

# Evidence-informed quality standards (QS) for universal health coverage

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# The quality problem

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- Countries aspiring towards universal health coverage (UHC) often face **common challenges around quality of care**, e.g.:
    - *Three “overs”: overcrowding, over-diagnosis, over-treatment*
    - *Under-use of high quality, cost-effective interventions*
    - *Variation in quality between providers and regions*
  - Health reforms have emphasised financial over quality measurement and improvement issues

Campbell et al. (2015), Quality indicators as a tool in improving the introduction of new medicines", Basic Clin Pharmacol Toxicol., 116, 146-157

Mate et al. (2013) Improving health system quality in low- and middle-income countries that are expanding health coverage: a framework for insurance", Int J Qual Health Care, 25, 497-504.

Kieny (2015) Universal Health Coverage: What is it and how can it be measured? <http://www.who.int/medicines/areas/policy/5-D>

## Quality standards help to prioritise and quantify quality improvement

*Quality standards (QS) are a concise, prioritised set of measurable indicators, describing achievable best practice.*

1. Aim to **maximise impact** in terms of *clinical effectiveness, safety, and patient experience*
2. Focus on areas **where poor practice is common**
3. Derive from **best available evidence**, e.g. NICE, WHO, national guidance
4. Are **aligned with government/payer priorities**
5. Are **produced collaboratively** (policymakers, payers, hospital managers, clinicians, patient organisations, etc.) through a transparent, deliberative process.

## Quality Standards do *not*:

- Review or re-assess the underlying evidence base
- List *all* necessary components of acceptable care

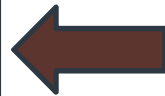


# Many different terms, but same objective

- Health technology assessment
- Clinical guidelines
- Protocols
- Clinical pathways and algorithms
- Quality Standards

**Beware:**

These terms are often used interchangeably



All linked and contributing to:

**Improving patient care and outcomes**

# Let's clarify the terminology

- **Clinical guidelines:** Provide generic recommendations in the form of statements
- **Protocols:** Build on clinical guidelines and describe practical steps to treat patient at local level
- **Clinical pathways:** Flowcharts or algorithms to support translation of clinical guidelines into clinical practice

# Key differences between UK NICE Technology Appraisals, guidelines and QS

	Technology Appraisal	Guidelines	Quality Standards (QS)
<b>Scope</b>	Focused on individual drugs, devices, diagnostics, procedures, etc.	Cover all aspects of care for a clinical condition or area	Cover high-priority aspects of care for a clinical condition or area
<b>Evidence sources</b>	Primarily: (systematic reviews of) health economic evaluations and clinical trials	Primarily: (systematic reviews of) health economic evaluations and clinical trials; incorporates published NICE Technology Appraisals	NICE guidelines

# From **evidence** to setting **standards** and improving **quality**

Clinical trials  
Health economic  
evaluations  
Systematic  
reviews

Health  
technology  
assessment  
(HTA)  
Clinical  
guidelines

Quality  
standards

## *Financial levers*

- Budget management
- Provider payment mechanisms incl. case-based payment

## *Non-financial levers*

- Medical education and professional training
- Performance management
- Communication of entitlement to patients and their families
- Clinical audit and provider benchmarking
- Provider regulation and accreditation

## Why evidence-informed quality standards for LMICs committing to Universal Health Coverage?

- Can be **developed relatively quickly** without having to create a guideline from scratch
- **Provide clear priorities** for quality improvement
- Describe what needs to be in place for best practice, thus “**closer to implementation**”
- Provide key performance indicators that can be **readily linked to audit, payment, accreditation, education**

However:

- Requires some **assumptions about relevance of source guidelines** (e.g. cost-effectiveness?), and **contextualisation**

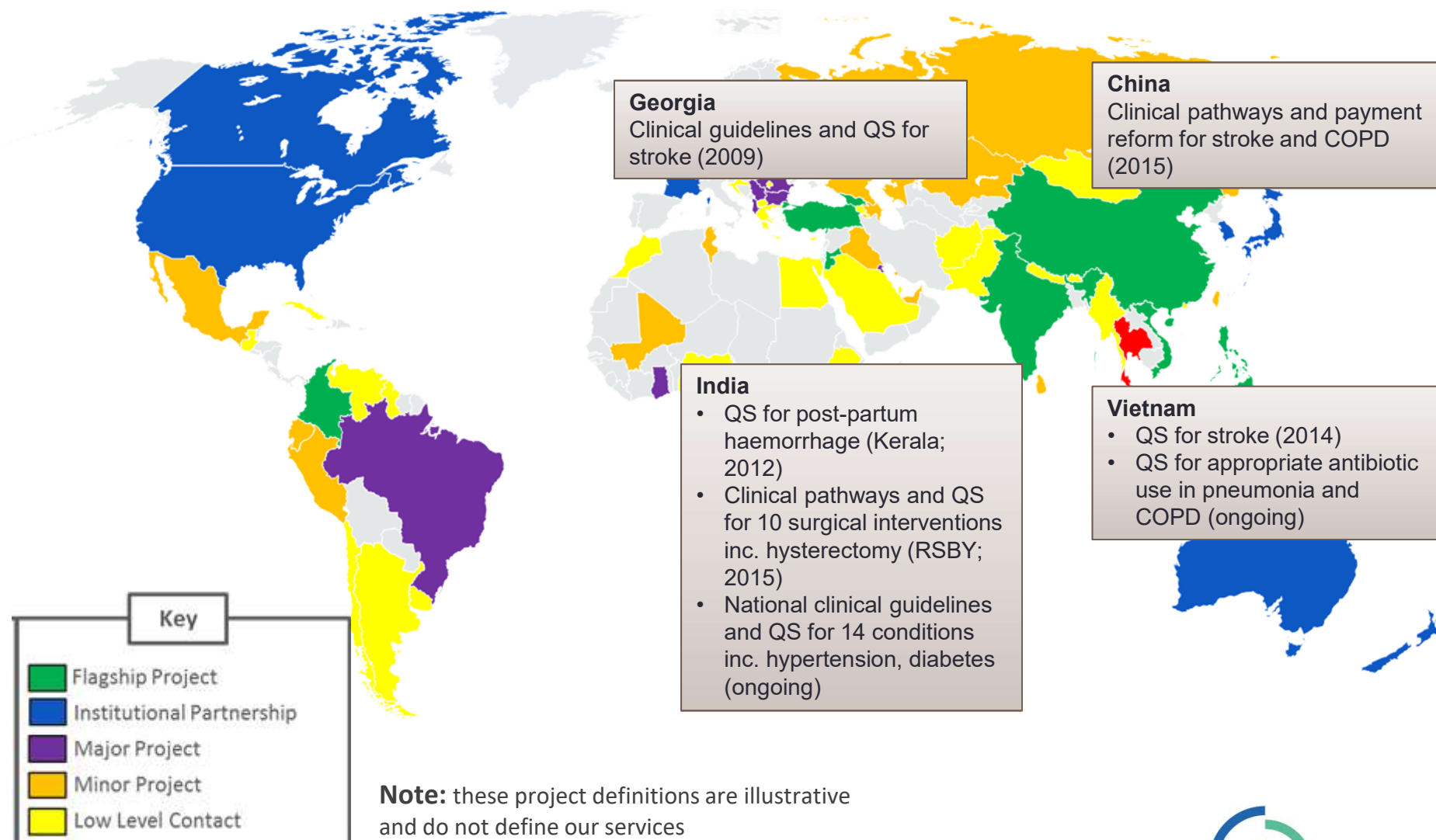
Campbell, S. M., Godman, B., Diogene, E., Furst, J., Gustafsson, L. L., MacBride-Stewart, S., Malmstrom, R. E., Pedersen, H., Selke, G., Vlahovic-Palcevski, V. & Wettermark, B. 2015, "Quality indicators as a tool in improving the introduction of new medicines", *Basic Clin Pharmacol Toxicol.*, vol. 116, no. 2, pp. 146-157.

## QS principles are relevant to *all* countries and health systems

- Scientific evidence is international
- *Local* stakeholders need to consider:
  - What are the *local* **priorities** for improvement?
  - What QS would have the most **impact** in the *local* context?
  - How can *local* health system structures and processes (including incentives) and resources **drive implementation** of QS?



## Illustrative iDSI collaborations on evidence-informed quality improvement since 2008



# CASE STUDY: QS IN VIETNAM

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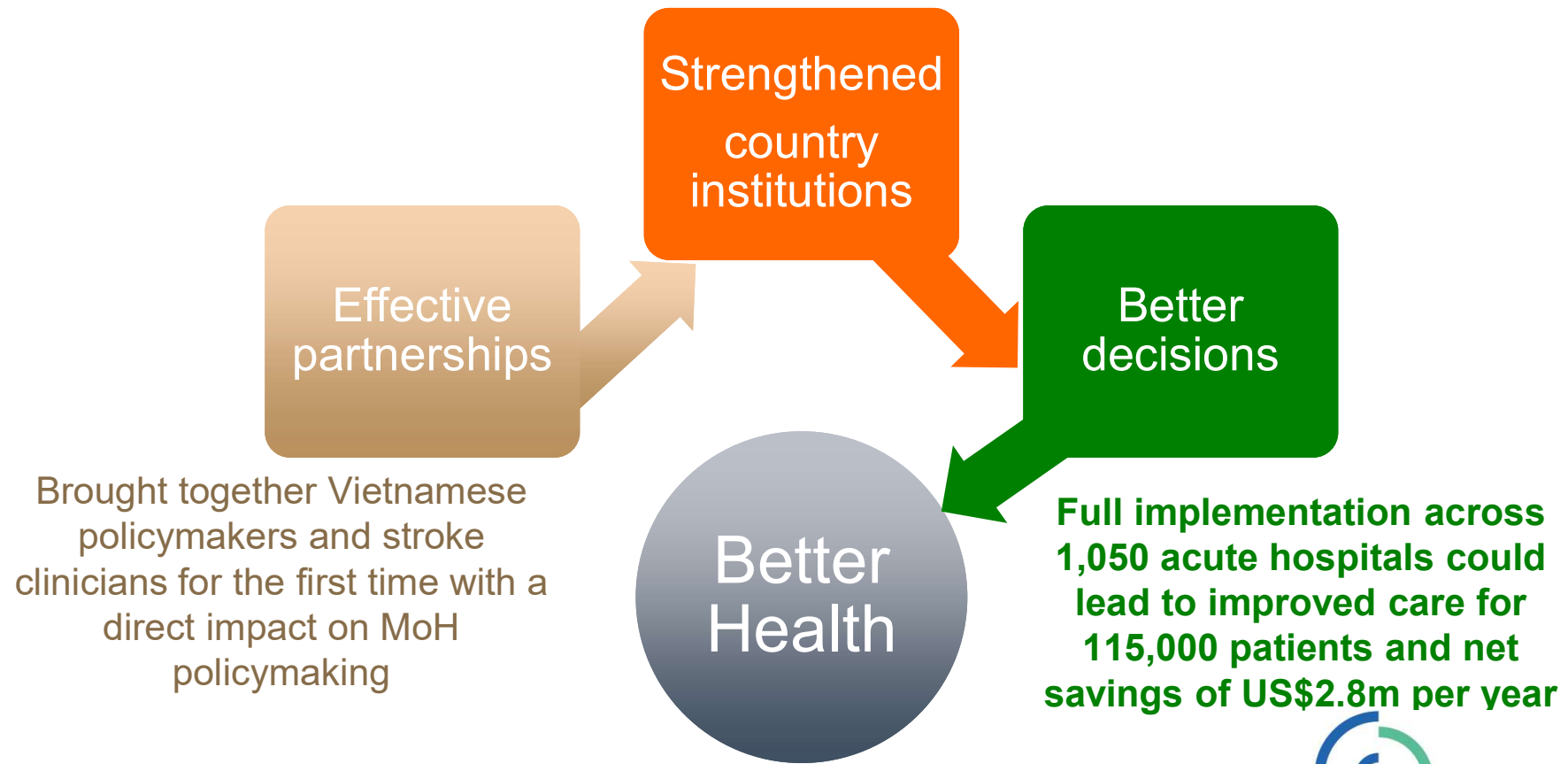
## MOH policymakers and clinicians across Vietnam engaged in 14-month deliberative process

- Selected relevant recommendations to address high-priority clinical areas
- Developed quality statements and measures, appropriate to Vietnamese context
- Final product approved by Vice Minister



# QS for Stroke has demonstrated impact at the institutional level

Implementation incorporated as a component of MOH Hospital Quality Criteria, with dedicated World Bank funding for pilot



# Challenges and learning

- Broad stakeholder buy-in, with **political and clinical champions**, is key to success
  - **Stakeholder engagement** is essential ingredient in evidence-informed policymaking (Lavis, 2016)
- Can't reform the whole health system at once – make **incremental improvements**
- Where evidence (or even methods) not fully transferrable – **stick to key principles**. Process matters!

Prof. Le Duc Hinh  
Vietnam Association of  
Neurology

Prof. Le Quang Cuong  
Honorary Adviser, Vice Minister,  
MoH

# CASE STUDY: QS IN VIETNAM

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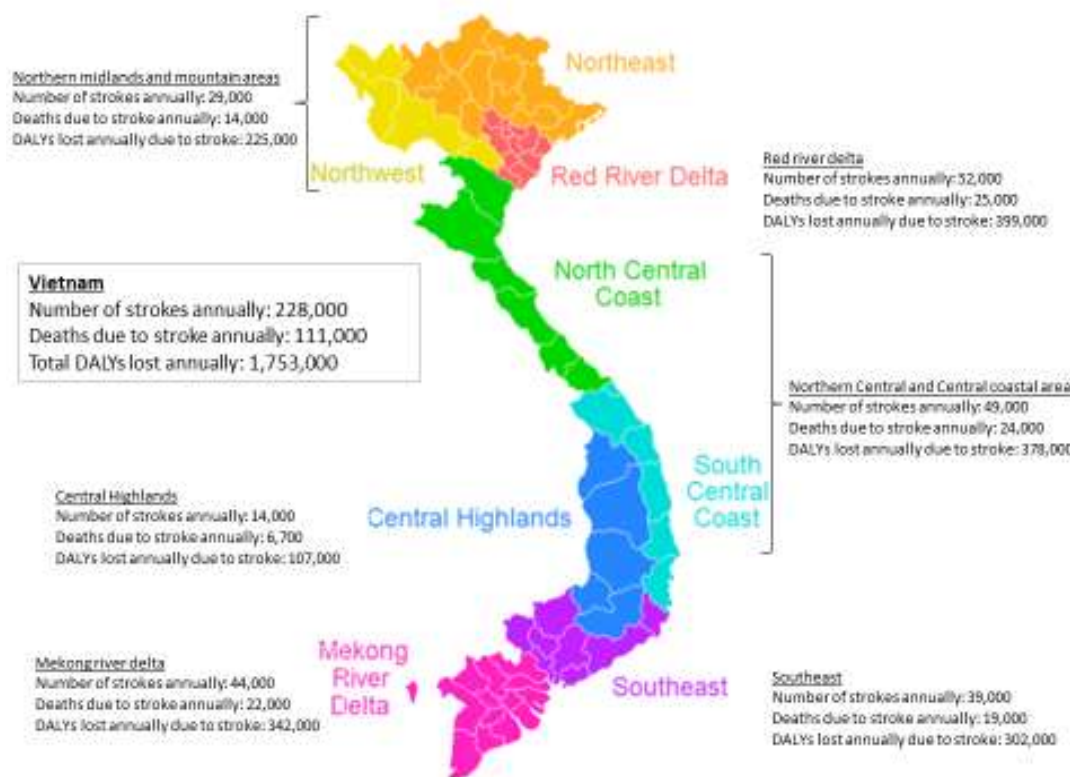
Tam Diep Hospital (district hospital)



# Bach Mai Hospital, Hanoi (central hospital)



# Stroke accounts for 1.7m disability-adjusted life years (DALYs) annually in Vietnam



- Prevalence  $6.08/1000 = 500,000$  people living with stroke
- Incidence of  $2.5/1000 = 228,000$  cases per year
- 14% of deaths (commonest cause of death)

Cong (2007), Nguyen et al. (2010), Tirschwell et al. (2012), WHO; NICE International calculations based on Global Burden of Disease 2010 estimates and Government of Vietnam national statistics

# The problems that need solving

- Variable quality of care
- No national guidelines or clear standards
- No system for measuring care given
- Patients often admitted to hospitals without equipment or staff required for diagnosis and treatment
- Lots of non evidence based treatments
- Little focus on prevention or rehabilitation

Vietnam: QS for Stroke developed over 14 month collaborative, country-owned process



## Key principle: Maximising impact requires prioritisation throughout the process

### Selecting topic area(s)

- Disease burden, budget impact, current quality of care, equity/ethical considerations

### Defining the scope

- Relevance (to decision-making body), resources available for QS development

### Selecting source documents

- Relevance (to scope), methodological rigour

### Identifying relevant recommendations

- Relevance (to scope), feasibility (of measurement), clinical/cost-effectiveness, impact on patient safety, budget impact, current quality of care, equity/ethical considerations

### Prioritising recommendations

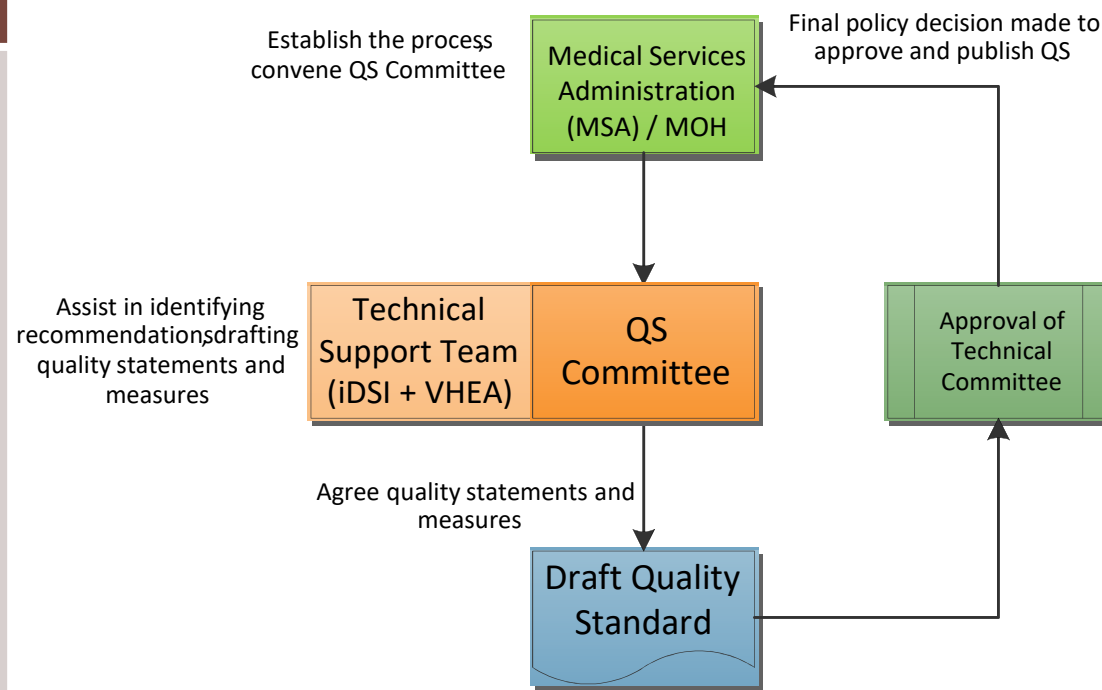
- Feasibility (of implementation), clinical/cost-effectiveness, impact on patient safety, budget impact, current quality of care, equity/ethical considerations



# Links between the different groups involved in QS development

## QS Committee

- **Vice Minister Prof Le Quang Cuong**
- **Co-Chairs**
  - Prof Le Duc Hinh (Chairman, VN Neurology Association)
  - Prof Le Van Thanh (Chairman, VN Stroke Association)
  - Prof Tony Rudd CBE (National Clinical Director for Stroke, NHS England)
- **Medical Services Administration (MSA), MoH**
  - Prof Luong Ngoc Khue (Director, MSA)
- **Provincial health departments and hospital managers**
- **Clinicians from various disciplines: neurology, cardiology, emergency medicine, pharmacy, nursing**
- **Vietnam Health Economics Association (VHEA)**



## Other stakeholders, e.g.

- **Health Strategy and Policy Institute, MOH**
- **Vietnam Social Security (payer)**
- **Professional organisations (VN Stroke Association, VN Neurology Association)**
- **Patients, carers and the general public**

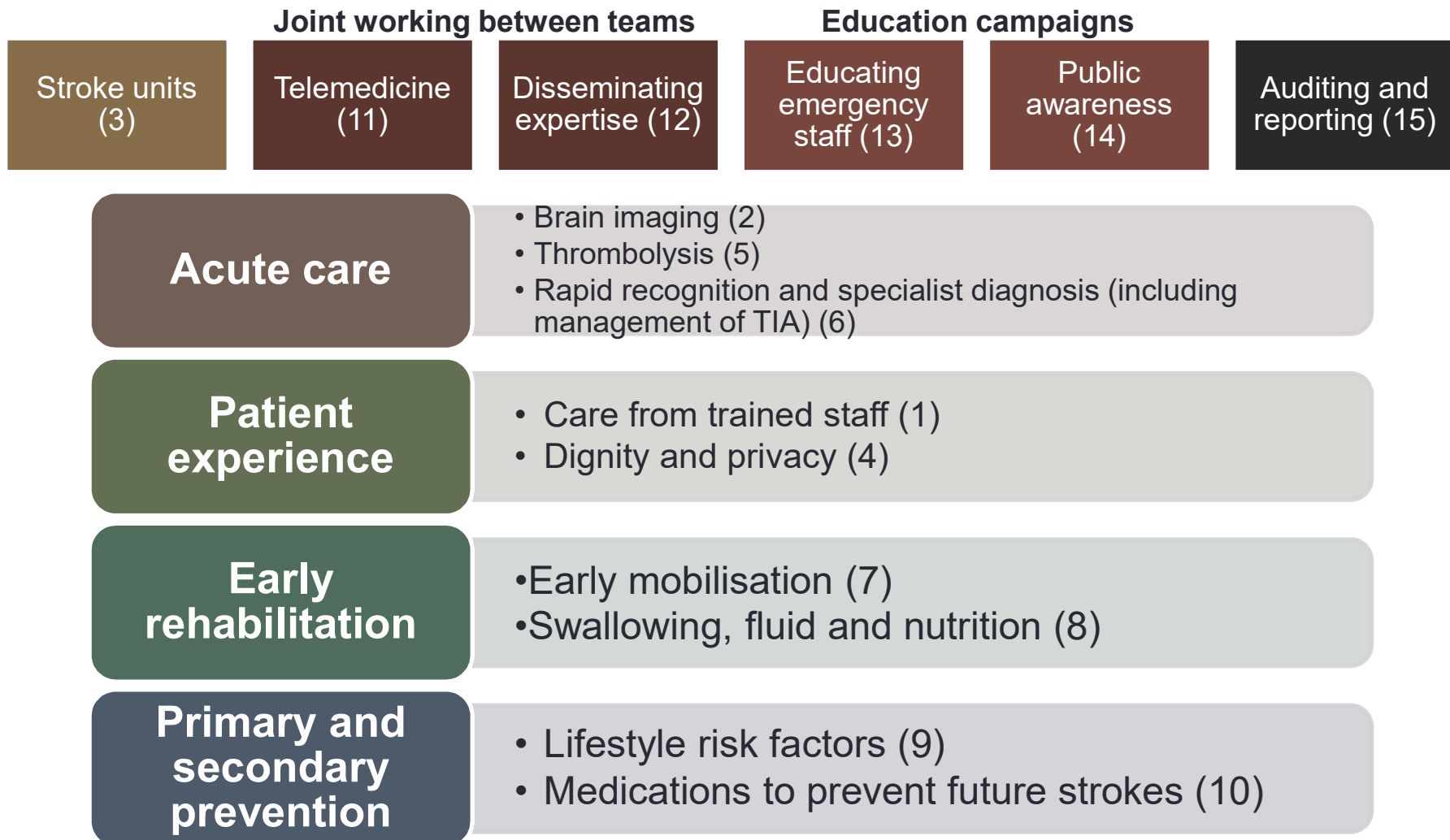
# Recruiting the QS Committee

- **Neurologist (7) – *including chairmen of VN Stroke and VN Neurology associations as co-chairs***
- **Emergency care / ICU doctors (3)**
- **General hospital doctor (2)**
- **Neurosurgeon (2)**
- **Cardiologist (3)**
- **Radiologist (1)**
- **Internal doctor (1)**
- **Pharmacist (1)**
- **Nurse (1)**
- **MOH policymakers (Vice Minister; MSA officials x3)**
- **Provincial Department of Health (1)**
- **Hospital manager/administrator (2)**
- **VHEA team (Secretariat): Economist (2); Logistics secretary (1)**

# Selecting relevant clinical guidelines and recommendations

- Relevant guidelines included:
  - NICE clinical guideline on stroke
  - Royal College of Physicians (RCP)
  - Vietnamese guidelines?
- Preparatory work before workshops (UK team, QS Committee Chair, VHEA, MOH)
  - Identify relevant stages of clinical pathway
  - Collate relevant recommendations from all guidelines

## Workshop 1: Identify priority areas for quality improvement, based on potential for impact



## Building consensus through breakout group discussions

- QS Committee reviewed shortlist of recommendations from the NICE, RCP, and various Vietnamese guidelines
- Formed small groups of 5, to discuss what quality standards for stroke care they would like to see.
- Rapporteur from each group reported key discussion points to the wider group. QS Committee then collectively discussed each issue



## Workshop 2: Review and agree the QS through small-group discussions

- Agree each quality statement
- Agree quality measures
  - Structure: What facilities need to be in place in order to meet the standard?
  - Process: What data sources are needed to be measure quality?
- Discuss cost implications, and consider feasibility from policy / legislation perspectives





## Quality statements developed from evidence-informed clinical guidelines (Vietnamese and international)

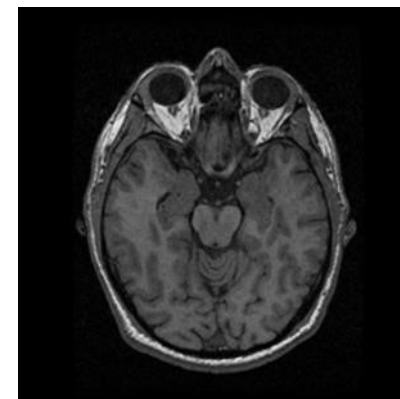
### Source guideline recommendations prioritised by Stroke QS Committee in Nov 2013 workshop

Patients with acute stroke should receive brain imaging within 1 hour of arrival at the hospital if they meet any of the indications for immediate imaging. (*UK Royal College of Physicians Guideline for Stroke, 2012*)

Chụp cắt lớp vi tính não nên thực hiện xong trong vòng 25 phút kể từ khi bệnh nhân đến khoa Cấp cứu và kết quả phải được bác sĩ chuyên khoa chẩn đoán hình ảnh trả lời trong vòng 45 phút. (*Bach Mai Hospital Acute Stroke Guideline*)

### Draft quality statement #2 for acute stroke in Vietnam hospitals

Patients with acute stroke receive brain imaging within 1 hour of arrival at the hospital if they meet any of the indications for immediate imaging, or within 24 hours if they do not meet any indication for immediate imaging.



#### Indications for immediate brain imaging:

- Indications for thrombolysis or early anticoagulation treatment
- On anticoagulant treatment
- Known bleeding tendency
- Depressed level of consciousness (Glasgow Coma Score < 13)
- Unexplained progressive or fluctuating symptoms
- Papilloedema, neck stiffness or fever
- Severe headache at onset of stroke symptoms.

# Quality measure for stroke: Structure

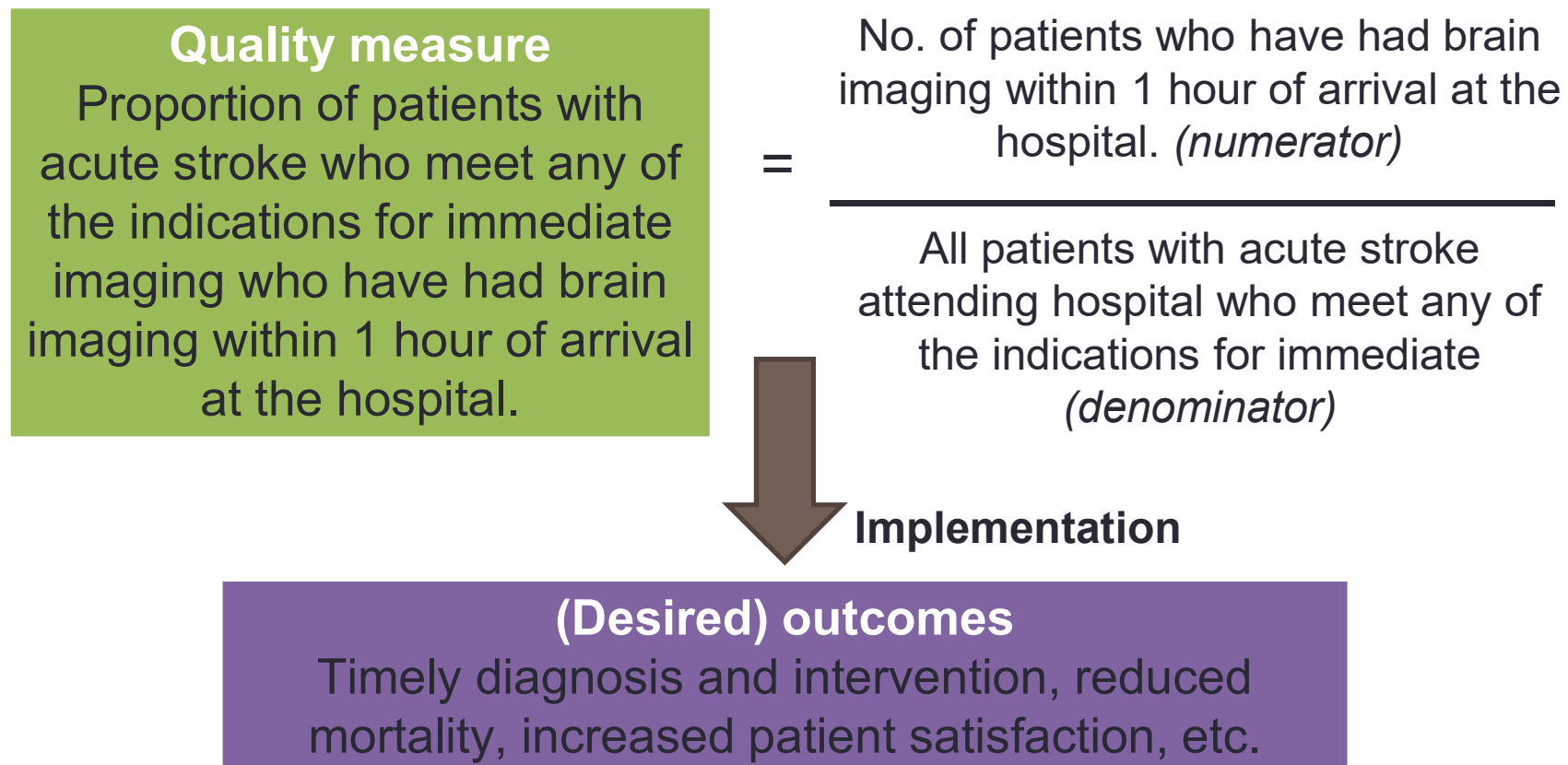
*What are the resources, and how are they organised to ensure patients can receive brain imaging within 1hr of admission?*

- Are there protocols or clinical pathways in the hospital for managing acute stroke, from admission to A&E onwards?
- Are brain imaging facilities (equipment and personnel) available 24x7, and organised to prioritise acute stroke patients?



# Quality measure: Process

*What amount of quality care (immediate imaging) is being provided?*



## Extract from the 15 quality statements

- **Patients with stroke are treated with dignity**, including their hygiene maintained, provided care to prevent and manage pressure ulcers, and given privacy.
- Patients with acute stroke (ischemic and haemorrhagic) are **mobilised and helped to sit up as soon as they are awake**, unless medically unstable; and supported to stand and walk as soon as possible.
- Patients with acute stroke have their **swallowing screened by specially trained healthcare staff within 4 hours of admission** to the hospital, before being given any oral food, fluid or medication; and have an ongoing management plan for the provision of adequate nutrition.

## Workshop 3: MoH approves and launches QS

- Prof Le Quang Cuong, Vice Minister, endorsed the QS
  - Prof Luong Ngoc Khue, Director of Medical Services Administration, had convened Technical Committee to sign official decision to approve QS and its implementation
- National media coverage
- Initial discussions on pilot implementation / baseline audit

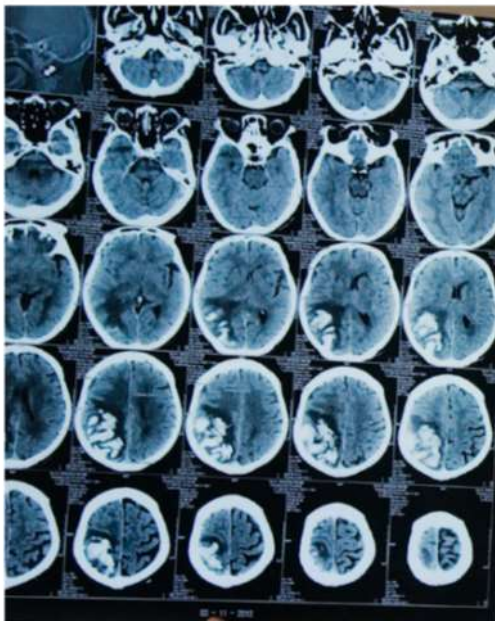


# Launch of the QS

Quality Standards for the Hospital  
Management of Stroke in Vietnam

JULY 2014

With funding support from the Rockefeller Foundation



- Vietnamese version published on MOH website
- Implementation of quality standards included as one of the official hospital accreditation criteria, through a dedicated policy circular
- **Implementation and audit tools, and budget impact analysis** also produced

# Summary of quality statements

## Clinician-level quality standards

- People with stroke or transient ischaemic attack (TIA) receive hospital care from appropriately trained healthcare professionals.
- Patients with acute stroke receive brain imaging within 1 hour of arrival at the hospital if they meet any of the indications for immediate imaging, or within 24 hours if they do not meet any indication for immediate imaging.
- Patients with stroke are assessed and managed in a specialist stroke unit that meets at least Level 1 (Bronze) criteria by a doctor with specialist expertise in stroke and other appropriately trained staff within 24 hours of admission to hospital, and by all relevant members of the multidisciplinary rehabilitation team within 72 hours, with documented multidisciplinary goals agreed within 5 days.



# Summary of quality statements

## Clinician-level quality standards

- Patients with stroke are treated with dignity, including: their hygiene maintained and provided pressure area care; given sufficient physical space and privacy.
- Patients with suspected stroke arriving at a hospital with facilities to provide thrombolysis are admitted directly to a specialist stroke unit and assessed for thrombolysis, receiving it within 4.5 hours of stroke onset if clinically indicated.
- People with TIA are considered as medical emergencies, and assessed and treated by a healthcare professional with expertise in neurovascular disease within 24 hours; started on aspirin treatment immediately, and advised not to drive within 1 month.



# Summary of quality statements

## Clinician-level quality standards

- Patients with acute stroke are mobilised and helped to sit up as soon as they are awake, unless medically unstable; and supported to stand and walk as soon as possible.
- Patients with acute stroke have their swallowing screened by a specially trained healthcare professional within 4 hours of admission to the hospital, before being given any oral food, fluid or medication, and have an ongoing management plan for the provision of adequate nutrition.
- People at increased risk of stroke, including those who have already had a stroke, are assessed for and given information about lifestyle risk factors (exercise, smoking, diet, weight and alcohol); these people, and their carers where available, given accessible information, advice and support in possible strategies to modify their lifestyle and risk factors.
- Patients after stroke are offered appropriate medication to reduce risk of future strokes.

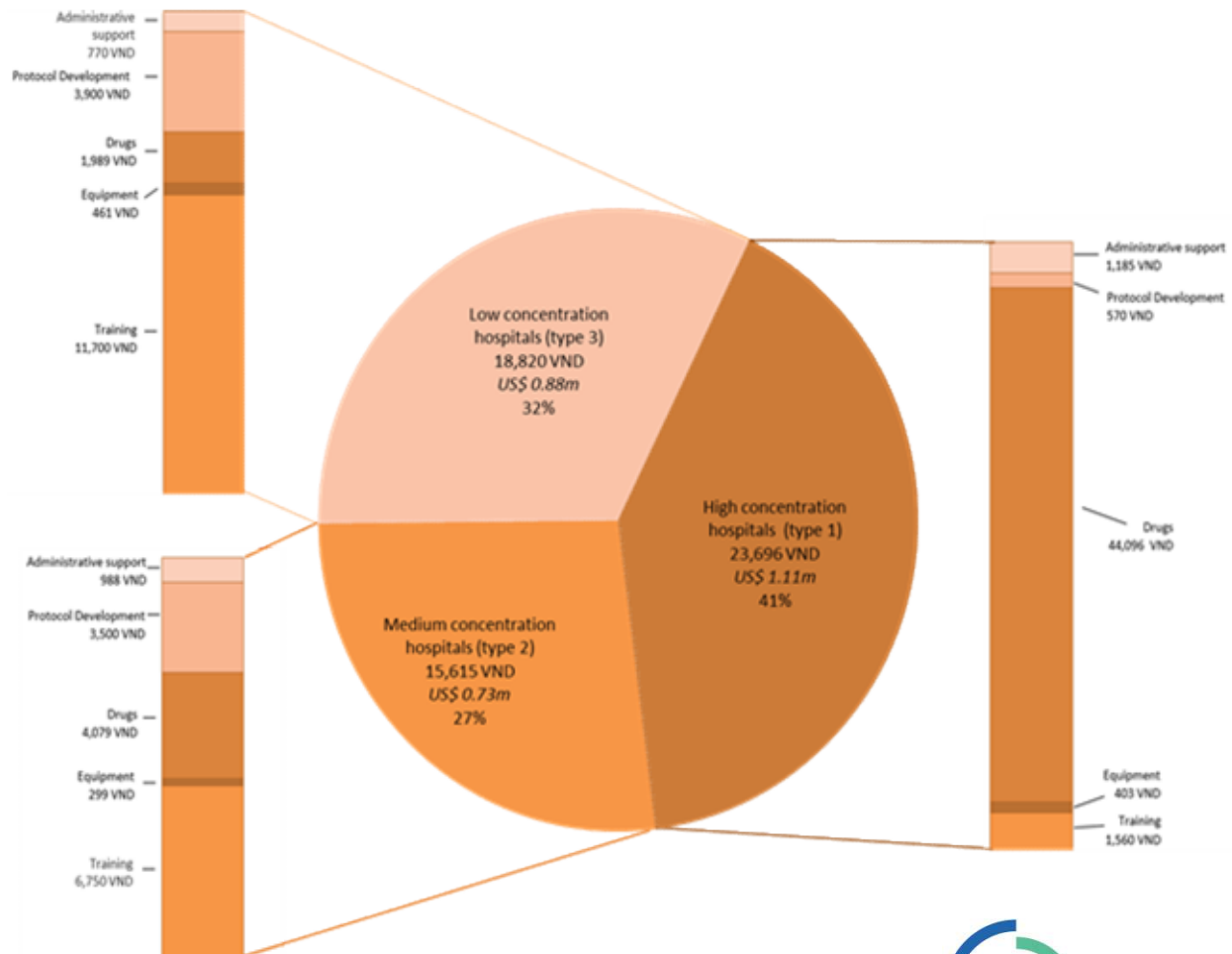
# Summary of quality statements

## Service-level quality standards

- A telemedicine service in a specialist stroke unit that does not have a local specialist stroke physician has: a video link that enables a specialist stroke physician to observe a clinical examination, discuss the case with a trained assessing clinician, and see and talk to the patient and carer directly; a link that enables a specialist stroke physician to review radiological investigations remotely.
- Each hospital with a specialist stroke unit meeting Level 2 (“Silver”) or Level 3 (“Gold”) criteria disseminates expertise to other stroke units within the locality via regular meetings.
- Emergency contact healthcare professionals can screen for stroke and TIA using a validated tool, and know how to respond to these as emergencies.
- Members of the public can identify the main symptoms of stroke and TIA, and know how to respond to these as emergencies.
- Patients with stroke have their quality of care monitored, and systems are in place to address problems that are identified.

# Budget impact analysis

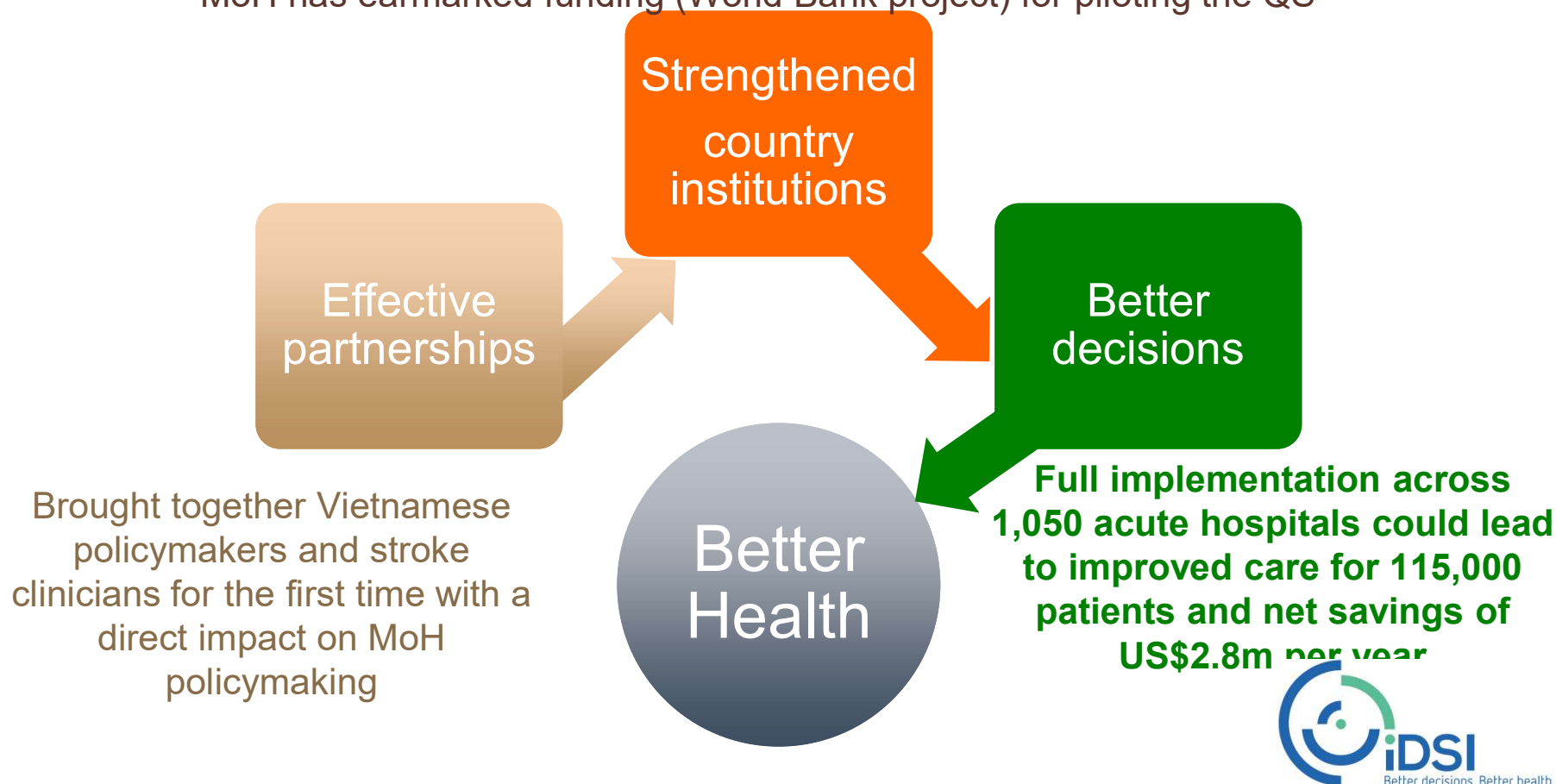
- Identifying key cost drivers and estimating costs of implementation
- Considers administrative constraints, capacity, patient flow, etc.



## QS for Stroke has demonstrated impact at the institutional level

Implementation incorporated as a component of Hospital Quality Criteria, through dedicated policy circular

MoH has earmarked funding (World Bank project) for piloting the QS



# Implementation

- World Bank funding through NORRED project
- Pilot hospitals to implement stroke quality standards
  - 2-3 new hospitals per year given resources from Ministry of Health
  - Support from UK (Royal College of Physicians)
    - Visits from UK clinicians to Provincial hospitals
    - Twinning hospitals in England with Vietnamese hospitals
    - Training opportunities using telemedicine
- Pilot hospitals then help to support other hospitals in subsequent years to develop their services

# Challenges and learning

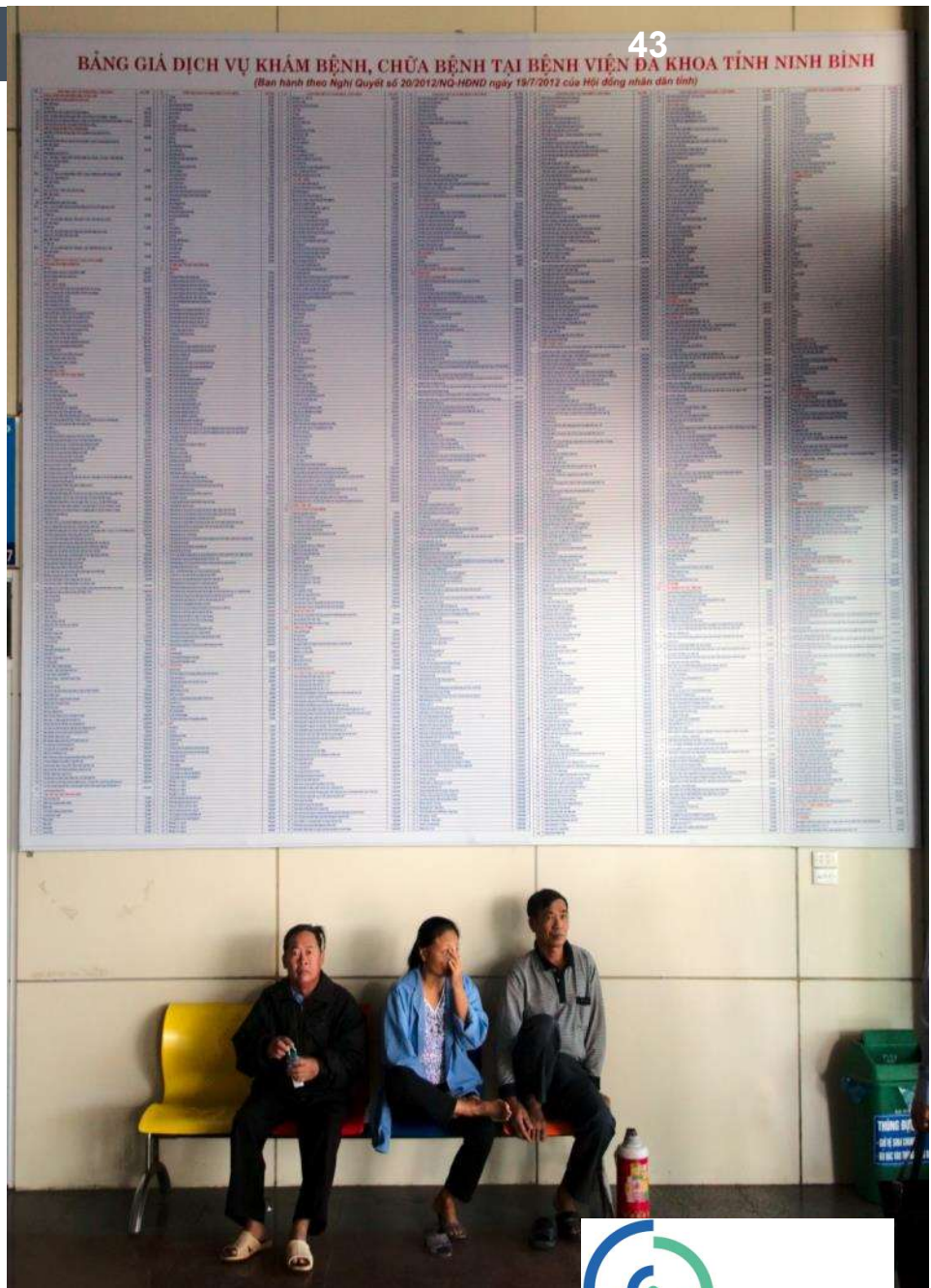
- Broad stakeholder buy-in, with **political and clinical champions**, is key to success
  - **Stakeholder engagement** is essential ingredient in evidence-informed policymaking (Lavis et al., forthcoming)
- Working within very different administrative and cultural contexts around healthcare and decision-making – need to be **creative and flexible**
- Challenges around clinical staff / policy advisers' already stretched capacity





## Challenges and learning

- Can't reform the whole health system at once – make **incremental improvements**
- Where evidence (or even methods) not fully transferrable – stick to **key principles. Process matters!**



# Thank you!

[www.idsihealth.org](http://www.idsihealth.org)

Twitter: @idsihealth



# CASE STUDY: QS FOR POST-PARTUM HAEMORRHAGE IN KERALA, INDIA

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# About the project

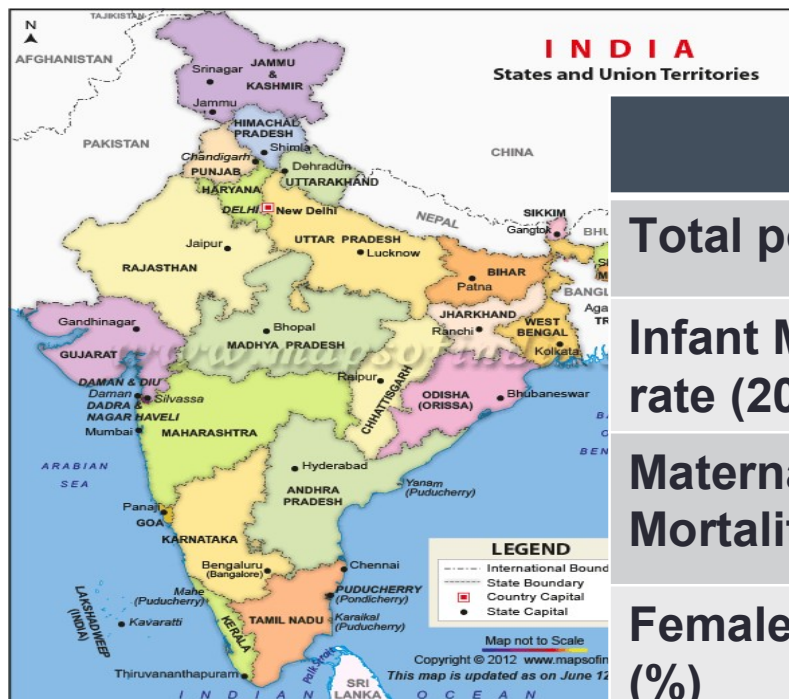
- Started in 2012, following various informal engagements with state of Kerala since 2009
- Initiative led by Principal Health Secretary
- Objective: to develop QS for improving care in an area of strategic importance
- iDSI provided technical support (mostly remotely)
- Ongoing implementation driven by Government of Kerala with National Health Mission & Kerala Federation of Obstetricians and Gynaecologists (KFOG)

# Aligned with State Strategy

“States need to put in place a strategy to address issues of **quality assurance and improvement, beyond fragmented approaches to selected dimensions** of quality. Such a strategy should include **defining quality standards**, processes of **measurement**, establishing quality management systems and a system of un-biased certification.”

6<sup>th</sup> Common Review Mission (2013) recommendations

# Kerala features



	Kerala	India
Total population	33.4 Million	1.237 Billion
Infant Mortality rate (2012)	12	42
Maternal Mortality Ratio *	66	190
Female Literacy (%)	91.98	65.4

\* WHO, UNICEF, UNFPA, The World Bank, & UN Population Division Maternal Mortality Estimation Inter-Agency Group; modeled estimate, 2014

2010-12 Sample Registration Survey

\*Sample Registration Survey



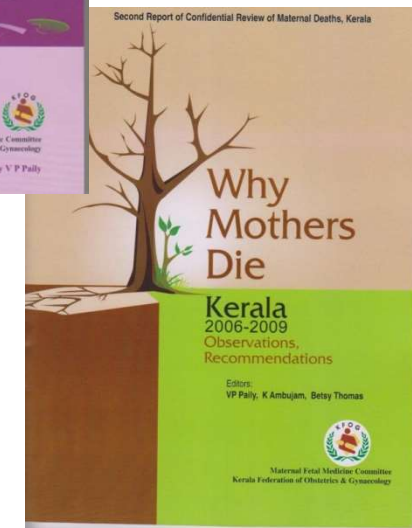
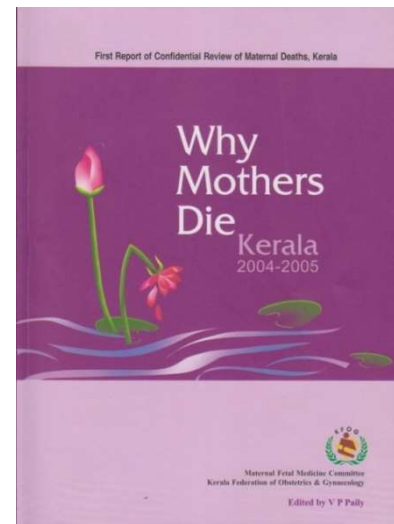
# Kerala: the maternity landscape

- Institutional deliveries: 98.4% (28% public, 72% private)
- most private deliveries are out of Pocket
- Kerala's MMR has not decreased significantly in the past 20 years
- Many maternal deaths are avoidable
- Reducing MMR is a key priority

Target	2010- 12	2013-14	2014-15	2015-16	2016-17
MMR	66	60	50	45	40

# Maternal deaths Audit

- Confidential Review of Maternal Deaths since 2004 by KFOG, based on similar exercise in the UK
- All maternal death in Govt and Private sector are audited, and causes identified



# Causes of maternal deaths causes

	2004	2005	2006	2007	2008	2009	2010	2011	2012
	%								
<b>Hemorrhage</b>	20.2	24.1	28.4	20.3	27.8	10	18.4	27.1	21
<b>Hypertension</b>	15.1	18.6	10.1	15.2	16.5	19	13.3	16.3	11.5
<b>Heart disease</b>	3.7	13.1	4.5	6.7	5	4.7	8.1	6.5	4.2
<b>Sepsis</b>	3.7	7.6	6.4	11.8	13.9	8.3	4.1	7.6	5.2
<b>AFE</b>	13.8	8.8	9.1	8.4	6.3	8.3	4.1	5.5	8.4
<b>Thromboembolism</b>	8.8	3.3	0.91	5	3.7	2.3	2	5.5	4.2
<b>Pl.prev.accreta</b>	1	3	7				2	2	4
<b>SUICIDE</b>	3	3	4	1	6	8			

CRMD; KFOG

# Partnership

- Kerala Government Health Services
- National Health Mission (Central government)
- Kerala Federation of Obstetrics & Gynecology (KFOG)
- UK team

Rajeev Sadanandan  
(Principal Secretary)



Beena  
Mahadevan  
(NRHM Director)



Dr Paily  
(KFOG)



Dr Kalipso Chalkidou & Dr Francoise Cluzeau  
(NICE International)



# QS was developed using NICE-like methods

- Convened multidisciplinary\* group
- Selected areas of priority for the QS from confidential review
- KFOG drafted quality statements with UK team support
- Statements discussed by multidisciplinary group chaired by Principal Health Secretary, went through several iterations
- Whole development process took 9 months

\* Public & private sector, expert clinicians/academics, providers, NRHM, insurers



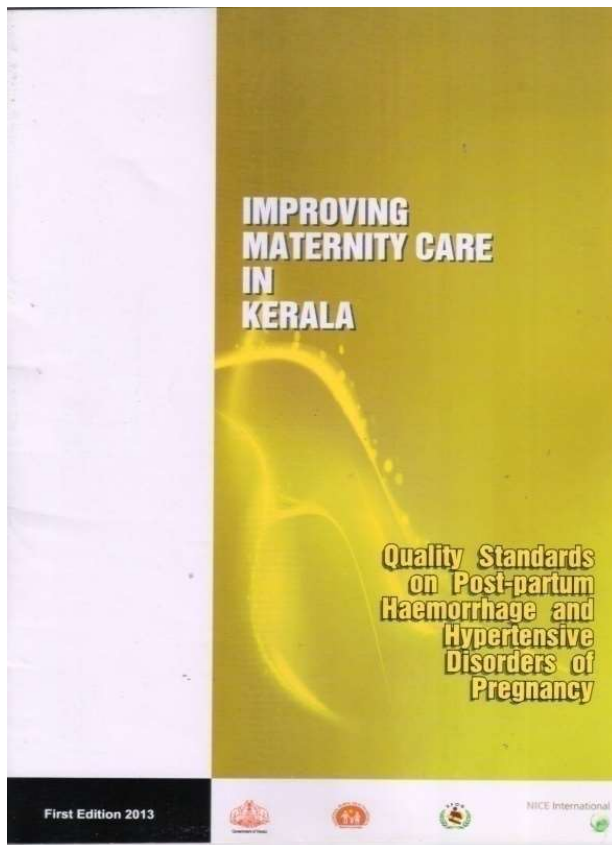
# Local & adapted international evidence

- Using WHO, UK (NICE and Royal College of Obs&Gynae), and KFOG guidelines as evidence base
- 10 statements with measurable indicators
  1. Active Management of Third Stage of Labour
  2. PPH Prevention – 4th Stage Management
  3. Management of Post-Partum Haemorrhage with Blood and Blood Products
  4. Obstetric Intensive Care
  5. Placenta Praevia Accreta
  6. Pre-eclampsia
  7. Anti-hypertensive Treatment
  8. Severe Hypertension in pregnancy and in Immediate Postpartum Period
  9. HELLP
  10. Eclampsia





# QS Launched



- January 2013
- By Honorable Chief Minister and Health Minister of Kerala in the presence of UK Health Minister

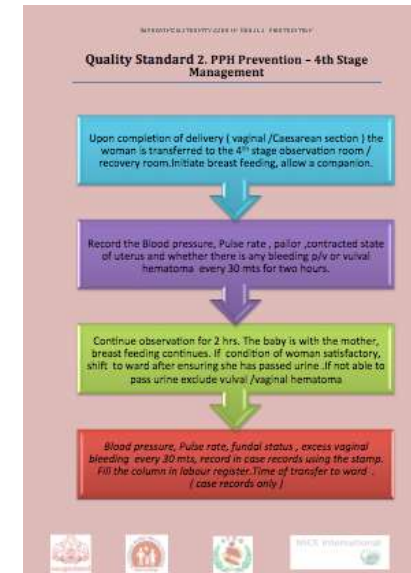


# Preparing for Implementation in 8 pilot hospitals

Tasks	Who	Dec-12	Jan-13	Feb	Mar	April
Orientation meeting	Dr Beena					
Inspection of the centres - Need assessment	Dr Beena					
Format for data entry	Sandeep & Manju					
Baseline data collection	Sandeep & Manju					
Reporting Form & Registers - Format	VPP					
Reporting Form & Registers -Printing	NRHM					
Quality standards - Editing, Final Proof	Francoise,VPP	22-Dec				
Flow charts design	VRSN					
Flow charts Printing	NRHM					
Training	KFOG,SAT					
- Data collection & Reporting						
- Clinical Training						
Quality standards- design	Francoise		07-Jan			
Quality standards - printing	NRHM		12-Jan			
Launch of qlty stds & press conf ANNA SOUBRY, PARLIAMENTARY UNDEF	Health Sec		15-Jan			
Human Resources	Health Sec		30-Jan			
Procurement	Health Sec					
Roll out	Health Sec					01-Apr
Clinical audit meeting	Key Person/Hosp					

# Preparing for implementation\_2

- Flowcharts were developed and displayed
- New labour register designed and implemented
- Disposable delivery kits and other new equipment purchased and distributed
- Staff were redeployed



# Preparing for implementation\_3

- All staff working in the Labor room and maternity ward trained (>400)
- NRHM Director & KFOG visited all hospitals to review the programme
- Needs assessment conducted in hospitals





# Implementing the QS

- QS was implemented in 8 pilot (public & private) hospitals on 1<sup>st</sup> April 2013
- data collected (manually)
- monthly review meetings held
- attended by all pilot hospitals
- chaired by The Principal Health Secretary
- run by the NRHM Director and KFOG



# Changes brought about

- Disposable sterile delivery kits were provided to conduct delivery aseptically.
- Staff were trained to behave properly to patients and were encouraged to allow companion in labour



# Training

- Of the Rs 900,000(\$14,000/)allotted to KFOG for training,600,000/ were used for purchase of training materials which are still used for conducting deliveries.
- Only \$4500/ was spent on training nearly 400 staff.

## Review meetings were conducted regularly

- Data collected and presented in monthly review meetings.
- Discussions helped to increase self respect and morale of staff.
- Day today problems like ambulance transport could be sorted out.

# Impact from pilot

March 2014

## ***Process:***

- Good compliance with some QS indicators
- 100% compliance with active management of third stage of labour and two hour observation of women in the labour room after delivery (4th stage)

## ***Outcome*** *(suggest improvement in PPH)*

- Reduced average blood loss
- Reduced number of blood transfusions

# High staff satisfaction

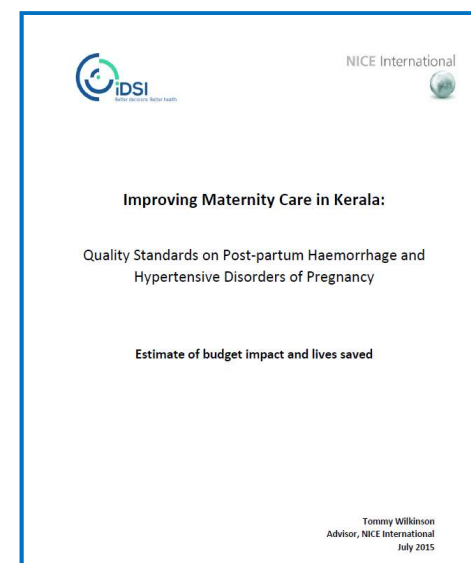
*“ All of us gynaecology unit chiefs are able to sleep peacefully at night these days. PPH referral emergencies have come down drastically in the past five months. Even when such referrals come, our job is easier because all required first aid measures would be initiated before the mothers were sent here. An excellent initiative, these standards need to be adopted in all maternal care hospitals: “*

From Gynaecologist at Tertiary Referral Centre. The Hindu, 16 Oct 2013

# Budget impact analysis

## Estimate of budget impact and lives saved

- QS implementation could lead to a reduction of maternal deaths by an estimated 25% (to 50 deaths per 100,000)
- Estimated annual cost of QS implementation across all hospitals in Kerala: Rs. 11,44,94,927 (US\$1.8 million)
- Rs. 2,97,55,557 to government facilities & Rs. 8,47,39,370 to private facilities
- Including direct costs (staff time, drugs and equipment) & implementation costs for staff training, local protocols, clinical audit & monitoring and amortised basic equipment upgrades
- Successful implementation dependent on funding for both direct resource costs and implementation costs. Without investment the QS are unlikely to have any significant impact on maternal mortality in Kerala



- Learning from maternal care **QS extended to** neonatal mortality QS
- **Sharing experience** with other Indian states (Odisha & Bihar) and internationally
- Pilot rolled out to 35 public hospitals (Jan 2015), inc. private hospitals
- NICE International Developed **QS process guide** for LMICs





# However...

- **Technically**

- Baseline data was not collected prior to pilot
- uncertainty about the quality and reliability of collected data
- lack of technical capacity at NHM to analyse data and feed back to hospitals

- **Policy/governance & sustainability**

- 'Champions' Principal Health Secretary and NHM Director left; new leadership less committed, leading to delays, risk of project stalling
- Risk of jeopardising good relationship with KFOG, professionals and private sector

- **Replication of process to other Indian states questionable**

## What next

- The QS has been extended to include sepsis and Amniotic fluid embolism
- Plan to roll out QS to all district hospitals in Kerala
- Other main causes of MMR will need addressing: Thromboembolism, Heart disease & Suicide

# Publication



The screenshot shows the F1000Research website interface. At the top, the logo "F1000Research" is displayed with the tagline "Open for Science". To the right is a blue button that says "SUBMIT YOUR RESEARCH" with a document icon. Below the logo is a navigation bar with links: "BROWSE", "SUBJECTS" (which is highlighted), "GATEWAYS", "CHANNELS", "HOW TO PUBLISH", and "ABOUT".

Below the navigation bar, on the right side, is the "CrossMark" logo with the text "click for updates".

The main content area is titled "RESEARCH ARTICLE" and features the article title: "Improving quality for maternal care - a case study from Kerala, India [version 1; referees: 3 approved]".

Below the title, the authors are listed: "Ioana Vlad<sup>1</sup>, VP Paily<sup>2</sup>, Rajeev Sadanandan<sup>3</sup>, Françoise Cluzeau<sup>4</sup>, M Beena<sup>5</sup>, Rajasekharan Nair<sup>6</sup>, Emma Newbatt<sup>7</sup>, Sujit Ghosh<sup>7</sup>, K Sandeep<sup>8</sup>, Kalipso Chalkidou<sup>4</sup>".

At the bottom left of the article preview, there is a small icon and the text "Author affiliations".

# Independent evaluation

Itad (Feb 2015)

- KFOG training universally found to be useful in implementing the QS. Clear changes in practice as a result of the QS and associated training
- QS perceived as a valuable tool to improve and standardise quality of maternal care, and catalyse reductions in MMR in Kerala
  - Development process perceived to be innovative and considered locally owned 'made in India' and driven by Kerala Institutions

# What have we learnt?

- Policy makers and institutions are strong levers for
  - Initiating change
  - Driving processes of evidence-informed decision making at local level (development and implementation)

## But:

- How to ensure sustained commitment when faced with unavoidable changes in leadership?
- How to better integrate 'projects' in quality improvement processes in a local health system?