World Health Organization

African Partnerships for Patient Safety

Building Momentum for Safer Health Care

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WHO/IER/PSP/2012.7
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Designed by CommonSense, Greece

Printed by the WHO Document Production Services, Geneva, Switzerland

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Foreword

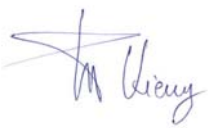
African Partnerships for Patient Safety (APPS) was established in 2009 in response to the political commitment on patient safety emanating from the WHO African Region. The programme engages closely with WHO Member States and frontline health-care professionals in an area of the world where advancing safety and quality of care has been very difficult.

The stakes are high. Without a rapid spread of effective patient safety improvements, more patients will be harmed unnecessarily due to unsafe care. The goal is to ensure patient safety is at the very core of a strong health system in each of the 46 countries in the WHO African Region, to prevent unnecessary harm and death to patients.

There have been impressive achievements to date. The first wave of APPS hospital partnerships have already received recognition for their efforts with APPS listed as one of the achievements in WHO reporting on the 2010-11 biennium. The first wave partnerships have co-developed and utilised a range of context- specific "first of a kind" resources to significantly advance patient safety. APPS partnerships have empowered health-care workers to improve care, communities to be engaged in hospital safety and ministries of health to take system-wide action to improve safety. The programme has allowed innovation and learning – such as locally produced alcohol based handrub for improving hand hygiene – to flow within and beyond the partnerships. There are now a total of 14 African and 3 European countries committed and involved in the work of the programme. Partnerships involving frontline health-care professionals are integral to the work, and this is just the beginning.

Our next challenges will be to work with other partners in Africa active in improving safety, quality and strengthening health systems to achieve the APPS mission. I hope momentum will not only continue and be sustained but move forward even faster towards the WHO goal of safer patient care for all.

We urge those already involved in partnerships to channel their efforts to spread their learning and innovation, making a difference nationally and regionally. APPS remains uniquely placed to facilitate this momentum for action to address patient safety improvements and save patient lives. Only by working together can we address this public health issue, strengthen health systems and make the delivery of health care safe for every patient in Africa, every time.



Dr Marie-Paule Kieny,
Assistant Director-General
Health Systems and Innovation
World Health Organization

Executive Summary

African Partnerships for Patient Safety (APPS) focuses on the implementation of patient safety improvement action through hospital-to-hospital partnerships to tackle the public health issue of preventable harm to patients during the process of health care.

The challenge of patient safety in the African setting is serious and urgent, considering weak health systems and poor resources all within the context of the Millennium Development Goals.

The APPS programme was born as a response to the commitment of the ministers of health of the African Region to implement changes in patient safety, following their acknowledgement that it was an important public health issue which needed to be addressed.

Implementation has focused on 12 key patient safety action areas (see page 8) with particular initial emphasis on the improvement of hand hygiene. Hospitals are now producing and using alcohol-based handrub, conducting staff training programmes to raise awareness of patient safety issues, engaging with local communities to ensure patients understand the importance of patient safety and using improvements within their institutions to galvanize action on patient safety at the national level in developing policy and national guidance.

Hospital partnerships follow a systematic cycle of steps – highlighting the current status of patient safety, identifying the gaps, planning action for change and then evaluating and refining activity. A series of tailor-made tools and resources support each step. The unique situational analysis tool and the patient safety resource map provide support to this cycle of analysis, planning, implementation and evaluation. The co-development of these tools and resources with the first original six hospital-to-hospital partnerships has allowed refinement that reflects reality on the ground. It is hoped these tools will have value beyond those directly involved in the programme to support patient safety activity, not only across Africa but in other regions too.

The APPS model of partnership brings a unique aspect to patient safety improvement and is proving an effective and resourceful model for action within WHO. This report outlines some key elements of programme implementation, highlighting the challenges that still lie ahead and emphasizing the growing momentum for action.

> "Improvements to make care safer for patients take time and commitment, and I welcome the energy that the APPS partnership hospitals have demonstrated in accepting this challenge. The skills and expertise that each partner brings enriches the body of knowledge for patient safety, not just for APPS, but for all WHO Member States"
>
> Sir Liam Donaldson, WHO Envoy for Patient Safety

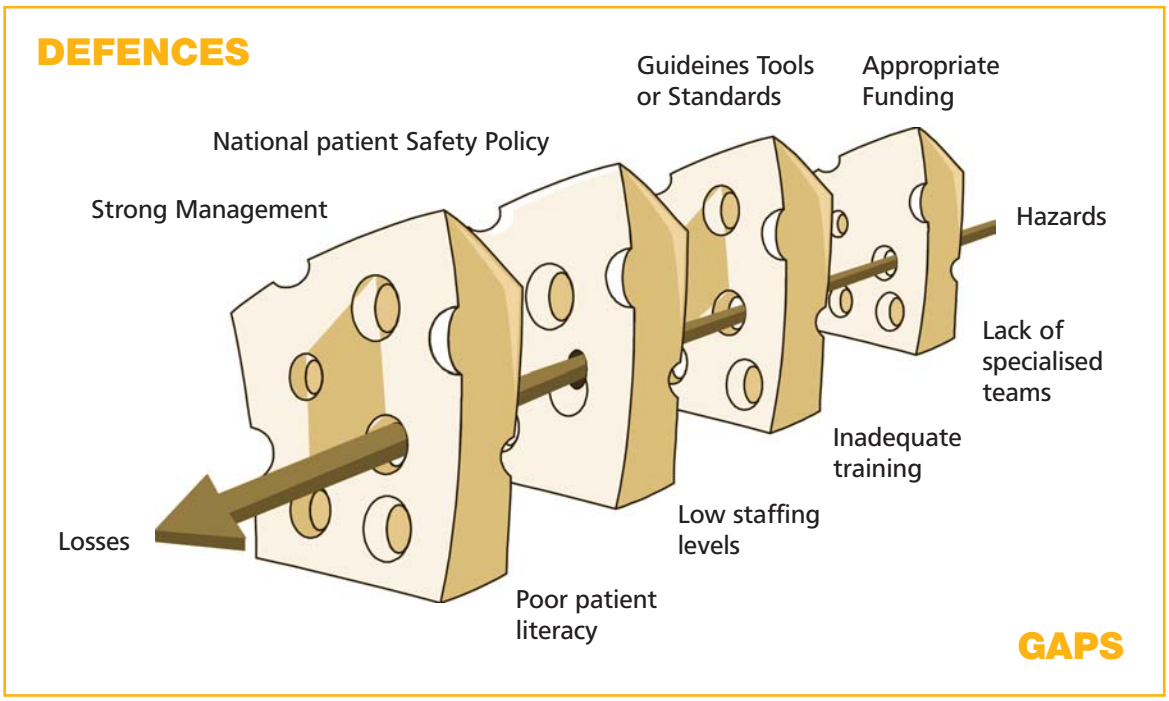
Introduction

Preventable disability and death from health care is a serious global public health issue.

Data on the magnitude of harm and death in developing and transitional countries as a direct result of unsafe health-care systems is limited, but the evidence strongly suggests inequitable access to safe, effective treatment. The numbers affected run into the tens of millions.
In a recent study of hospitals in Eastern Mediterranean and African countries, unsafe care affected nearly 1 in every 10 patients.
The majority of this harm was preventable.
This is a serious public health problem, placing a high economic burden on limited health resources, and having major implications for health policy and planning.

To use Professor Reason's 'Swiss Cheese' analogy, in many hospitals in Africa there are multiple gaps stacked one on top of the other, with zero or weak defenses in place. The possibility of medical error and patient harm is therefore a constant threat that requires action now, to save lives.

In a region facing challenges to provide basic health services to the most vulnerable communities and meet the targets set out in the Millennium Development Goals, safety and quality are public health issues that can appear an additional challenge. However, it also poses an opportunity as an entry point for action to strengthen health systems, avoiding the additional burden of unsafe care and ultimately impacting positively on population health.



Health-care systems in the African Region that are unable to provide safe, high quality and effective service delivery seriously jeopardize the ability of individual hospitals to successfully treat diseases such as HIV/AIDS, TB and malaria and can contribute to harm and death rather than successful outcomes for patients. Indeed, patient safety has an impact on health-seeking behaviour and is a particular concern in relation to the health status of pregnant women and newborns.

The challenges for safer patient care in Africa are numerous and serious, calling for global action to ensure that all concerned players contribute to the best of their ability.

All health-care professionals, institutions and national governments have obligations to provide safe, quality health-care services and to avoid unintentional harm to patients.

Uniting for Action on Patient Safety

The global patient safety movement has grown considerably over the last decade. It received significant impetus in Resolution WHA55.18 in 2002 and the subsequent establishment of the WHO Patient Safety Programme in 2004. WHO Patient Safety aims to coordinate, facilitate and accelerate patient safety improvements around the world. It has a strategic focus on global leadership for patient safety.

African Partnerships for Patient Safety (APPS) is helping Member States across the African Region coordinate their efforts to protect public health by implementing strategies to reduce harm to people receiving health care. African Regional Technical Paper AFR/RC58/8 highlighted that every patient has the right to be treated using the safest technology available in health facilities and freedom from unnecessary or potential harm associated with health care. The Paper drew attention to problems faced by many health-care systems across the African Region and proposed a series of actions for improving patient safety. APPS is concerned with stimulating that action to result in quality and safety improvements, that can be rapidly scaled up, building on a solid foundation of partnership working between Europe and Africa.

APPS responds to the political commitment for action on patient safety expressed during the Regional Committee Meeting in 2008.

APPS provides a framework for action on patient safety that spans the components of a safe health-care system under the umbrella of 12 action areas. The aim is for a simple, achievable and joined-up approach. Partners decide locally on priorities based on the realities and capabilities on the ground. APPS is leading the way on patient safety improvement across the African Region through engaging in partnerships for joint action.

The APPS framework and tools for improvement are being disseminated across and beyond partnership hospitals to provide access to the necessary knowledge that can be translated into simple actions to save lives. Resource boxes at the end of each section throughout this report highlight key tools and how they can be accessed.

APPS at a glance

Vision	Our vision is for safe health care in every country of Africa through sustainable partnerships
Mission	To catalyze improvements in patient safety through the use of partnerships and to facilitate the spread of patient safety improvements across & between countries.
Objectives	1. To catalyse sustainable **improvements** in the safety of health care 2. To build hospital-to-hospital **partnerships** that support patient safety improvement 3. To facilitate the **spread** of patient safety improvements across and between countries.
Hospital Partnerships	14 Hospital-to-Hospital Partnerships: • 8 England to Africa – Ethiopia, Ghana, Malawi, Mozambique, Rwanda, United Republic of Tanzania, Uganda and Zambia • 3 Switzerland to Africa – Cameroon, Mali and Senegal • 3 France to Africa – Burundi, Cote d'Ivoire and Niger

Key components

12 Patient Safety Action Areas

Health System Strengthening

- Patient safety and health systems and services development
- National patient safety policy
- Patient safety surveillance and research
- Knowledge and learning in patient safety

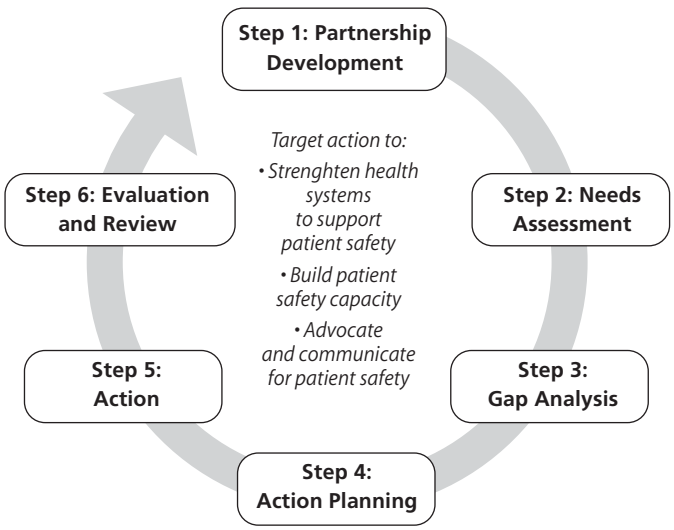
Capacity Building

- Health care-associated infections
- Health-care worker protection
- Health-care waste management
- Safe surgical care
- Medication safety

Advocacy and Resource Mobilization

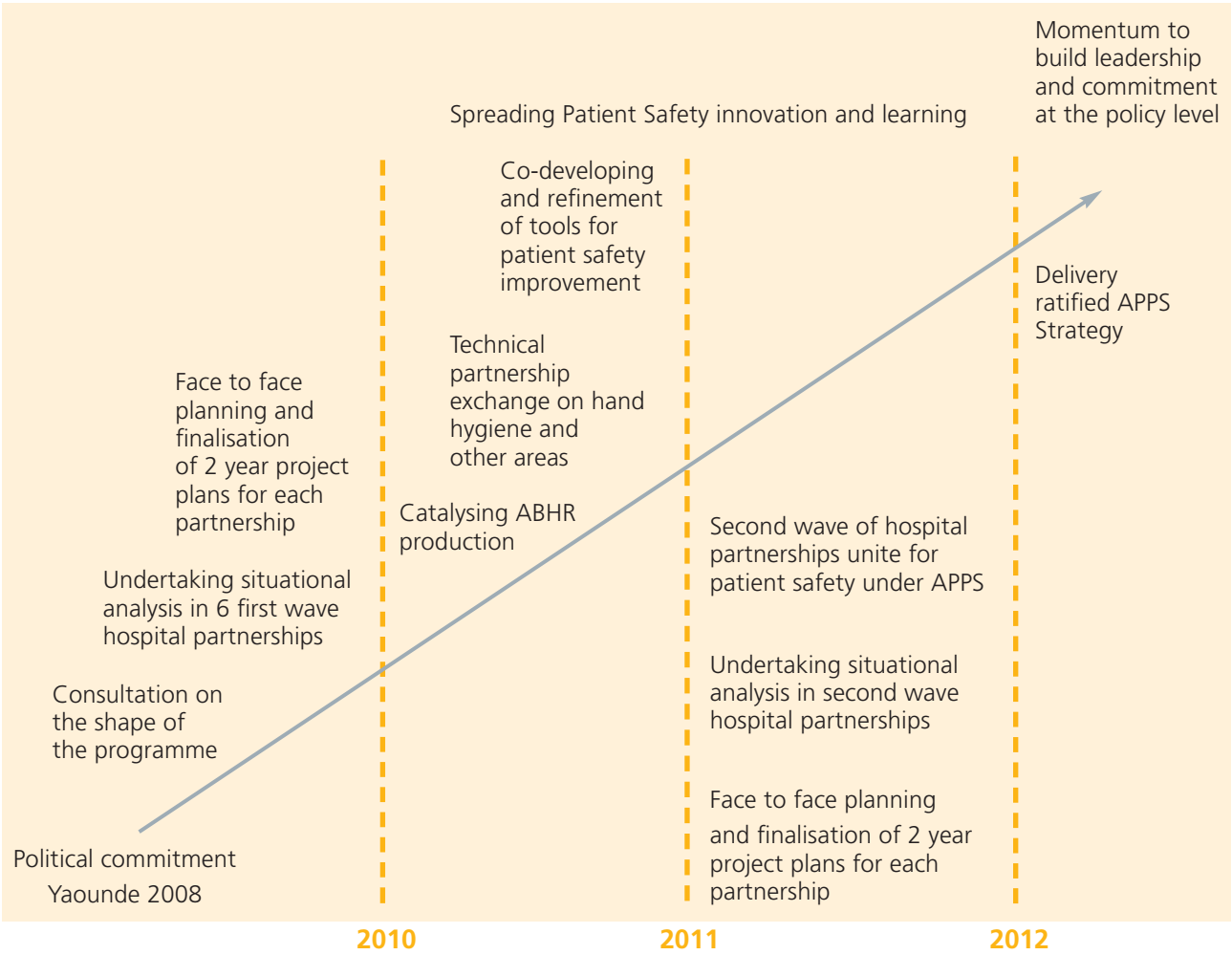
- Patient safety awareness raising
- Patient safety partnerships
- Patient safety funding

6 Step Cycle



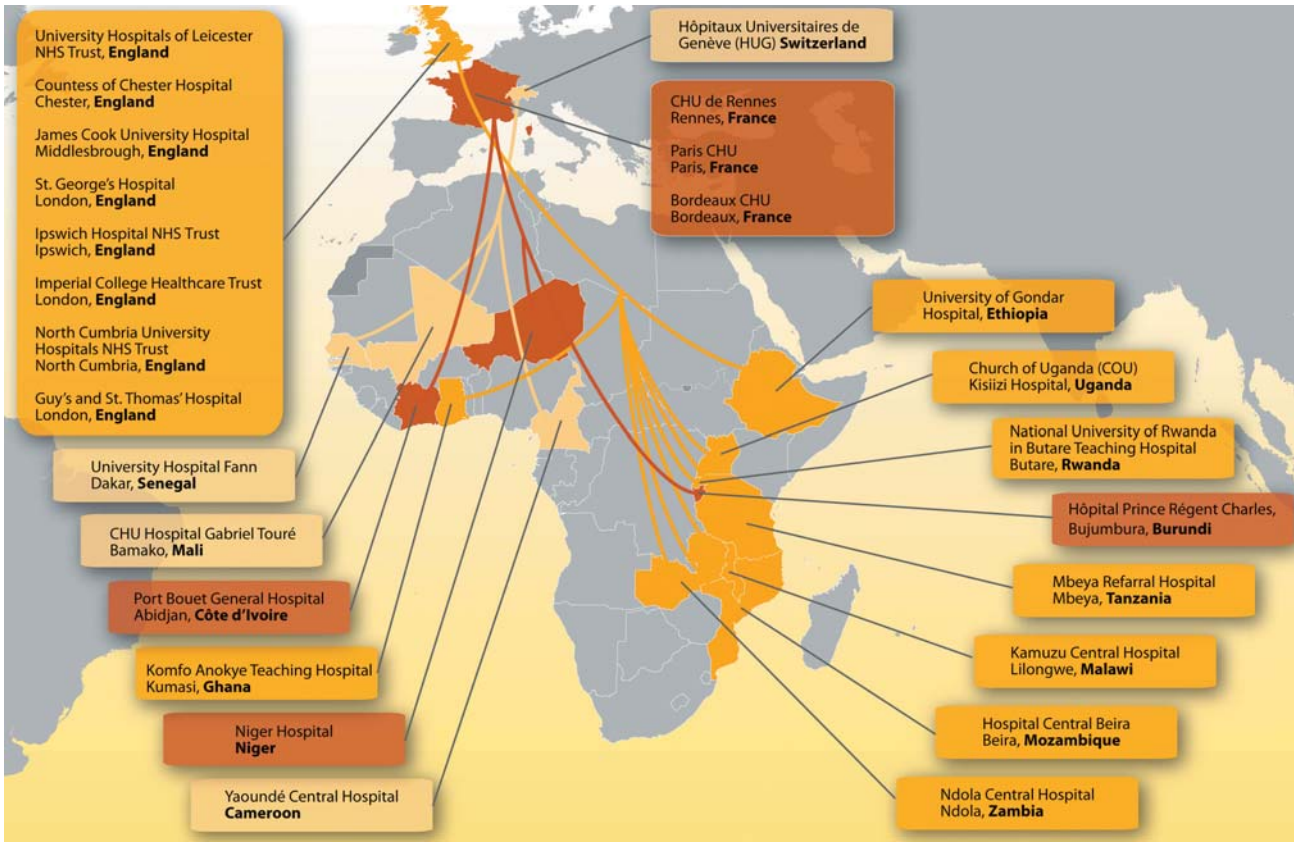
Partners work together to establish the patient safety baseline in their respective hospital using a patient safety situational analysis tool. Results of the analysis are examined to identify gaps which might contribute to patient harm and priorities for action agreed. An action plan is developed with the involvement of both partner hospitals, and action is taken to address the patient safety gaps. A review and evaluation cycle is built in.

APPS Programme Development



This report outlines the action to address these important issues and challenges. It acknowledges the tireless work that goes on every day by individuals committed to improving the safety of health care in Africa, both those working as part of and those working outside of the APPS programme. Throughout the following pages, we chart where progress has been made, but focus also on areas in which progress has been slow. The report, therefore, sets the stage for the next phase of work as we move beyond rapid implementation of available tools towards addressing the urgent need for renewed political commitment and will. This 'momentum report' provides a snapshot of the programme in 2012 and will be followed by similar documents annually. Additional technical reports will be developed during 2012, providing further details on partnership experiences.

APPS partnership hospitals - 2012



Partnership: uniting for safer health care

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 'partnership'.

The APPS network has refined and led global thinking in the area of partnership development, particularly in relation to hospital-to-hospital partnerships. This is now being used by partnership-focused organizations across the world, including partnerships outside the field of patient safety.

In order to ensure a strong, effective, sustainable working model APPS has:

- Conducted an in-depth analysis of the literature to co-develop an APPS definition of partnership.
- Engaged with first wave APPS partnerships to co-define a set of seven partnership principles on which hospital-to-hospital partnership working is based.
- Built a method for measuring partnership strength and evaluating effective partnership working.
- Utilized a partnership-based approach to patient safety improvement and spread.
- Captured early learning on partnership strength to inform future work and the global knowledge pool in this area.

APPS has worked closely with partnership-focused organizations such as THET in the UK and "Ensemble pour une Solidarité Thérapeutique Hospitalière En Réseau" (ESTHER) in France. In 2011, the collaboration with ESTHER allowed three patient safety partnerships to be established between hospitals in France and hospitals in Francophone African countries – Burundi, Cote d'Ivoire and Niger. This allowed continued programmatic linguistic balance, highlighted as critical in initial consultations in the African Region.

Vision, Ownership, Trust, Sharing, Transparency, Commitment, Respect

> "APPS has led global thinking on how partnerships can be defined, providing a much needed compass for hospital partnership work. The APPS partnership definition was at the core of our deliberations when awarding grants in the early stages of the Health Partnership Scheme, a flagship DFID-funded programme which is managed by THET."
>
> Andrew Jones, Head of Partnerships, THET

APPS partnership activities have formed the basis of patient safety improvement and spread throughout the programme. These are summarized below:

- **14** hospital patient safety partnerships created involving 14 African and 3 European countries
- **28** patient safety teams established in partnership hospitals in Africa and Europe
- **6** multi-country patient safety partnership workshops hosted
- **20** reciprocal partnership visits focused on specific patient safety technical areas
- **8** partnership-based patient safety webinars delivered
- **8** national policy dialogues on patient safety catalyzed by APPS partnerships

The partnership-based approach has worked very effectively in some cases; hard lessons have been learned in others.

Early programme experiences highlight key learning in building strong partnerships, synthesized in the APPS Compendium of Experience. Broad learning areas include the crucial importance of sustained engagement of executive decision-makers focused on accrued benefits for participating institutions; agreement on core partnership principles at the onset of activities to form a "compass" for partnership working; regular partnership communication to maintain improvement momentum; and a keen awareness of divergent cultural contexts.

At the more operational level, it has been clear that reciprocal partnership visits can provide an engine for change. However, such visits need to be carefully planned with clear and specific objectives, to be successful. The majority of the improvement work occurs between visits. However, partnership visits provide a fulcrum for improvement activity. At the individual level, the partnership can harness the power of individual passion to drive improvement. The human interactions between passionate individuals can create a strong synergistic effect. Partnership work benefits hugely from recognizing this as a basic ingredient.

Partners from either arm of the partnership can enhance partnership effectiveness through exchanging ideas with other partnerships (on their geographical arm of the partnership). In particular, the African arm of each partnership can benefit from ideas and solutions emanating from Africa for Africa.

Benefits can accrue to both arms of the partnership. The nature of these benefits is different for each arm, given the nature of "bidirectional learning" and can often be hidden at first, especially for resource-richer partners. Multiple forms of knowledge exist and learning can flow in both directions.

The one over-riding finding: hospital-to-hospital partnerships can stimulate change but the approach requires continued nurturing and energy from both within and beyond the partnership. Partnership-based approaches to health systems improvement is increasingly recognized as a potentially effective means of stimulating and sustaining change at the frontline, both for WHO and beyond.

APPS Resource Box

APPS resources focused on partnership strength:

- Definition of Partnership
- Principles of Partnership
- Compendium of Experience – Partnership Strength

www.who.int/patientsafety/implementation/apps

Improvement: action for safer health care

Safety action by partnerships – health care-associated infection

During the last two years, the six first wave partnerships have taken systematic action to address the gaps and weaknesses in the state of patient safety in African health-care settings. Tremendous progress has been made to strengthen the quality and safety building blocks in each hospital.

Frameworks and resources:	To address the universal and immediate weaknesses associated with infrastructure and design that make it impossible for health-care workers to do the right thing reliably (i.e. perform hand hygiene at the point of care), each of the 6 early implementers have worked collaboratively to secure production and distribution of a low-cost, life-saving hand sanitizer. This system change has contributed to making it easier to implement the WHO Guidelines on Hand Hygiene in Health Care.
Culture and governance:	The partnerships are working together to strengthen infection prevention and control knowledge and skills on strategic leadership. As a direct result of participating in APPS, those African partner hospitals having no staff previously working on IPC have now secured a named lead for driving activity. Infection prevention and control in the UK has a high political profile and has undergone significant investment in recent years. By sharing information, and supporting training and development with colleagues in the African partnership hospitals, the role of infection prevention and control is being strengthened.
Processes of care:	The absence of policies and guidelines at both national and hospital level was acknowledged as a weakness in patient safety and infection prevention in the African Region. Since the initiation of APPS, the hospitals and countries participating in the programme are starting to address this by co-developing policies and guidelines on patient safety, infection prevention and control, health-care worker protection, surgical safety, medication safety and waste management.

Hand Hygiene training session, University Hospital Fann, Dakar, Senegal

Case study – clean hands for health

Why hand hygiene?

Improving hand hygiene both within health care and in rural communities, has the potential to halt the spread of harmful germs that can be life-threatening. Tremendous progress has been made on hand hygiene in the community in many countries of Africa. However, although there has been significant investment in behaviour change programmes outside health care, to improve hand hygiene and access to soap and water, hospitals have until recently been largely neglected.

APPS as a trigger for unified action

APPS is uniting action on hand hygiene across both sectors and this is currently being demonstrated in the Malawi-Middlesbrough partnership where relationships are being forged between the hospital infection prevention and control team and local community-based organizations already implementing hand hygiene.

Strengthening the system and building capacity

Kamuzu Central Hospital in Lilongwe has been working closely with colleagues at James Cook University Hospital, UK to address the lack of infrastructure to support hand hygiene. Kamuzu Central hospital is now producing over 700 bottles of the life-saving hand sanitizer each month, and has worked closely with its UK partner to source bottles not available locally.

Key challenges and how they are being addressed

Affordability and access to handrub is a key challenge at Kamuzu, and this is common in other African partner hospitals. To address this, local staff have been identified and trained in the production of the WHO formulation alcohol-based handrub. This brings its own challenges related to the procurement and delivery of bottles, and access to the raw materials to make the handrub. The hospital has developed the "PUSH System" for distribution of the handrub to nurses, clinicians, doctors, including at the point of care within hospital wards.

How WHO is supporting action on hand hygiene

WHO, through APPS, is providing a vehicle to support action on hand hygiene in Africa. The partnership programme not only promotes the Save Lives: Clean Your Hands global campaign, but raises awareness of the multiple tools that assist in implementation of a multimodal behaviour change strategy in health care. Action on hand hygiene is at the heart of APPS. In addition, APPS has developed a framework for the production and procurement of handrub and is part of an industry collaborative designed to increase access to commercially available hand hygiene products in developing countries. The APPS Resource Map is a one-stop-shop for all the freely accessible improvement tools to help hospitals act on clean hands.

Case study – engaging the local community

Why community engagement?
Community engagement in health development is now recognized as a 'critical dimension' of health systems. APPS appreciates this critical role and works to promote community engagement in the design, implementation and monitoring of patient safety interventions. Community engagement is a key component of one of the 12 action areas.

APPS as a trigger for action
APPS triggers action on community engagement at the start of partnership activity. In the Chester-Kisiizi (Uganda) partnership, district health officers are supporting the ethos of the programme and have agreed to an audit of health-care facilities' infrastructure (soaps, sinks and handrub). The initial focus is on level 4 facilities with a plan to cascade to lower level health facilities as part of spread activity.

Strengthening existing hospital-community linkages
The baseline situational analysis provides a map of hospital-community linkages. At every stage of implementation, partners consider how to engage with the local community to strengthen patient safety, building on these existing linkages. In the Chester-Kisiizi (Uganda) partnership, partnership visits have allowed a range of activities to take place, including sessions on maternity wards with mothers and carers on the safety of care; engagement with local community actors, singers and dancers to create an advocacy DVD to coincide with the launch of APPS; a full session with 500 children in the local government primary school on hand hygiene; and sessions on hand hygiene with 50 older adults at the local health centre.

How WHO is supporting action on community engagement
APPS has co-developed a community engagement approach for sustainable action to work with the local community on patient safety. The WHO Patients for Patient Safety Programme is helping to build an African Network of Patient Champions across the region, to help advocate for safer health care.
The APPS Resource Map is a one-stop-shop for all the freely accessible improvement tools to help hospitals act on engaging the local community.

Case study – safer surgery

Why safe surgery?
At least half a million deaths per year would be prevented with effective implementation of the WHO Surgical Safety Checklist worldwide. The checklist was pilot-tested in developed and developing countries and the results suggest that the use of the WHO Checklist significantly reduces surgical morbidity and mortality.

APPS as a trigger for action
APPS acts as a vehicle for intensifying action on surgical safety and encouraging implementation of the WHO Surgical Safety Checklist within a multi-pronged programme of patient safety improvement.

Strengthening the system and building capacity
The Leicester-Gondar (Ethiopia) partnership has undertaken considerable activity to implement the WHO Checklist in the operating theatres at Gondar Hospital. There has been a constant focus on joint learning and participation in APPS is also helping to build research capacity, resulting in a multi country research project to look at Checklist implementation in a partnership context. Use of the Checklist has risen from 17% to 53%, with a 100% application in major emergency procedures. Multi professional groups are now trained in its implementation.

Key challenges and how they are being addressed
Intensive action is taking place to improve communication in the theatre setting, including encouraging participation from all levels of staff, as well as strengthening leadership and management support and buy in.

How WHO is supporting action on safer surgery
WHO Patient Safety has produced a range of tools to assist hospitals in implementing the Surgical Safety Checklist, including training videos and booklets.
The APPS Resource Map is a one-stop-shop for all the freely accessible improvement tools to help hospitals act on safer surgery.

APPS is working to build defenses against the occurrence of patient harm. Each successful patient safety improvement leads to another hole in the "Swiss cheese" being blocked and patient safety incident avoided. The programme is creating these defenses through a variety of improvement activities – effective training programmes, safer microbiology laboratories, creation of specialized patient safety teams and engagement with patients, families and the community – to name but a few.

The pioneering work of individuals and hospitals across the African region is turning gaps into positive action, to strengthen health systems.

"I hope we will be able to replicate some of the fantastic success we have heard about in the first wave partnerships, within our own partnership."

Participant during Second Wave Implementation Workshop, Nov 2011

Using the WHO Surgical Safety Checklist in COU Kisiizi Hospital, Uganda

Tool Box

APPS resources focused on patient safety improvement:

- APPS First Steps
- APPS Situational Analysis
- APPS Resource Map

www.who.int/patientsafety/implementation/apps

Table 1: Summary of First Wave Partnerships - progress across action areas

Improvement area	African Country (European partner)	Impact/actions since the start of the partnership
Health care-associated infections	Cameroon (Switzerland)	A multidisciplinary infection prevention and control care- team is now in place with representation on relevant hospital wide committees.
	Ethiopia (England)	A multidisciplinary infection prevention and control team and committee is now in place. Policies have been developed on infection prevention & control. Reliable supply of alcohol based handrub available in all wards.
	Malawi (England)	The existing infection prevention and control team has been strengthened. A reliable supply of hospital-produced alcohol based handrub is available in all wards.
	Mali (Switzerland)	An infection prevention practitioner now leads and coordinates the infection prevention and control programme. Alcohol based handrub is being produced at the hospital.
	Senegal (Switzerland)	A full-time infection prevention and control team is in place and is represented on relevant hospital-wide bodies and committees. Alcohol based handrub is being produced. Policy development on antibiotic use.
	Uganda (England)	A full-time professional is leading a newly established infection prevention and control committee. Hospital policies have been developed. A reliable supply of alcohol based handrub is available in all wards. Hospital antibiotic prophylaxis policy developed.
Safe surgical care	Ethiopia (England)	WHO Surgical Safety Checklist has been implemented and its application audited with regular feedback & multidisciplinary learning sessions.
	Mali (Switzerland)	Hospital safe surgery team formed and trained in checklist utilization. WHO Surgical Safety Checklist adapted for local implementation.
	Uganda (England)	WHO Surgical Safety Checklist has been locally adapted, implemented and its application audited to inform continuous improvement.
	Senegal (Switzerland)	Safe surgery team formed and trained in checklist utilization.
Health-care waste management	Ethiopia (England)	Hospital waste management systems strengthened. National policies have been developed on health-care waste management.
	Malawi (England)	Hospital waste management systems strengthened. National policies have been developed on health-care waste management.
	Senegal (Switzerland)	Hospital policies have been developed on health-care waste management.
	Uganda (England)	Hospital system strengthened, including an overhaul of protocols, laundry management and new incinerator. National policies have been developed on health-care waste management.
Health-care worker protection	Cameroon (Switzerland)	Staff hepatitis B vaccination status examined and staff educated on safe practices.
	Ethiopia (England)	Staff educated on occupational health. National policies developed on health-care worker protection.
	Malawi (England)	Workers trained on health-care worker protection.

Patient safety surveillance and research	Ethiopia (England)	A research strategy has been developed on patient safety and research studies initiated in collaboration with partners.
	Malawi (England)	Existing surveillance systems strengthened with a special focus on the maternity ward. Data is now collected and collated across the hospital and the laboratory is clearly linked with the system.
Medication safety	Uganda (England)	Drug and therapeutics committee established. Computer based medicine management system developed alongside dispensing reforms. Training programme on medication safety.
Knowledge and learning in patient safety	Cameroon (Switzerland)	A continued education programme has been initiated for nursing and other disciplines on patient safety.
	Uganda (England)	Training modules for national patient safety training activities have been developed and approved by the Ministry of Health.

The first wave of APPS partnership hospitals are leading the challenge but a second wave of hospitals have joined the effort and are keen to learn from experiences so they too can implement improvement activity, embedding patient safety within health services locally, nationally and regionally. Based on rigorous feedback provided by each of the initial six partnerships, the following learning points have been drawn out as critical.

Table 2 – Patient Safety Improvement - Emerging Learning from APPS Implementation

Learning Area	Learning Point
Simplicity vs. Complexity	Patient safety interventions need to be simplified as far as possible. Effective sustainable implementation requires front-line African realities to shape interventions, while keeping to evidencebased practices – this is a difficult balance.
Patient Safety Teams	Early formation of a patient safety team is critical on either arm of the partnership to drive change. With time, specific teams need to be formed for specific patient safety action areas.
Action Areas	The number of patient safety action areas tackled in the initial phase should be focused – it is more important to have fewer action areas but more focused action.
Systematic Process	The 6-step patient safety improvement cycle outlined by APPS should form the basis of patient safety improvement. The 6-step cycle should be communicated widely within the hospital to enhance understanding of the importance of step-wise incremental change.
Measurement	It is critical to measure progress over time. Overall patient safety status can be periodically assessed through repeat patient safety situational analysis. More granular information on the status of specific patient safety areas can be gained through periodic audits.
Patient Safety vs. Systems	Patient safety cannot be seen in isolation of quality improvement or improving the entire health facility. Patient safety should be communicated to audiences as a tangible entry point to improve the health facility and the system that it is a part of.
Knowledge and Learning	Patient safety interventions need to be implemented within an environment that is simultaneously focused on patient safety knowledge and learning. An intervention can be perceived as "disjointed" unless health professionals understand the nature of patient safety as a whole.
Basic Infrastructure	Attention is required to basic infrastructure issues at the same time as patient safety interventions. Partnership working can form a channel for action in relation to basic equipment necessary for patient safety advancement.

Spread: catalyzing systems for safer health care

APPS places emphasis on systematic planning for patient safety spread from the onset of partnership activities. But what is spread? APPS considers it the process of disseminating methods of practice between institutions and individuals at the same or different hierarchical levels. It is a deliberate process to increase the impact of innovative health service improvements, to benefit a wider population and change policy and system development in a sustainable way. The focus is on ensuring patient safety learning within partnerships does not sit in isolation but effectively accelerates national and regional patient safety action too.

The APPS first wave co-developed and refined programmatic thinking in patient safety spread in combination with global thought leadership. This led to the development of a novel "APPS Spread Pack" which can now be used across the African Region for patient safety action.

Patient safety advocacy days in all six first wave countries convened key stakeholders to amplify patient safety at national level. Ministries of health and WHO Country Offices were involved in every case, sometimes in unison across countries on the same day. Each of the six first wave APPS partnerships has taken a different approach to patient safety spread beyond this.

Horizontal, vertical & spontaneous patient safety spread is possible in Africa.

Table 3: Patient Safety Spread – Six First Wave APPS Countries

Country	Patient Safety Spread Approach
Cameroon	Focused sensitization of neighboring hospitals in Yaoundé on patient safety through shared mechanisms for knowledge and learning.
Ethiopia	Coordinated national action on patient safety using both the convening power of the Federal Ministry of Health as well as peer-to-peer learning mechanisms at University Hospitals across the country.
Malawi	Engagement with civil society organizations centered on health equity alongside high level decision-makers within the Ministry of Health.
Mali	South-south exchange across the partnerships as well as intimate involvement with the national policy and strategy unit in development of a national health policy and strategy on patient safety.
Senegal	Close links with a national organization focused on patient safety improvement have allowed APPS activities to strengthen and be strengthened by national momentum, as well as links to regional work in Francophone Africa.
Uganda	APPS improvement activities recognized at the highest national level and emphasis placed on national replication. APPS focal point received Presidential Honour for hospital improvement efforts through the partnership.

Each partnership provides a unique picture of how patient safety improvement activities within a hospital-to-hospital partnership can influence the patient safety "canvas" within a country. For example, APPS activities in Ethiopia resulted in coordinated national spread of patient safety improvement through the Ethiopian Ministry of Health. APPS connected organizations focused on health system quality. University Hospital heads were invited alongside key systems stakeholders to a Ministry of Health forum where patient safety problems and proposed solutions were presented. Gondar-Leicester partnership experience in frontline improvement stimulated thinking. The WHO Country Office was galvanized into a team to provide patient safety technical cooperation. Subsequently, four hospitals were designated by the Ethiopian Ministry of Health for a national patient safety project which led to national regulations, a training manual, a national protocol reference book and cascade training in all regions of Ethiopia. A network of patient safety improvers now exists across Ethiopia.

In less than two years, strategic spread activities have seen patient safety develop from an obscure concept to become a pillar of health quality improvement. It is now an integrated part of the national 5-year priorities to improve health in Ethiopia. In addition, patient safety has catalysed harmonization and collaboration of NGO activities, providing a solid platform for future sustainable change.

Programme experience on spread, however, has been varied, with inspiring successes as well as opportunities for learning. Early programme experiences highlight nine key learning areas, outlined in Table 4, synthesized in the APPS Compendium of Experience. The one over-riding finding – successful spread needs planning from the onset as well as an ability to seize opportunities.

> "We have faced many challenges together but achieved gains in a short time – in fact the patient safety approach at Gondar has been used by the Ethiopian Ministry of Health in hospitals across the country."
>
> Dr Gashaw Getahun, APPS Focal Point Gondar Hospital

Table 4: Patient Safety Spread – Emerging Learning from APPS Implementation

Learning Area	Learning Point
Spreading APPS Approach	The spread message needs to be clear. The step-wise systematic APPS approach to improvement and specific patient safety interventions can be the message focus.
Decision Maker Networking	Early mapping of national decision makers (and decision-making processes) is critical. Opinion leaders need periodic engagement through WHO Country Offices.
Hospital Partnership – APPS Programme Interactions	Partnerships need to work closely with the APPS Core team to define a "tailored" approach to spread. Partnership stories can provide a powerful catalyst for spread.
National Launches	A national event hosted by the partnership is a powerful spread stimulus. Such events can make the case for its replication in other hospitals.
National NGOs	A range of national NGOs can be used to support patient safety spread. Early engagement can lead to significant resources for national patient safety activities.
Media Power	Local and national media can be used to make the case for patient safety. Interviews by local radio can spread patient safety activities to the local population.
Community Engagement	Creation of strong links between APPS hospitals and the community can strengthen the implementation and sustainability of patient safety improvement.
Networking with Hospitals	Neighbouring hospitals can be driven to match the steps taken in APPS partnerships. National hospital forums can be effectively used for spread.
Regional and International Dissemination	Conference presentations and publications can effectively spread the APPS approach regionally and internationally through the global knowledge pool.

The second wave of APPS partnerships has been applying this learning to their early planning and implementation. Already, all ministries of health have been systematically sensitized to patient safety both in-country and in high profile events such as the World Health Assembly – an air of expectation has been created. Partnership experiences from Ghana, Mozambique, Rwanda, Tanzania and Zambia are now eagerly awaited by these ministries of health for application in national systems.

APPS also focuses on regional spread as part of its strategy for 2012-2015.
Through participation in key regional and national events, the APPS approach is becoming increasingly recognized. For example, a national stakeholder meeting in Uganda organized by the University Research Council provided a unique platform to catalyze national action. The sequential participation at the annual conference of the Infection Control Africa Network (ICAN) in South Africa and Namibia allowed partnership experiences to be shared with patient safety leaders across Africa.

WHO architecture has allowed patient safety "cascading". Inter-country Support Teams (ISTs) have been at the heart of this. For example, in February 2012, engagement with 32 staff at the IST in Ouagadougou, Burkina Faso (which provides support to 17 countries in Western Africa) allowed the APPS approach to be shared with staff responsible for stimulating patient safety improvement in national ministries across Western Africa.

National governments outside countries that are directly involved with APPS are uniting with APPS for action.

For example, Burkina Faso National Director General of Hospital Services from the Ministry of Health and members of his staff were recently engaged by APPS. This intervention was timely; Burkina Faso is in the process of drafting health-care quality policy and revising hospital administration guidelines.

APPS is getting noticed across the African Region. Articles and resolutions have made reference to the APPS approach to improvement. Articles and conference papers have been published on multiple programme dimensions to ensure that learning flows within and beyond APPS. Spread experiences are just starting to accumulate. The focus for the next programme phase will be to ensure that programmatic learning can inform future partnership activity.

Local production of alcohol-based handrub, University Hospital of Gondar, Ethiopia

Case study – developing national patient safety policy

Why national policy?
High disease burden alongside lack of infrastructure, access and funds made available for health care makes national policy on patient safety critical for significant improvement in quality of health care. Such policies assist health-care stakeholders to understand what is expected of them and how this is to be monitored.

APPS as a trigger for unified action
The APPS Mali-HUG partnership has hosted training workshops for others in the local production of alcohol based handrub and RAFT (an electronic Communication platform to allow the spread of patient safety knowledge and awareness). This has been alongside activities focused on local improvement such as in safe surgery.

Strengthening the system and building capacity
As a result of this improvement activity led by the partnership, Gabriel Touré Hospital has engaged with the Mali Ministry of Health national policy and strategy unit, international NGOs and the association of community organizations to develop a national health policy and strategy on patient safety.

Key challenges and how they are being addressed
The fact that patient safety is a relatively new concept presents significant challenges in building a strong case for the inclusion of patient safety in the national policy agenda when planning for health systems strengthening is taking place.
Within Mali, the APPS team at Gabriel Touré Hospital is now involved in ongoing consultation on patient safety during the health policy planning process.
How WHO is supporting action on hand hygiene
WHO, through APPS, is providing a vehicle to support action on the development of national patient safety through facilitating the access to WHO Patient Safety guidelines, best practices and recommendations documents, and is participating with AFRO in the creation of a tool for the purpose of developing national patient safety policy and health plan strategy.
The APPS Resource Map is a one-stop-shop for all the freely accessible improvement tools to help develop national policy on patient safety.

Hand washing facilities, University Hospital Fann, Dakar, Senegal

APPS Resource Box

APPS resources focused on patient safety spread:

- APPS Spread Pack
- APPS Approach Series
- Compendium of Experience – Patient Safety Spread

www.who.int/patientsafety/implementation/apps

Harnessing Resourcefulness: the APPS model

Resources for health system improvement – financial and human – are increasingly scarce. APPS has conceptualized and implemented a novel partnership-based approach to maximize resourcefulness for patient safety improvement. The model places human interactions for empowered action at the core of improvement efforts – the power of exchanges between committed frontline professionals is emphasized. The model is gradually receiving increased attention as an innovative approach.

The World Health Assembly in 2011 emphasized the use of inter-country exchange and institutional twinning in particular as a way of facilitating future country efforts in health systems strengthening.

The table below describes how the APPS approach compares with a more traditional "vertical expert-driven" technical assistance improvement model.

Table 5: Traditional Versus APPS Model for Patient Safety Improvement

Criteria of comparison		Traditional Expert Driven	APPS
Frontline Needs		Technical support to deliver patient safety improvement in specific action area in African hospital e.g. health care-associated infection	Technical support to deliver patient safety improvement in specific action area in African hospital and securing mutual benefits to partner hospital
Human resource requirement		Human resource requirement WHO staff time for "vertical" technical assistance in selected health facilities	Front line experts from partnership hospitals through "donated" time (institutional or personal)
Implementation parameters	Frequency of interaction	Usually one-off	Continuous sustained engagement
	Nature of interaction	Response to technical request	"Human interaction" on technical areas – channel for passion
	Financial factors	Substantial costs of WHO expert engagement (plus travel costs)	Travel and subsistence costs only

The model comparison emphasizes a shift in thinking between a "top down" vertical approach to one focused on sustained "co-learning" and "co-development". Mutual benefits are emphasized. The model is in keeping with the gradual move to "flattening" global health through empowered action. At the same time, the APPS model can effectively catalyze patient safety change with efficiency built in.

Further, as consistently highlighted in the global health arena, the health worker crisis in African health systems is directly affected by health systems in high-income countries through a range of mechanisms. The partnership model highlighted by APPS can contribute to partially redressing this balance if taken to scale. APPS provides a model to deliver on patient safety improvement through global solidarity.

Tools: making action possible

APPS Tools and Resources

QUADRANT 4
Communications Series
Supports effective communication and advocacy for successful Implementation

QUADRANT 1
Partnership Planning Series
Supports steps in establishing successful partnerships

QUADRANT 3
Approach Series
Outlines the APPS approach to a series of cross-cutting themes to support patient safety activity

QUADRANT 2
Patient Safety Improvement Series
Practical Tools for Patient Safety Improvement in a hospital setting

Working with frontline health-care professionals from partnership hospitals, APPS has co-developed a series of tools to support the planning, implementation and review of patient safety improvement across the African setting. These tools now provide a mechanism to bring about change in the safety of health-care provision in hospitals across the region. Although primarily developed by and focused on the APPS partnership hospitals, the APPS tools series are available for any hospital engaged in patient safety improvement. The suites of tools available focus on different aspects of implementing patient safety improvements.

In particular, the Situational Analysis provides a framework for the baseline assessment of patient safety along with a mechanism for monitoring improvement. The APPS Patient Safety Resource Map presents a review of pertinent patient safety resources from dependable sources, including research publications, best practices, recommendations, implementation manuals and guidelines in one place. This is proving useful beyond individual hospitals to national governments, education institutions and research bodies. The Spread Pack developed by APPS provides support to ensure that best practice is disseminated and scaled up rapidly using a range of mechanisms.

National governments are using the Patient Safety Situational Analysis to evaluate patient safety in hospitals. In Ethiopia, the Situational Analysis has been used as a baseline study tool for several hospitals in the country. Zimbabwe is planning to use it in around 100 hospitals as a national baseline and monitoring tool.

"From the perspective of a UK-based partner, we have found the situational analysis to have tremendous utility in systematically identifying the state of patient safety in our partner hospital. The results have helped us jointly construct a clear plan of action for improvement and at the same time approach health system strengthening in a realistic way. The learning from the first wave partners has undoubtedly played a role in enabling us to move quickly, and we acknowledge their unique contribution to APPS."

Peter Donaldson, Medical Director, Ipswich Hospital NHS Trust

Building the momentum: moving forward faster

Weak health-care systems place an unacceptable burden on the health and economy of the 46 countries in the WHO African Region. Simple, effective tools to improve patient safety are now available, and 14 countries are taking actions on patient safety that is already beginning to demonstrate impact and effect.

This report acts as a mirror to shine a light on early programme implementation. Immense challenges still remain if patient safety is to be sustainably improved across the African Region.

However, progress is already being made in 14 countries in the African Region and the way forward for patient safety in Africa will be informed by the pioneering work of partners and stakeholders, to strengthen national capacity to implement patient safety. What is needed now is greater focus on patient safety at the policy level and the requisite leadership at the highest level to build on these foundations so that the health care of the people of the region has safety and quality at its heart.

Spreading the experiences, lessons and impact from those hospitals currently associated with APPS will result in more hospitals committing to patient safety as the core of strong health systems, more health professionals being trained and knowledgeable in patient safety improvement activity and ultimately more patients and family members avoiding unnecessary harm or death as a result of the care they receive.

Looking to the future, APPS will continue to champion the need for action on patient safety as a central part of achieving stronger, safer and more reliable health systems across the region.

> "This is not too ambitious – in fact, it's not ambitious enough. We needed to have done this yesterday."
>
> Dr Sam Zaramba,
> Chairman, WHO Executive Board 2010
> Ex-Director General of Health Services in Uganda

3
years

14
countries

Building momentum for safer health care

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