

# Innovation| Pressing the Accelerator

**Chair:** David Hare, Chief Executive, IHPN

**Speakers:**

- Dr Layla McCay, Director of International Relations, NHS Confederation
- Zahid Latif, Innovation Specialist, Healthcare UK

@THETlinks #THETConf

# Pressing the Accelerator

How are Public-Private Partnerships spreading innovation in health throughout the world?

Dr Layla McCay  
Director of International Relations

@LaylaMcCay

## Why is there such a high rate of innovation in low income countries?

1. Need  $>$  Provision
  2. Less strong institutions and regulations -> More flexibility/freedom
- Create an innovation-friendly environment for public and private innovators

## Zipline

- Faster delivery
- Reduced waste
- \$50,000 dollar saving



## Arbutus Drill Cover System



- Sterile cover for drills used in surgery
- As effective as standard surgical tools
- Potential 94% saving for the NHS (*BMJ*)

What can the NHS learn from these LMIC-originated partnerships and innovations?



1.

Overcome bias and harness the value in frugal innovation



## 2. Invest in LMIC-based innovation for mutual benefit





# 3.

Leverage existing advantages of NHS to spark and harness LMIC-based innovation



# 4.

Become more comfortable with building multi-organisation partnerships to harness LMIC innovation.



## Conclusion

layla.mccay@nhsconfed.org  
@LaylaMcCay

## Innovation, that wonderful yet nebulous word.....

*‘To what extent do healthcare professionals and decision-makers look to other industries and other countries to find those innovative low-cost models of care that benefit the system without compromising on quality?’*

Zahid Latif, Innovation Specialist,  
Healthcare and Life Sciences, Department for International Trade



**Trisha Greenhalgh**  @trishgreenhalgh · Sep 18

15 senior academics on a leadership course. Me (guest 'leader') being interviewed.

Interviewer: "Can you tell us the factors behind your success?"

Me: "No, but I can tell you some stories."

This worked.

(Abstraction is overrated, even in academia.)



**GREAT**

BRITAIN



GREAT

“Other countries still evolving their systems have the opportunity to **leapfrog** many of the processes, discoveries and advances in healthcare the NHS has overseen. They can adopt swiftly and cheaply the new technologies that will in due course underpin healthcare everywhere, including advanced mobile communications, data analytics, and AI-assisted diagnostics<sup>1</sup>”

Prof. Sir Malcolm Grant CBE  
Chair, NHS England  
November 2018

<sup>1</sup> Globally exporting the NHS, National Health Executive, 28<sup>th</sup> November 2018  
<http://www.nationalhealthexecutive.com/News/prof-sir-malcolm-grant-a-global-nhs>





COMMENT | [VOLUME 5, ISSUE 10, PE967-E968, OCTOBER 01, 2017](#)



PDF [40 KB]



Save



Share



Reprints



Request

## Can reverse innovation catalyse better value health care?

[Faheem Ahmed](#) • [Na'eem Ahmed](#) • [Tim W R Briggs](#) • [Peter J Pronovost](#) • [Devi P Shetty](#) • [Ashish K Jha](#) • et al.

[Show all authors](#)

[Open Access](#) • Published: October, 2017 • DOI: [https://doi.org/10.1016/S2214-109X\(17\)30324-8](https://doi.org/10.1016/S2214-109X(17)30324-8)

[PlumX Metrics](#)

References

The remarkable progress emerging economies have made over the past few decades has attracted the attention of leaders and

ADVERTISEMENT





---

# Remote Consultation Case Study

## Babylon – Rwanda

In 2016, Babylon initiated a project in Rwanda at the invitation of the President of Rwanda to deliver a hybrid service to Rwandan citizens particularly in remote areas. The service was launched with local doctors there in early Nov 2016 and since then over 280,000 people have signed up and over 77,000 consultations have taken place using the platform. Some key facts about the service are:

- The service is offered both as app and via USSD (for feature phones) alongside partnership agreements with the 2 largest telcos.
- Customers register via their National ID number (to qualify for the government subsidy – like in the regular public system). Once registered, patients can request a call-back from our medical team for free at a time of their choice (depending on availability)
- Payment is done only via mobile money (not credit cards) and currently only pay as you go.
- Unlike the UK, the platform doesn't currently offer the AI triage. Instead, Rwandan nurses do the triage and the connect patients to Rwandan doctors.
- Like in the UK, patients can also send medical staff a message (called Ask) for free and get a reply within a few hours.

---

Three women die every  
hour at the time of child-  
birth in Bangladesh.

© 2018 UPAHAR



## WHY CURRENT MATERNAL HEALTH PROGRAMMES ARE NOT WORKING



Lack of evidence  
base for intervention



Lack of collaboration  
with local healthcare  
infrastructure



Not  
patient-centred



# উপহার

## WE HAVE PUT THE ESSENTIALS FOR SAFER CHILDBIRTH IN ONE BAG

Inspired by UK's Bounty Pack and the Finnish Baby Box, Upahar (Bangla: Gift) is a low cost bundle that contains evidence-based interventions to make pregnancy safer for mother and child.





## Each bundle contains evidence based interventions to improve outcomes for mother and baby

**SWADDLE BLANKET:** Neonatal mortality has been shown to increase by approximately 80% for every 1 degree Celsius decrease in body temperature .


**INSECTICIDE TREATED BED NET:** In African settings has been shown in under 5s to reduce death by all causes by 20%

**IRON AND FOLIC ACID SUPPLEMENTS:** To prevent maternal anaemia, sepsis, low birth weight, and preterm birth.

**POSTPARTUM PAD:** To prevent unhygienic post partum practices that can lead to infections and possible infertility.

**BREASTFEEDING INFOGRAPHIC:** Pictorial aids assist in adherence. WHO recommends that all babies should be exclusively breastfed from birth until 6 months of age.

**ACCESS TO ANTENATAL GUIDANCE THROUGH MOBILE:** Better quality contacts affords opportunity to educate and detect risks early on in pregnancy.



## HOW IT WORKS

1

Mother discovers that she is pregnant

2

Travels to local clinic/distribution partner

3

Receives Bundle in exchange for mobile phone number

4

Educated on contents of Bundle at Clinic and remains in contact via mobile

5

Safer and healthier pregnancy

---

## Healthcare AI Catalyst

The HAIC Project was announced by Prime Minister Theresa May and Indian Prime Minister Narendra Modi in April 2018, as a £1m initiative which would bring the best of UK and other international Artificial Intelligence (AI) technology to the world's largest healthcare programme in India.

The project will run short pilots with each selected technology to demonstrate the impact such technology could have on the local health system.

Following successful pilots, the selected technologies will be supported in wider rollout across a number of states and private sector providers.

- The Project was formally launched at the India-UK Future Tech Festival in India last December.
- The first phase will see a small number of pilots starting in the next few weeks
- The Government of India (NITI Aayog) has constituted a panel of experts to drive the project forward. The panel has been involved in decision-making such as company selection
- Two Indian states (Maharashtra and Haryana) have been shortlisted to provide pilot sites for the project and two leading Hospitals in India have expressed an interest in participating.



## RELX / Elsevier



ELSEVIER

The proposed solution is based on Arezzo, an active clinical decision support (CDS) & pathway technology that empowers personalised care delivery at patient and population level. Arezzo matches evidence-based guidelines with patient & disease information & dynamically evaluates best-practice treatment options specific to the patient at that stage in their care.

15 years  
clinical  
experience  
including  
with the  
NHS

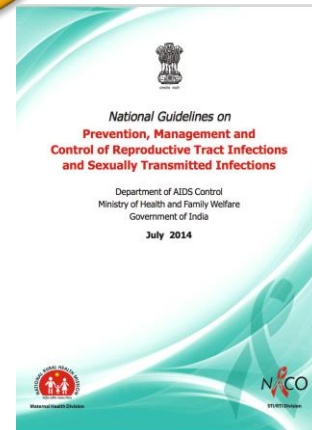
Winner:  
Queen's  
Award for  
Enterprise  
Innovation  
2012

Declarative  
AI to  
improve  
clinical  
outcomes

Based on  
computer-  
interpretable  
guidelines  
(CIGs)

## Implementation in India

- Facilitate India's achievement of Targets under the Sustainable Development Goal 3, by providing Computer Interpretable Guidelines on maternal and child health, incorporating non-communicable diseases (NCD).
- National India guidelines will be personalized in local dialects for health workers in remote regions, with limited internet connectivity



UHAMBO



SHONAQUIP®

# INNOVATING FOR CHANGE





**Inappropriate wheelchairs limit function - causing serious secondary health complications**



**Appropriate wheelchairs improve function - enabling inclusion & independence**



**Designed for rural use**

---

“the UK / Europe responded favourable to the design of our rural devices at the recent PMGUK conference. They do not have any products which offer the “**rural / hardy**” option that we have.

While this is considered our **base level norm** for an indoor and outdoor African environment (Rugged terrain, uneven surfaces) this for UK / Europe it meets a **need for outdoor / nature lifestyles** and activities which is not being catered for. We also have a uniquely designed folding buggy frame which they have never seen before and are very excited about.” **Shonaquip**

---

# Reflections

- Innovation is hard
- Opportunities are not immediately apparent
- Connections are key
- Opportunities for collaboration should be exploited

---

Upahar:

[upahar.co.uk](http://upahar.co.uk)

Shonaquip

<https://vimeo.com/286226842> and <https://www.youtube.com/watch?v=5jMFXwImHaM&feature=youtu.be&fbclid=IwAR0Yv4PSa9wYBx9Tn3Ut9GqnlBJeefrBv0jZfxpXJhPHJPhBY4f7WE4LC4>



Department for  
International Trade



Department  
of Health &  
Social Care

**NHS**

HealthcareUK