reduction in SSIs

Patient Safety: Cross-cut at all levels (1)
"What good does it do to offer free maternal care and have a high proportion of babies delivered in health facilities if the quality of care is sub-standard or even dangerous?"

Margaret Chan, World Health Assembly - May 2012
African Partnerships for Patient Safety (APPS): Genesis & Development
The Fifty-fifth World Health Assembly,

Having considered the report on quality of care: patient safety;¹

Concerned that the incidence of adverse events is a challenge to quality of care, a significant avoidable cause of human suffering, and a high toll in financial loss and opportunity cost to health services;

Noting that significant enhancement of health systems’ performance can be achieved in Member States by preventing adverse events in particular, and improving patient safety and health care quality in general;

Recognizing the need to promote patient safety as a fundamental principle of all health systems.
WHO AFRO Regional Committee
Yaoundé, Cameroon
**Twelve patient safety action areas**

<table>
<thead>
<tr>
<th>1. Develop and implement national policy for patient safety</th>
<th>2. Improve knowledge and learning in patient safety</th>
<th>3. Raise awareness</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Address the context in which health services &amp; systems developed</td>
<td>5. Minimize healthcare-associated infection</td>
<td>6. Protect healthcare workers</td>
</tr>
<tr>
<td>10. Promote partnerships.</td>
<td>11. Provide adequate funding</td>
<td>12. Strengthen surveillance and capacity for research</td>
</tr>
</tbody>
</table>
Co-development built in to programme design
Three Core Objectives
African Partnerships for Patient Safety

Objective 1: PARTNERSHIP STRENGTH
Objective 2: HOSPITAL PATIENT SAFETY IMPROVEMENTS
Objective 3: NATIONAL PATIENT SAFETY SPREAD
What is a partnership?

"Partnership can be defined as a collaborative relationship between two or more parties based on trust, equality, and mutual understanding for the achievement of a specified goal. Partnerships involve risks as well as benefits, making shared accountability critical."

APPS Definition of a Partnership
Patient safety improvement...striving for simplicity on the far side of complexity through partnerships

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<th>2. Improve knowledge and learning in patient safety</th>
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<td>4. Address the context in which health services &amp; systems developed</td>
<td>5. Minimize healthcare-associated infection</td>
<td>6. Protect healthcare workers</td>
</tr>
</tbody>
</table>
12 Patient Safety Action Areas

1. Patient safety and health services and systems development
2. National patient safety policy
3. Knowledge and learning in patient safety
4. Patient safety awareness raising
5. Healthcare-associated infections
6. Health-care worker protection
7. Health-care waste management
8. Safe surgical care
9. Medication safety
10. Patient safety partnerships
11. Patient safety funding
12. Patient safety surveillance and research
The Improvement Continuum and APPS

The Improvement Continuum & Health Care-Associated Infection

- Hand hygiene improvement
- Health care-associated infection prevention
- Patient safety
- Quality of care
- Health systems strengthening
- Enhanced population health

The Improvement Continuum & Safe Surgery

- Checklist Implementation
- Safe surgery
- Patient safety
- Quality of care
- Health systems strengthening
- Enhanced population health
Context specific national spread

VERTICAL: Political/Legal

SPONTANEOUS

HORIZONTAL: Expansion/Replication
Learning, doing, refining!
APPS 6-step process: Supported by co-developed tools & resources

- **Step 1: Partnership Development**
  - Target action: Strengthen health systems to support patient safety.
  - Build patient safety capacity.
  - Advocate and communicate for patient safety.

- **Step 2: Needs Assessment**

- **Step 3: Gap Analysis**

- **Step 4: Action Planning**

- **Step 5: Action**

- **Step 6: Evaluation and Review**

**APPS Tools and Resources**

1. **Helping You Prepare**
   - Definition of Partnership
   - APPS Work Package
   - APPS Compendium of Experience
   - Evidence to Policy
   - Spread Pack
   - Public-Private Partnership

2. **Helping You Act with Focus**
   - Situational Analysis & "First Steps"
   - Alcohol based hand rub procurement
   - Sustainable
   - Community Engagement

3. **Helping You Sustain**
   - Principles of Partnership
   - Resource Map
   - APPS Groundwater
   - Economic Resources
   - Evaluation Handbook

4. **Helping You Get Started Partnership Planning Series**
   - Partnership Preparation Package
   - APPS Network Web Platform
   - APPS Newsletter
   - Momentum Report

**QUADRANT 1**

- Partnership Planning Series
- Supports steps in establishing successful partnerships

**QUADRANT 2**

- Patient Safety Improvement Series
- Practical Tools for Patient Safety Improvement in a Hospital Setting

**QUADRANT 3**

- Approach Series
- Outlines the APPS approach to a series of cross-cutting themes to support patient safety activity

**QUADRANT 4**

- Communications Series
- Supports effective communication and advocacy for successful implementation

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World Health Organization

Patient Safety

A World Alliance for Safer Health Care
## Traditional versus partnership based approach

<table>
<thead>
<tr>
<th>Criteria of comparison</th>
<th>Traditional</th>
<th>APPS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frontline Needs</strong></td>
<td>Technical support to deliver patient safety improvement in specific action area in African hospital</td>
<td>Technical support to deliver patient safety improvement in specific action area in African hospital and securing mutual benefits to partner hospital</td>
</tr>
<tr>
<td><strong>Human resource requirement</strong></td>
<td>WHO staff time for “vertical” technical assistance in selected health facilities</td>
<td>Front line experts from partnership hospitals through “donated” time (institutional or personal)</td>
</tr>
<tr>
<td><strong>Implementation parameters</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of interaction</td>
<td>Usually one-off</td>
<td>Continuous sustained engagement</td>
</tr>
<tr>
<td>Nature of interaction</td>
<td>Response to technical request</td>
<td>Technical “human interaction” – passion channel</td>
</tr>
<tr>
<td>Financial factors</td>
<td>Substantial costs of WHO expert engagement</td>
<td>Travel costs for partnership exchanges.</td>
</tr>
</tbody>
</table>

The APPS is a commendable venture as it has created a network of hospital to hospital partnership which facilitates ‘bi-directional’ patient safety learning whilst enlisting 14 African and 3 European countries. In the same breath, under the APPS, partnership experiences have been the driving force behind national patient safety change in 6 countries in the African Region.

To conclude, the APPS Strategy 2012-2015 which proposes an integrated approach based on partnership strengthening to enhance patient safety in the African Region is the way forward.
How a partnership based approach can be used to improve patient safety
A simple 6-step process...

1. Partnership Development
2. Needs Assessment
3. Gap Analysis
4. Action Planning
5. Action
6. Evaluation and Review

Target action to:
- Strengthen health systems to support patient safety;
- Build patient safety capacity;
- Advocate and communicate for patient safety.
"If I had eight hours to chop down a tree, I'd spend six sharpening my axe."

- Abraham Lincoln
Helping you get started...

- For new and existing hospital-to-hospital partnerships
- Presents a step by step framework for action
- For each of the six steps highlights:
  - Main activities
  - Outputs or deliverables
  - Core tools & resources
  - Additional available tools
Step 1: Partnership Development
Developing principles from the bottom up...

- Shared vision & joint planning
- Ownership
- Relationships
- Communication
- Ways of working
Step 2: Needs Assessment
Patient Safety Situational Analysis

African Partnerships for Patient Safety

Patient Safety Situational Analysis (Short Form)

April 2012
Improvement Series
Step 3: Gap Analysis
Improving Patient Safety – First Steps

The African Partnerships for Patient Safety Framework

Improving Patient Safety: First Steps

Step 1: Partnership Development
Step 2: Needs Assessment
Step 3: Gap Analysis
Step 4: Action Planning
Step 5: Action
Step 6: Evaluation and Review

This resource outlines an approach to improving patient safety using a partnership model, structured around 12 action areas for improvement and with spread as a central arm. It lists some critical considerations for improvers at the start of their improvement journey.
Step 4:
Acting Planning
# Annex 2: Hospital Partnership Plan (HPP) – Template

## SUMMARY INFORMATION

<table>
<thead>
<tr>
<th>Name of partner hospital (Africa):</th>
<th>Name of APPS lead (Africa):</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Name of partner hospital:</th>
<th>Name of APPS lead (partner hospital):</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Date of Situational Analysis (SA):</th>
<th>Names of individuals completing the HPP:</th>
</tr>
</thead>
</table>

### Action Areas to be addressed

- Project 1: Health care associated infections
- Project X:

For each action area complete the template below. Use as many forms as required depending on the additional action areas addressed.

<table>
<thead>
<tr>
<th>Project number and action area</th>
<th>Brief description of project</th>
</tr>
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<table>
<thead>
<tr>
<th>Project goal(s)</th>
<th>Project outcome(s)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Project output(s)</th>
<th>Main activities</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Beneficiaries</th>
<th>Stakeholders</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Monitoring and Evaluation</th>
<th>Sustainability and spread</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Risks</th>
<th>Project Management and Support</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Approved by</th>
<th>Date of approval</th>
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</table>
Step 5: Action
APPS Resource Map

- Provides information on free patient safety resources available around the world.
- Provides all the information in one place.
- Shows how to access the resource, sharing case studies of its use where appropriate.
Step 6: Evaluation & Review
Moving from principles to measurement...

- **Patient safety improvement** tracked through situational analysis and hand hygiene self assessment.

- **Domains of partnership strength** (& further sub-components) are examined through the APPS partnership evaluation process.

- **Spread** of improvement tracked.
How can you get involved?
Registering with African Partnerships for Patient Safety (APPS)

1. General Information
   - Name, contact details, and type of institution;
   - Names of both arms of partnership and focus of work where appropriate; areas of interest in patient safety

APPS will:
   - Send you the quarterly APPS newsletter; invite you to join the online community; invite you to join APPS webinars and provide information on events and publications of interest.

Register as APPS Community Members if you are an individual interested in patient safety improvement.
Register as APPS Community Members if you are an African hospital not in a partnership.
Register as APPS Community Members if you are an organization interested in patient safety but not a hospital.

Please see 'rest of the world' for more details regarding registration.

Register now! www.who.int/patientsafety/implementation/apps
Two Types of Registration with APPS

• "APPS Community Member"
  - Simple
  - Takes minutes
  - Your connected!

• "APPS Implementer"
  - More involved
  - Takes time
  - Your "doing" patient safety partnership work!
Registering with African Partnerships for Patient Safety (APPS)

**Registration as APPS Implementers** if you are a hospital-to-hospital partnership involving an African hospital.

**Registration will require:**
1. **General Information**
   - Name; partnership contact details; focus of partnership work; length of partnership.
2. **Written Commitment**
   - Completed APPS Situational Analysis; pledge to implementing APPS Framework for Improvement; and annual feedback.

**APPS will**
- Connect partnerships with APPS Focal Hospitals and others in-country; circulate quarterly APPS Newsletter; invite participation in the APPS Online Community; host APPS Webinars; and develop an APPS Implementers Network.

**Registration as APPS Community Members** if you are
- An individual interested in patient safety improvement
- An African hospital not in a partnership
- An organization interested in patient safety (not a hospital)

See ‘rest of the world’ for more details on registration if you fall into these 3 categories.

**Register NOW!** www.who.int/patientsafety/implementation/apps
Four questions!

1. Are you part of a hospital partnership?
2. Does the partnership involve an African hospital?
3. Have you completed a patient safety situational analysis at your hospital?
4. Do you have a letter from the hospital management team committing to implementing the APPS Framework for patient safety improvement?
How are the 4 questions related to the registration process?

APPSS Registration Process

Are you part of a hospital to hospital partnership?

- NO
  - Register as an APPSS Community Member at www.who.int/patientsafety/implementation/apps
    - As an APPSS Community Member you can
      - Join the online APPSS community where you can share learning and experiences, access resources and discussions
      - Receive the APPSS quarterly Newsletter and be encouraged to contribute
      - Access patient safety information and learning from across the network
      - Access periodic APPSS webinars

- YES
  - Does the partnership involve an African hospital?
    - NO
    - YES
      - Have you completed a Patient Safety Situational Analysis at your hospital?
        - NO
          - For assistance with a letter please see our suggested template available at www.who.int/patientsafety/implementation/apps/getting_involved_with_APPSS/en/index.html
        - YES
          - Do you have a letter from the hospital management team committing to implementing the APPSS Framework for patient safety improvement?
            - NO
              - Now you are ready to register as an APPSS Implementer:
              - Make sure you have your completed APPSS Patient Safety Situational Analysis and Hospital Commitment Letter ready for upload

As an APPSS Implementer you can
- Connect with other APPSS partnerships that already exist
- Connect to the National APPSS Focal Hospital where they exist
- Receive the APPSS quarterly Newsletter and be encouraged to contribute
- Join the online APPSS community where you can share learning and experiences, access resources and discussions
- Access periodic APPSS webinars on specific subject areas
"If there is something great in you, it will not appear on your first call. It will not appear or come to you easily without any work or effort."

Ralph Waldo Emerson (1803-1882)
### African Partnerships for Patient Safety (APPS)

**Webinar Series**

**What is it?**

APPS is hosting a series of open webinars starting in October 2013. These free technical webinars are for anyone interested in patient safety improvement using hospital-to-hospital partnerships. The webinars will also be of use to all those interested in patient safety improvement in the African Region, even if not currently involved in a hospital-to-hospital partnership. Each session will last one hour. The slides of the presentations as well as the recordings will be made available on the APPS website and the APPS Platform.

**3 October 2013: Webinar 1 – APPS Overview and Registration Mechanism**

<table>
<thead>
<tr>
<th>Time</th>
<th>Summary</th>
<th>Lecturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:00-13:00 GMT</td>
<td>This webinar introduces participants to patient safety and the APPS programme as a whole. The webinar covers core patient safety concepts. It also describes how a partnership-based approach can be used to improve patient safety. The webinar defines clear mechanisms for engagement with the APPS programme through registration.</td>
<td>Shane Syed &amp; Edward Kelley</td>
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</table>

**7 November 2013: Webinar 2 - APPS Improvement Framework**

<table>
<thead>
<tr>
<th>Time</th>
<th>Summary</th>
<th>Lecturer</th>
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</thead>
<tbody>
<tr>
<td>13:00-14:00 GMT</td>
<td>This technical webinar provides information on the APPS Improvement Framework. A range of tools and resources are described in detail. Particular attention is placed on how to undertake a hospital patient safety situational analysis. Partnership planning steps are explained through an examination of the APPS 4-step process.</td>
<td>Shane Syed</td>
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</tbody>
</table>

**5 December 2013: Webinar 3 - National Patient Safety Policy in the African Region**

<table>
<thead>
<tr>
<th>Time</th>
<th>Summary</th>
<th>Lecturer</th>
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</thead>
<tbody>
<tr>
<td>13:00-14:00 GMT</td>
<td>This webinar examines the development of patient safety policy in the African Region. A WHO tool for developing national policy is examined. The policy context in different countries in Africa is described through case studies. Key lessons on how APPS partnerships can facilitate policy change are described.</td>
<td>Joyce Hightower</td>
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**9 January 2014: Webinar 4 - APPS Lessons and Learning for Implementation**

<table>
<thead>
<tr>
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<th>Lecturer</th>
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<tbody>
<tr>
<td>13:00-14:00 GMT</td>
<td>This webinar draws on the significant experience in partnership hospitals participating in APPS over the last 4 years. Key lessons are synthesized. Reflections on what these lessons mean for those starting the partnership journey are provided.</td>
<td>Julie Borr</td>
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**6 February 2014: Webinar 5 - APPS Community & Patient Engagement (ACE Approach)**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>13:00-14:00 GMT</td>
<td>This webinar analyzes the critical importance of community and patient engagement for patient safety improvement. An overview of the ACE Approach and its associated &quot;Implementation Pack&quot; is provided. Current collaborative activities on patient and community engagement are described.</td>
<td>Julie Borr</td>
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**6 March 2014: Webinar 6 - APPS Evaluation Synthesis**

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</thead>
<tbody>
<tr>
<td>13:00-14:00 GMT</td>
<td>This technical webinar will present findings from a summative evaluation from all learning to date from the programme. This includes a careful examination of transferable lessons on utilizing the partnership-based approach, patient safety improvement and national spread of patient safety change.</td>
<td>Julie Borr</td>
</tr>
</tbody>
</table>
Please visit our website to find out more about the programme and access our resources

www.who.int/patientsafety/implementations/apps

THANK YOU