

High Quality Health Systems: Time for a Revolution

Quality of TB Care

McGill Summer Institute in Infectious Diseases and Global Health

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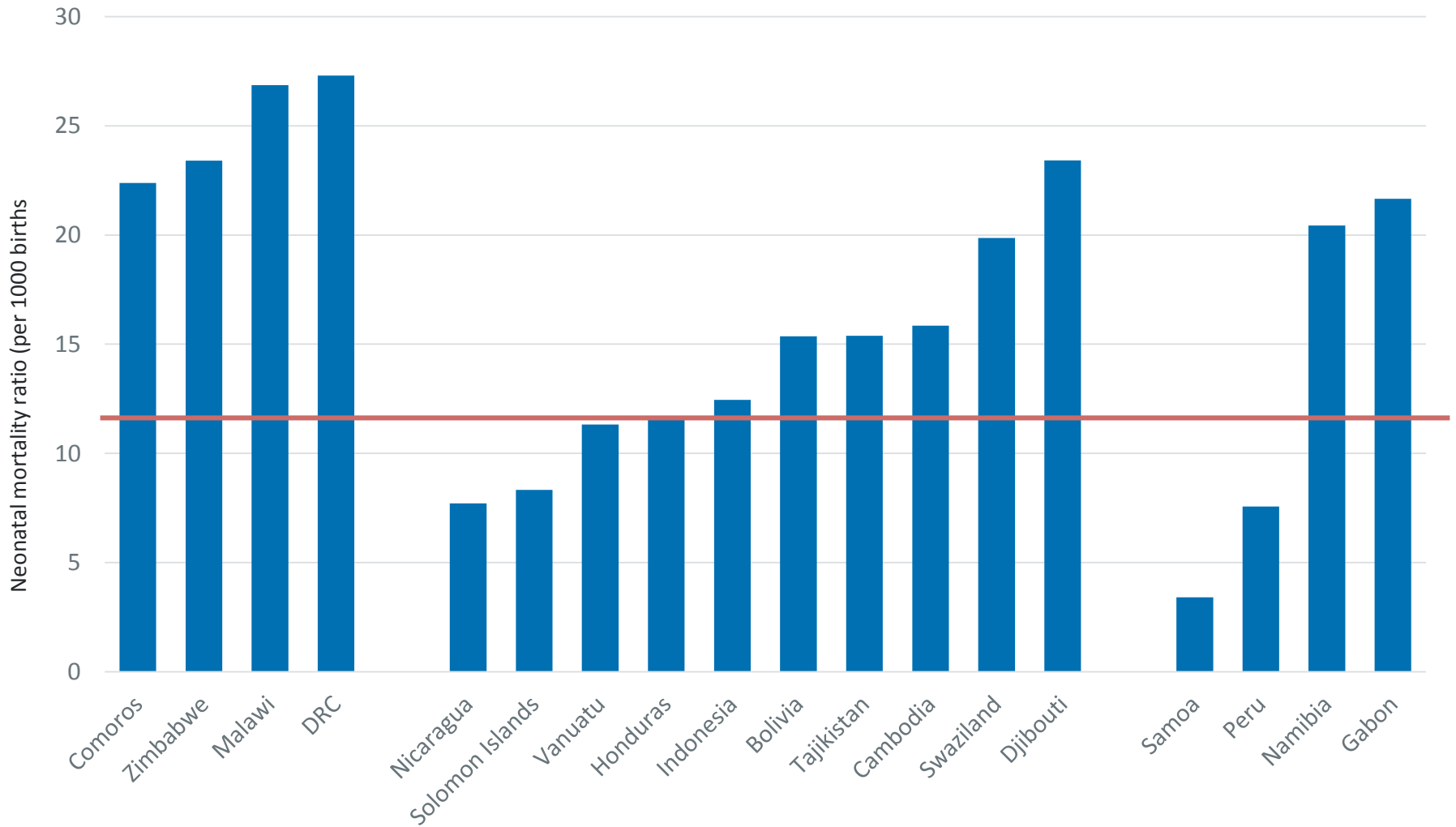
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The Lancet Global Health
Commission on
High Quality Health Systems
in the **SDG Era**

Utilization \neq survival



**Utilization x Quality =
Health**

More and more complex health needs

AIDS, tuberculosis, malaria, and neglected tropical diseases

injuries and accidents

hepatitis, waterborne diseases, and other communicable diseases

Rising expectations

deaths of newborns and children

malnutrition, stunting and wasting

noncommunicable diseases

national and global health risks

illnesses from hazardous chemicals and pollution

vaccines and medicines

sexual and reproductive health

maternal mortality

mental health and well-being

substance and alcohol abuse

tobacco control

universal health coverage

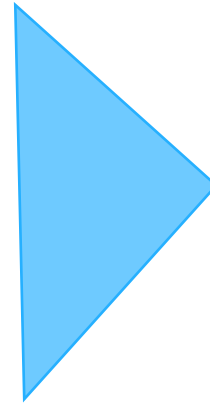
health workforce

Residual mortality harder to avert



Lancet Global Health Commission on High Quality Health Systems

1. Define and describe the state of quality of LMIC health systems
2. Propose updated measures of quality
3. Rethink improvement



Report launch
September 6, 2018

Academic launch
October 9, 2018 in
Liverpool

Global and national
launches (9 national
commissions)





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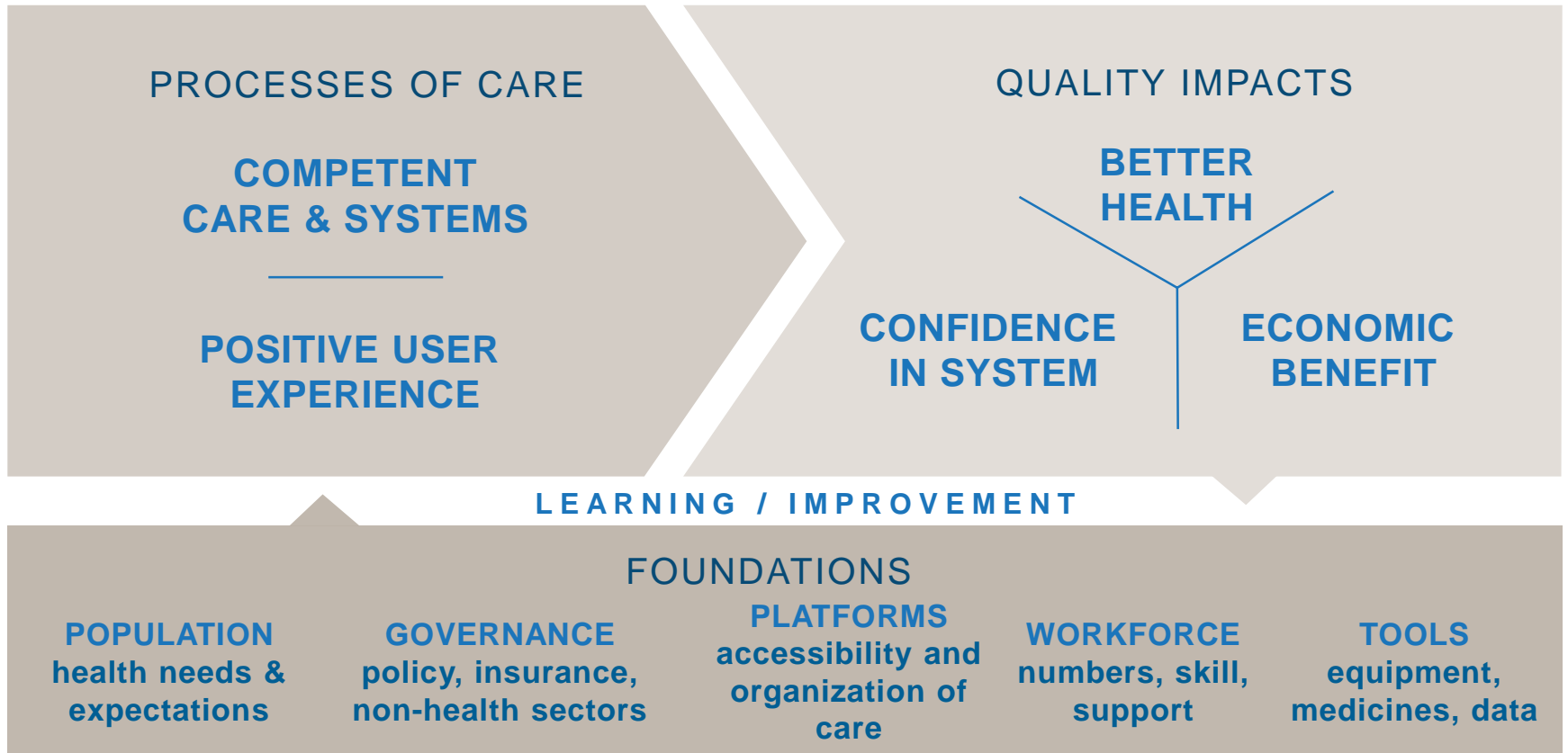
1. SDG era demands redefinition of health systems:
who systems are for and their core functions

Health systems are for people. A **high quality health** system optimizes health in a given context by

- **consistently** delivering care that improves or maintains health,
- being **valued and trusted by all** people,
- **responding** to changing population needs.

HIGH QUALITY HEALTH SYSTEM FRAMEWORK

FOR PEOPLE



EQUITABLE

RESILIENT

EFFICIENT

PROCESSES OF CARE

COMPETENT CARE

- Systematic assessment
- **Correct diagnosis**
- **Appropriate treatment**
- Counselling
- Referral

COMPETENT SYSTEMS

- Safety
- **Prevention and detection**
- **Continuity and integration**
- **Timely action**
- Population health management

POSITIVE USER EXPERIENCE

Respect

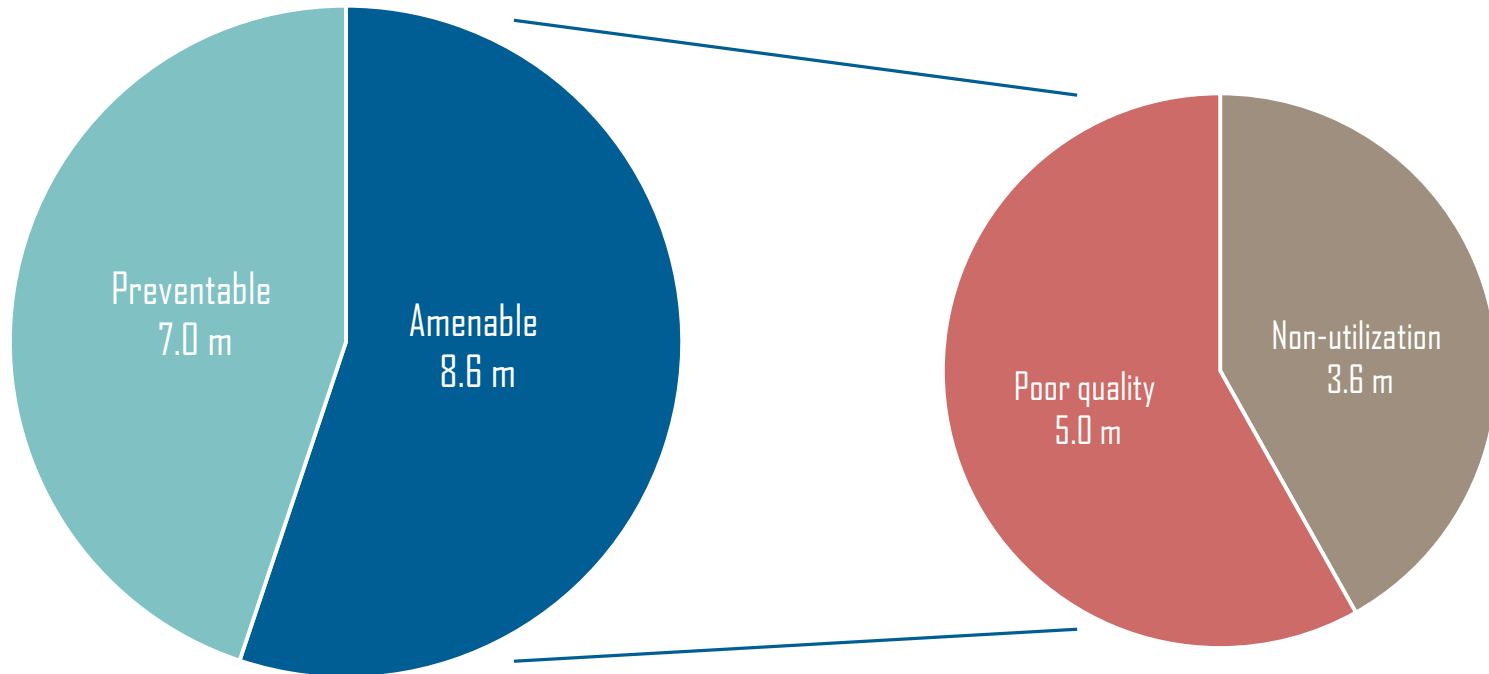
- Dignity
- Privacy
- Non-discrimination
- Autonomy, voice
- Confidentiality
- Clear communication

Customer Service

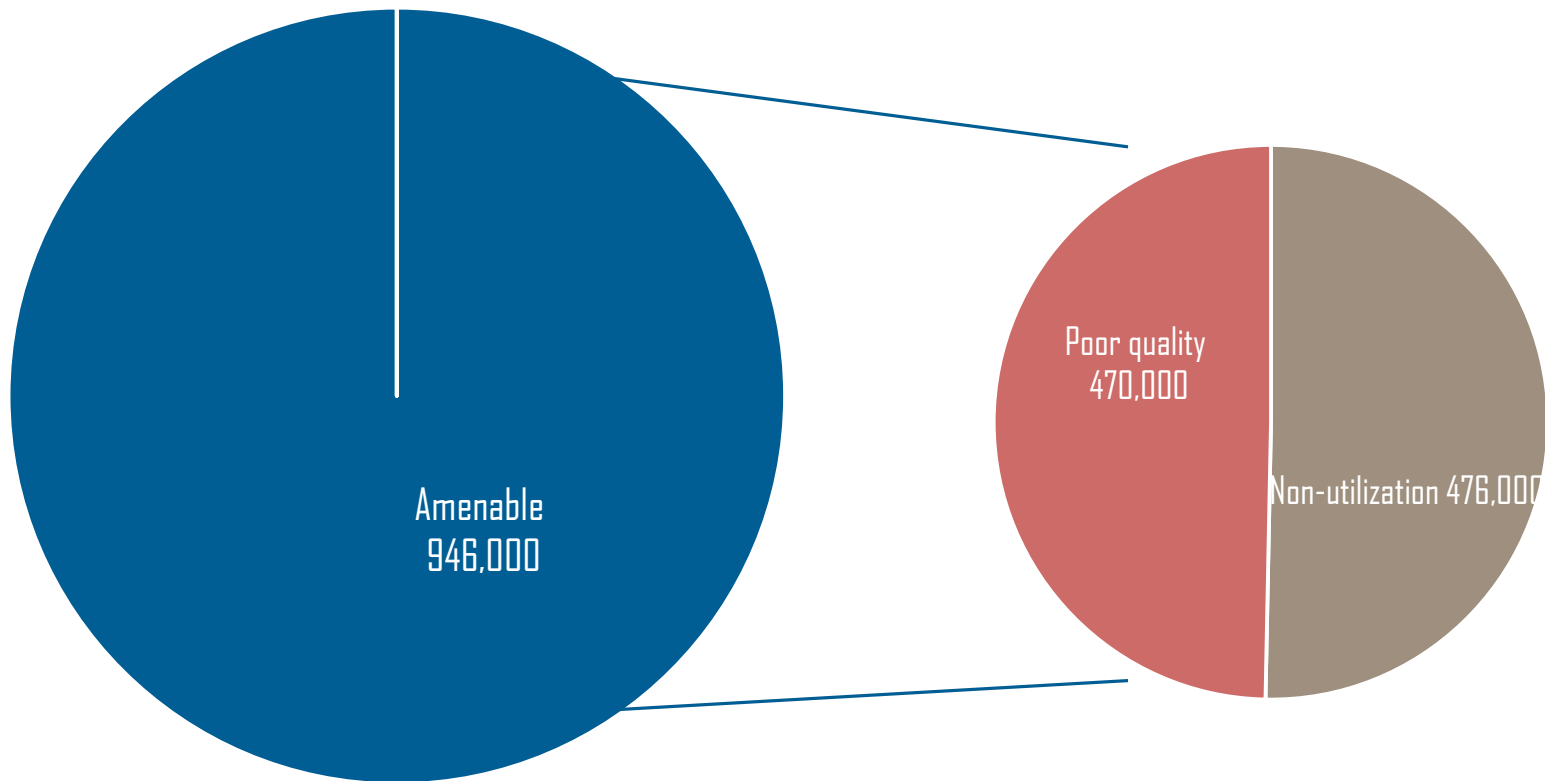
- Choice of provider
- Short wait times
- Responsive to patient preferences
- Affordability
- Ease of use

2. High quality health systems could save 8.6 million lives each year in low- and middle-income countries

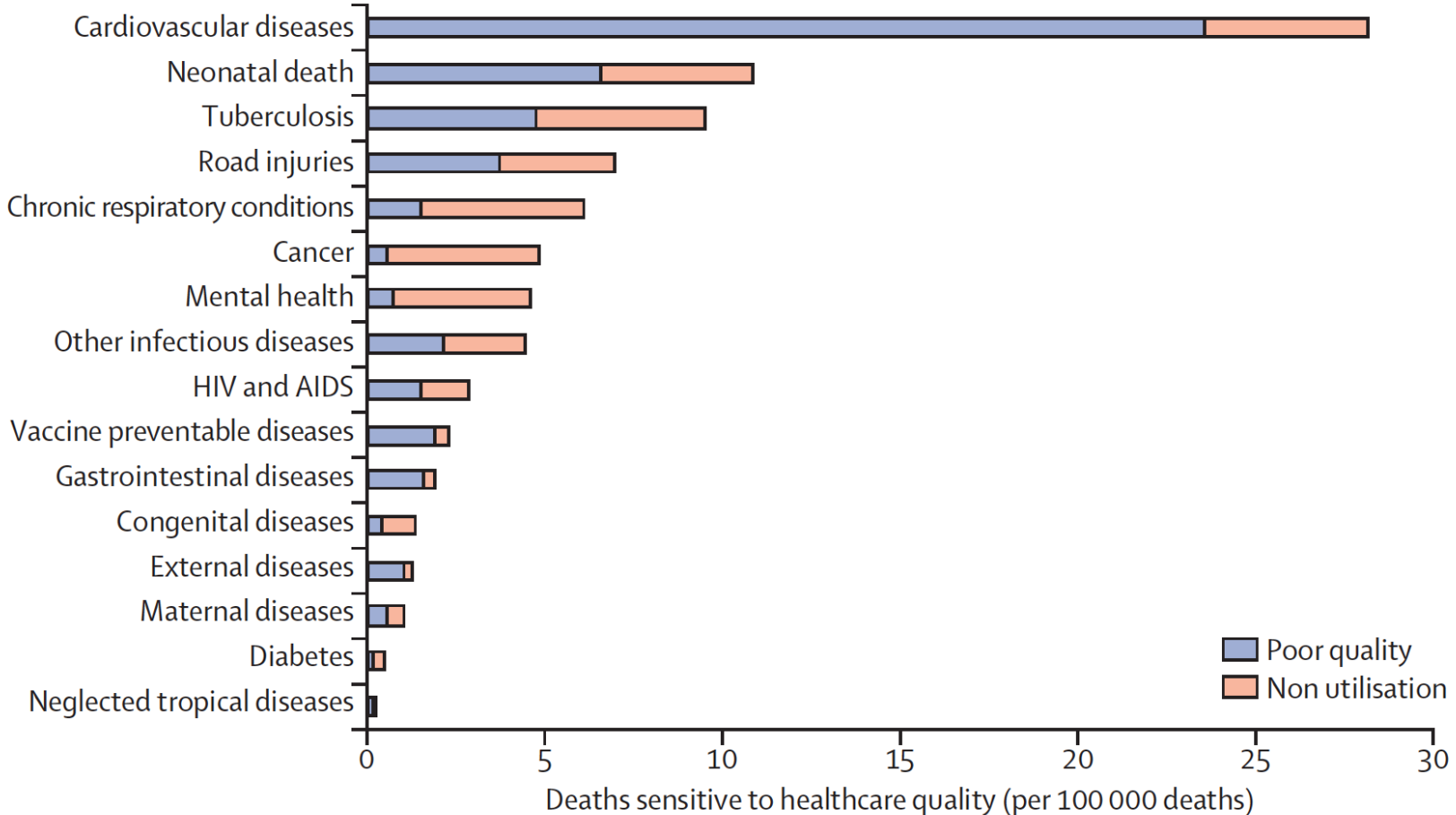
5 million deaths are due to poor quality among people using care; 3.6 million from lack of access



Half of TB deaths are due to poor quality



Quality plays a major role across conditions



Economic benefits of good quality

Reduce
premature
mortality

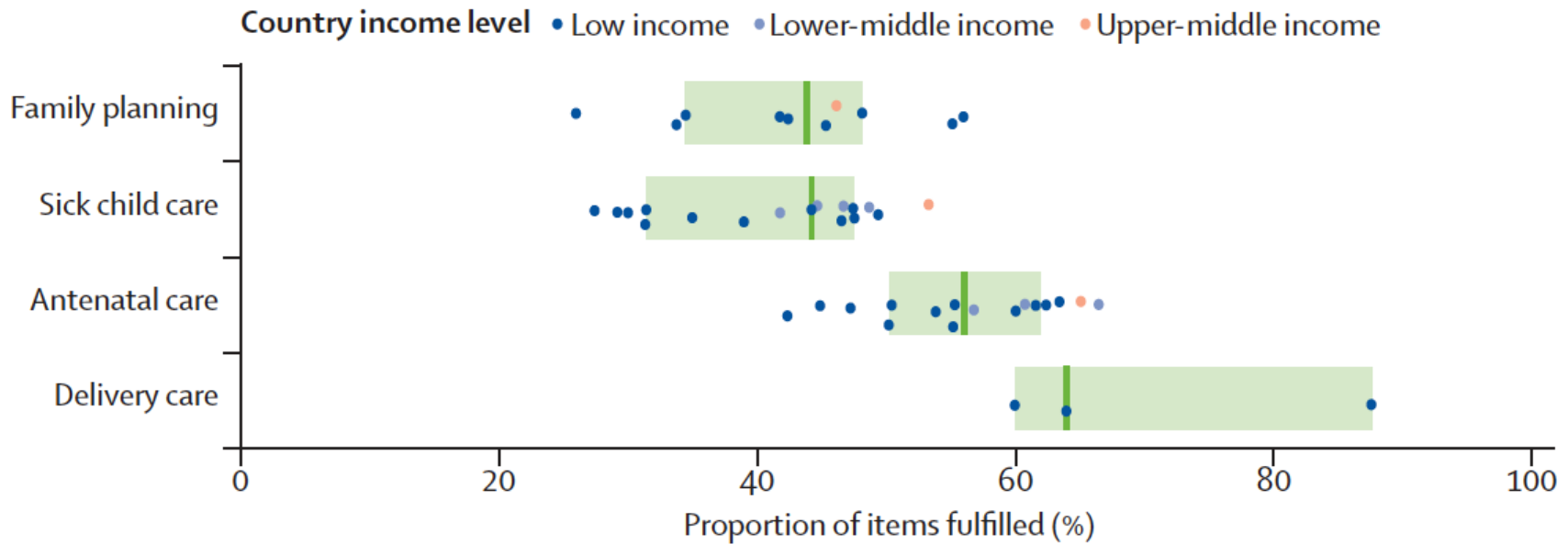
Reduce waste
from
unnecessary
and harmful
care

Prevent
catastrophic
expenditures

**\$6 trillion in
economic welfare
losses per year**

3. The care people receive is often inadequate: poor quality is common across conditions, with the most vulnerable faring the worst

Health providers perform 1/2 of recommended clinical actions for common preventive and curative care



Well known, effective treatments are not consistently provided



Care competence in TB in Delhi, India

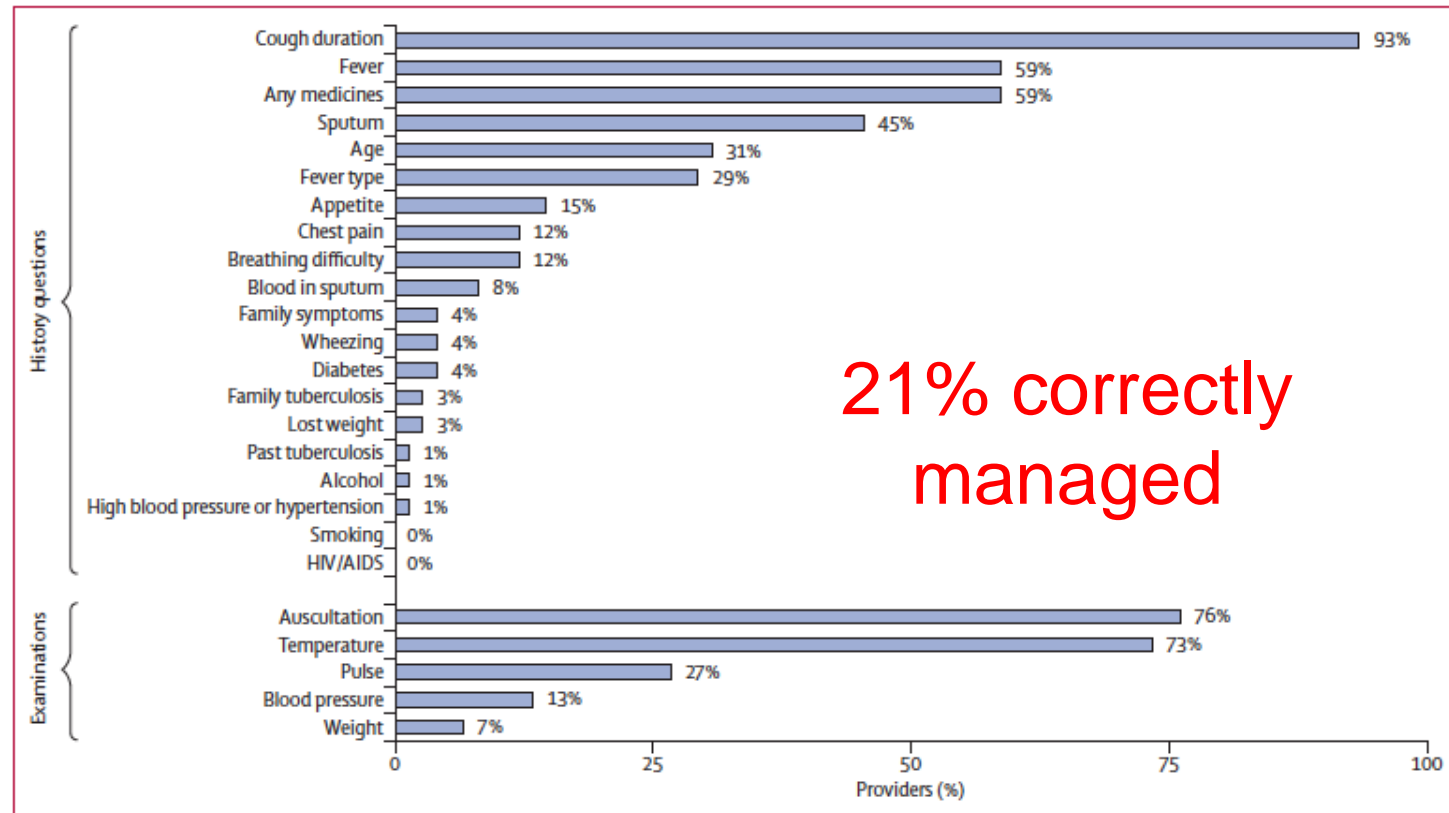
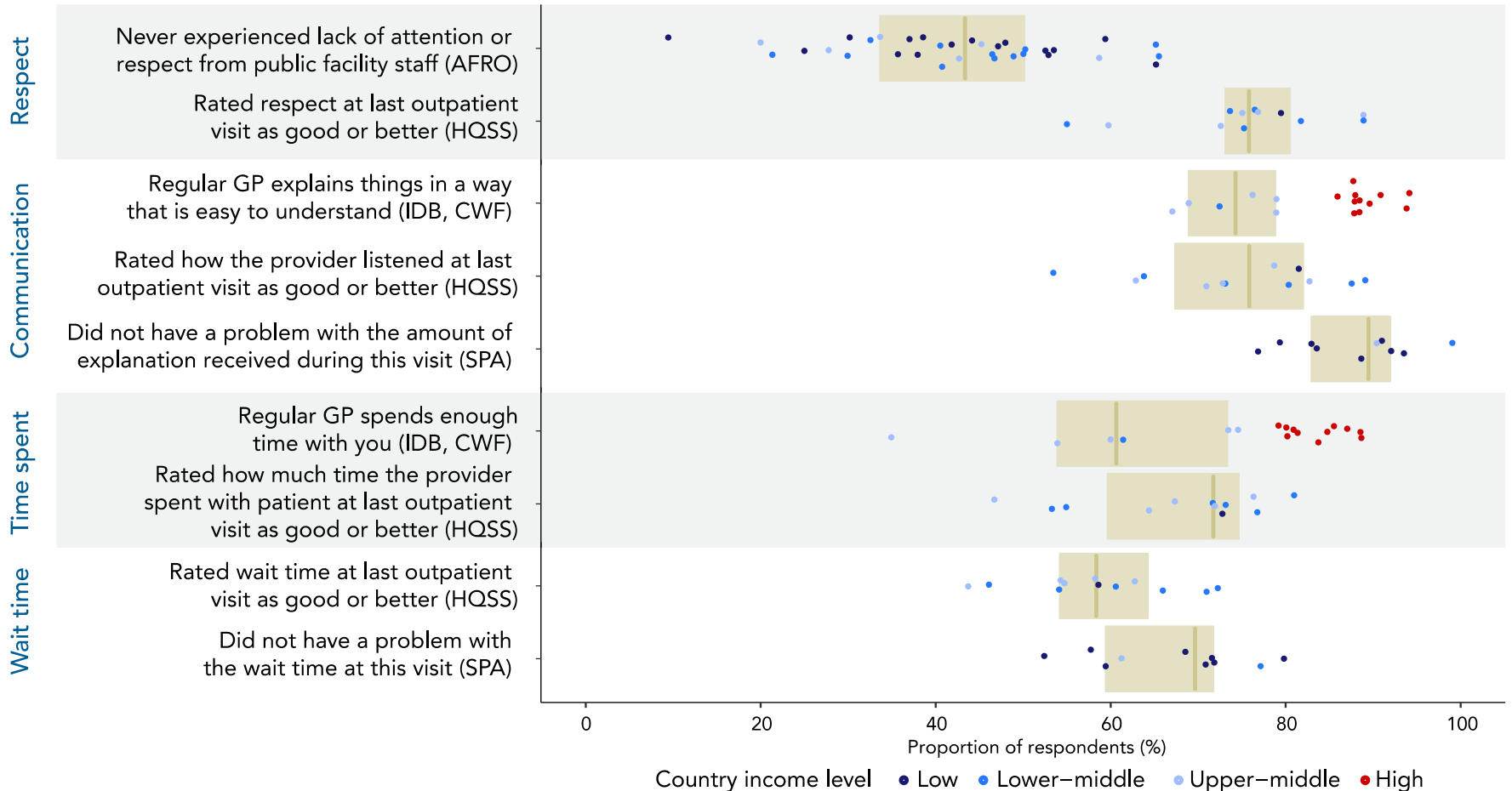


Figure 1: Proportion of providers who completed history and physical examinations for standardised patient 1 cases (n=75 interactions)

Standardised patient 1 presented as a classic case of presumed tuberculosis with 2–3 weeks of cough and fever. Each bar shows the proportion of providers who asked the corresponding question or completed the corresponding examination. For instance, 93% of all providers asked about cough duration and 76% of all providers auscultated the patient.

Approximately 1/3 of patients experience disrespectful care, short consultations, poor communication or long wait times



Health workers yell at us like a slave ... That is the reason why people do not want to go to the hospital although they have a letter of referral"

- Timor-Leste patient

"[Do you not want to live?] They tell him that he will kill his whole family, by infecting them, that they will tell his friends, who won't want to spend time with him when they find out he has a strong form of TB they can catch."

- South African nurse

"The hospital is like a prison"

- Russian patient

"If you are coughing, this is not the right place to come. Go to the TB corner!"

- Zambian nurse

Competent systems?

Safety: 6 surgical site infections for every 100 operations vs. 0.9 per 100 in US



Prevention: 36% of women in 9 countries in Latin America received pap smear

Continuity: 1 in 5 people on ART stop treatment within one year

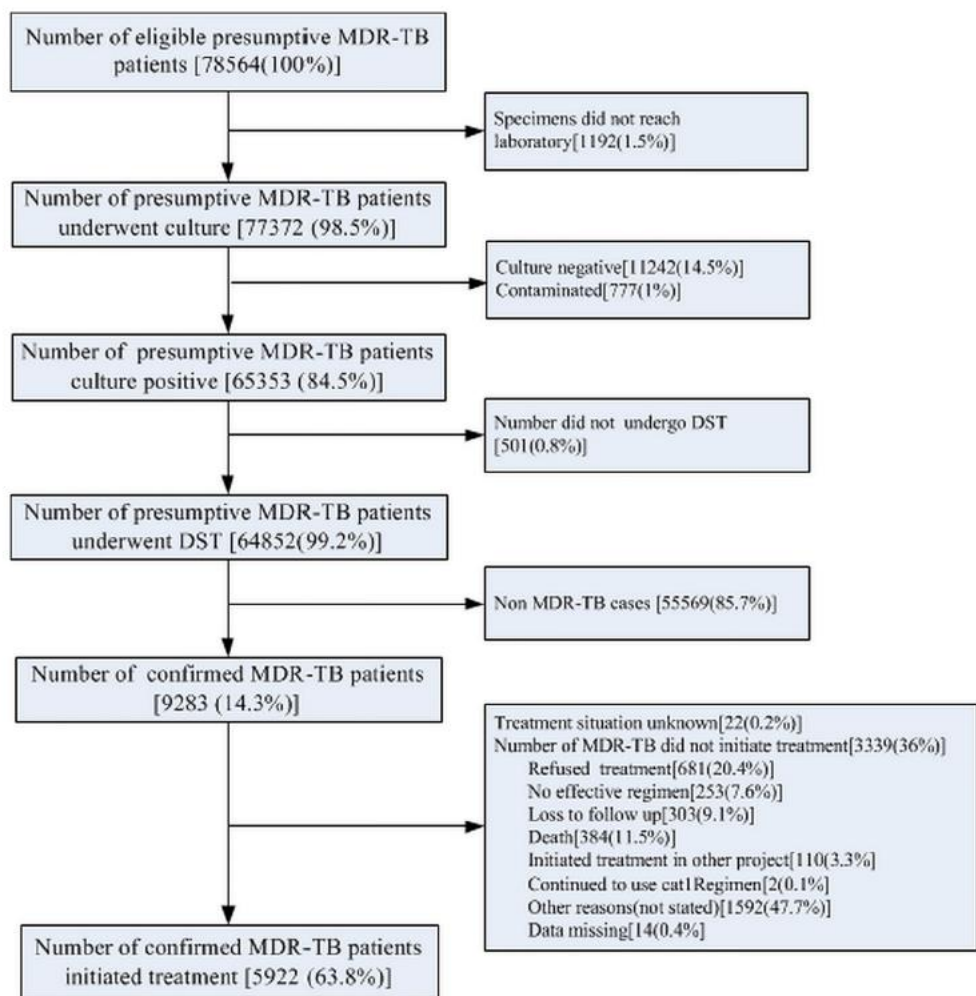


Timely action: <50% of women had postpartum check within 1 hour; 11.7 days from admission to surgery for femur fracture vs. 0.6 in US

Population health management: <1/2 adults over 40 in 6 countries in Latin America had BP checked in past year



Timeliness in MDR-TB care in China



Median delay

Diagnosis: 84 days

Treatment: 23 days

Attrition

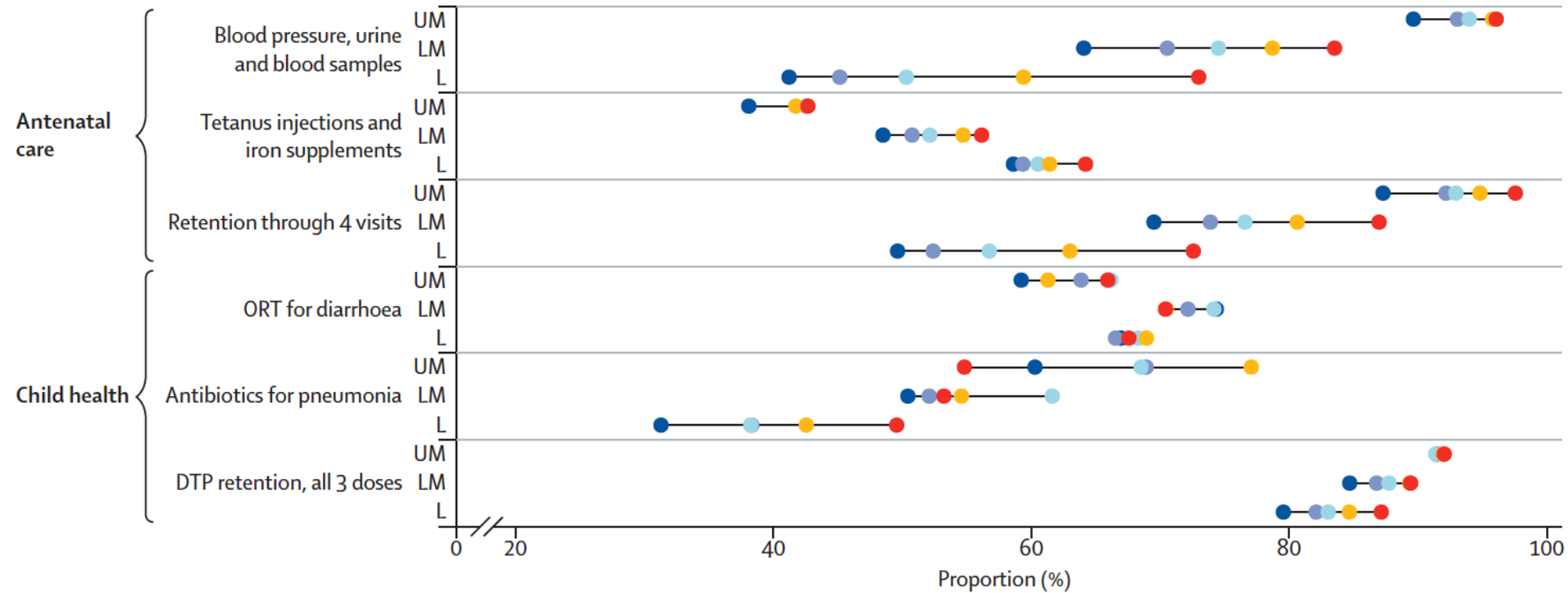
Pre-diagnosis: 3.1%

Pre-treatment: 36.2%

Poor quality for the poor

Country income level L = lower income LM = lower-middle income UM = upper-middle income
 Wealth quintiles ● Q1: poorest ● Q2 ● Q3 ● Q4 ● Q5: least poor

A



Fewer than 1 in 4 people believe their health system works well

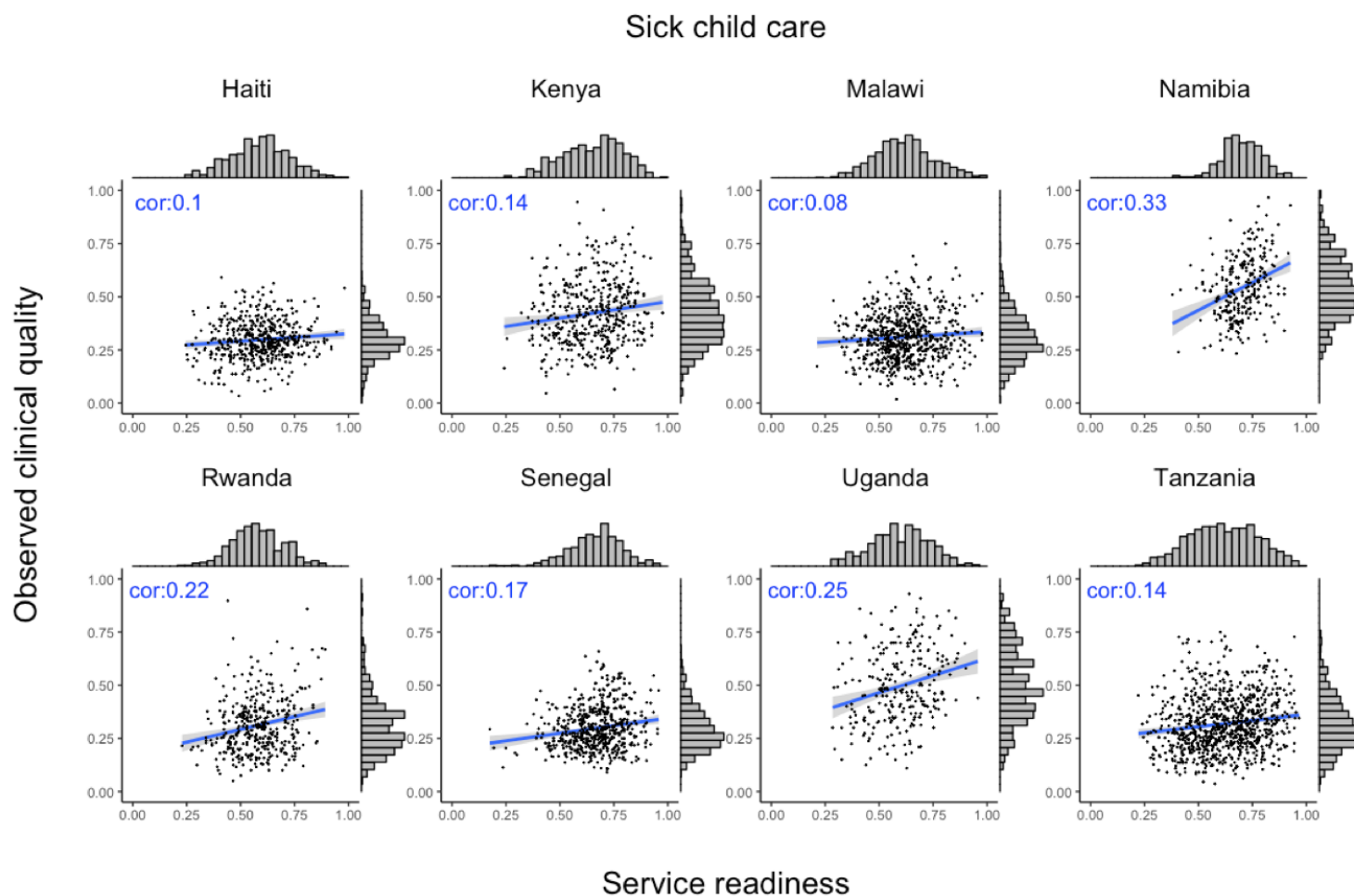


4. Health systems should measure and report what matters most to people: **competent care, user experience, health outcomes, and confidence** in the system

Current quality measurement in LMICs is not fit for purpose; measurement should be for accountability and action

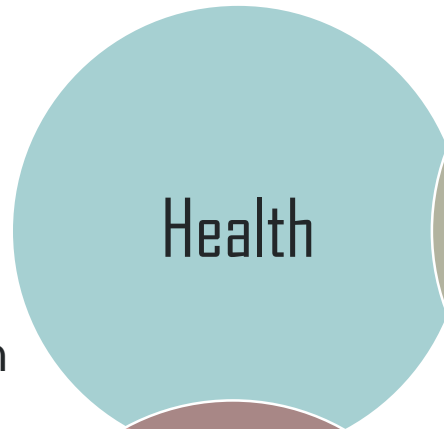
	Quality-relevant indicators	Foundation	Process of care		Quality Impact		
		All	Competent care	User experience	Health outcomes	Confidence	Economic benefit
Global measurement sets							
Countdown 2030 Indicators	91	41	26	1	23	0	2
SDG health Indicators	28	11	7	1	8	0	1
WHO Core 100 (2015)	49	15	14	0	18	0	2
Cross-national measurement sets							
DHS	72	4	51	2	14	0	1
SDI	726	723	2	0	1	0	0
SPA	1269	784	349	108	22	6	0
Example national measurement sets for routine health system measurement							
Kenya HIS	135	60	53	3	17	0	0
Mexico IMSS, ISSSTE, MOH	471	205	97	36	103	17	13
Nepal HMIS	183	89	39	0	32	0	0

Inputs are not indicators of quality



Fewer, better measures

tuberculosis mortality
maternal mortality
30 day AMI mortality
depressive symptoms
asthma hospitalization



Competent
care &
systems

accurate diagnosis
correct treatment
time to cancer treatment
surgical site infection
decision to incision

customer service:
wait times, ease of
use

respect: dignity,
voice, confidentiality



Confidence

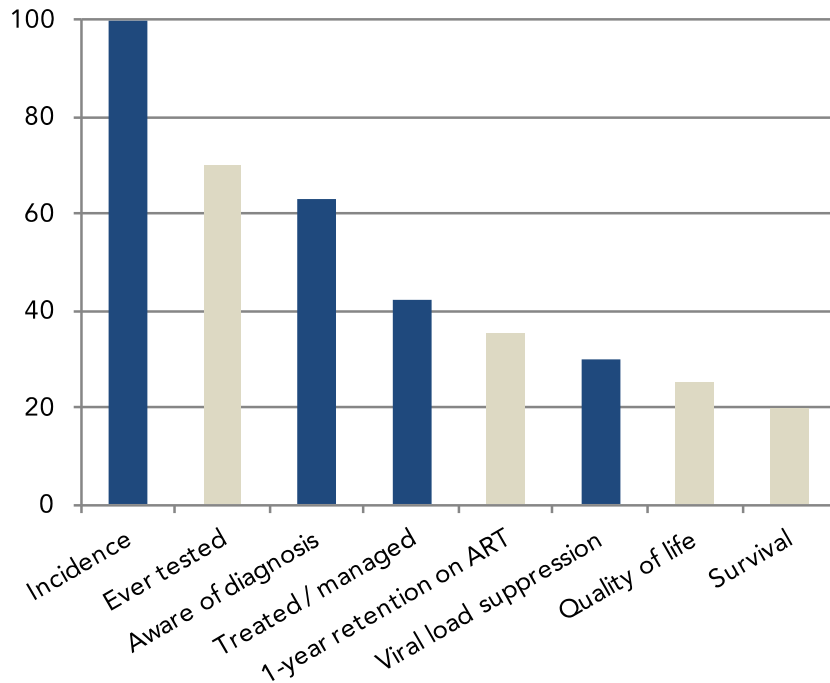
service uptake
use of primary care
retention
trust
endorsement

Sample TB metrics

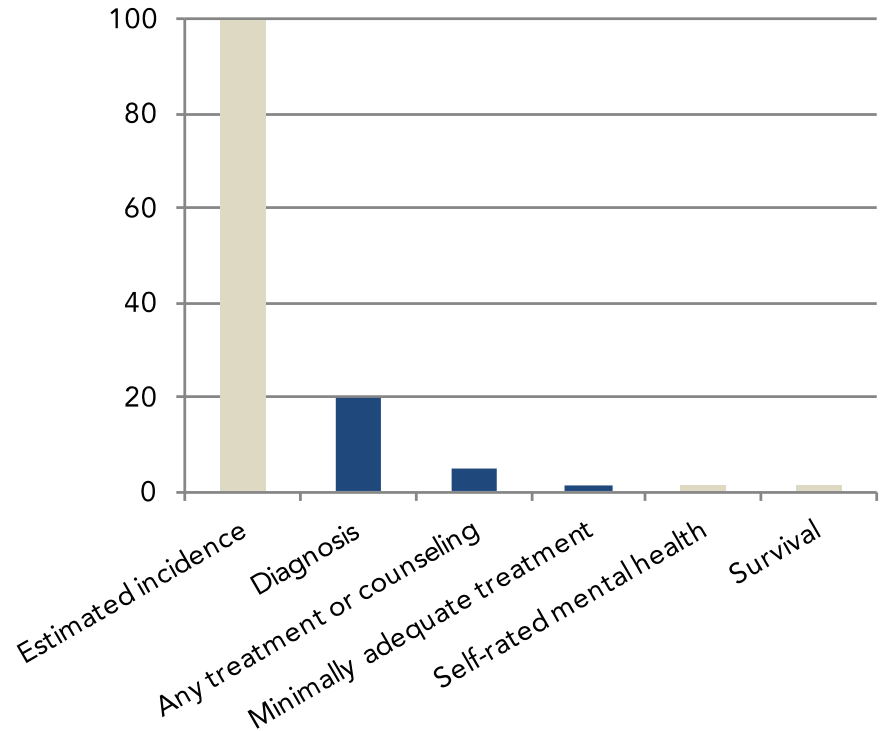
Quality impacts	
Health	<ul style="list-style-type: none"> - Avertable TB deaths - TB treatment success rate - Daily functioning and quality of life among TB patients⁹ - Serious health-related suffering caused by TB¹⁰
Confidence	<ul style="list-style-type: none"> - Proportion of TB patients who bypassed the public system for care - Proportion of TB patients who are confident in their ability to receive the most effective treatment if they are sick¹² - Proportion of TB patients who would recommend the clinic to others with the disease
Economic	<ul style="list-style-type: none"> - Number of productive days lost to TB - Proportion of TB patients with catastrophic care expenditures - Avoidable hospitalizations due to TB
Processes of care	
Competent care	<ul style="list-style-type: none"> - Proportion of providers correctly diagnosing TB - Proportion of patients managed according to the International Standards for TB Care guidelines
Competent systems	<ul style="list-style-type: none"> - Proportion of high-risk individuals screened for TB - TB case detection rate - TB case notification rate - Average days between first contact with the health system and definitive TB diagnosis and treatment ³¹ - National TB cascades of care (showing the proportion of patients lost at every step) (figure 2) ^{23,24}
User experience	<ul style="list-style-type: none"> - Proportion of TB patients with high ratings for provider's respectful attitude, communication, explanations received, respect for their privacy and confidentiality - Average wait time in TB diagnostic centers

Whole system measure: care cascades to diagnose health system quality

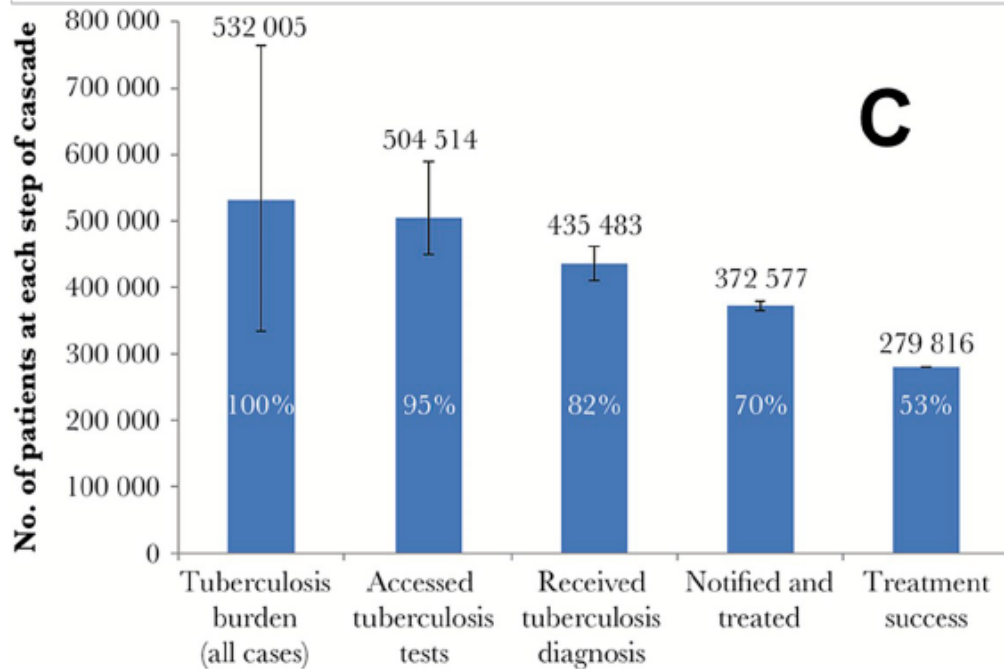
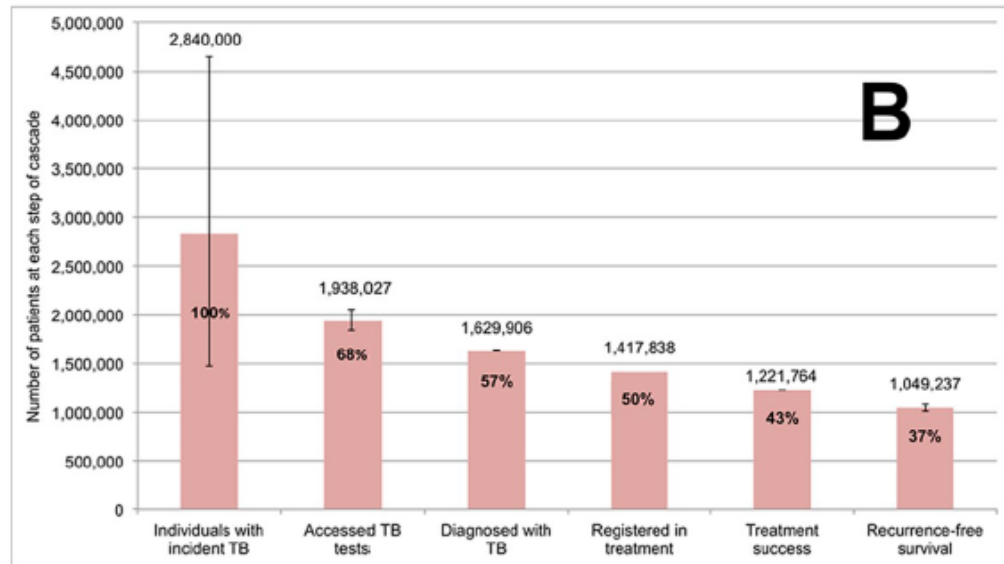
HIV and AIDS



Mental health: major depressive disorder

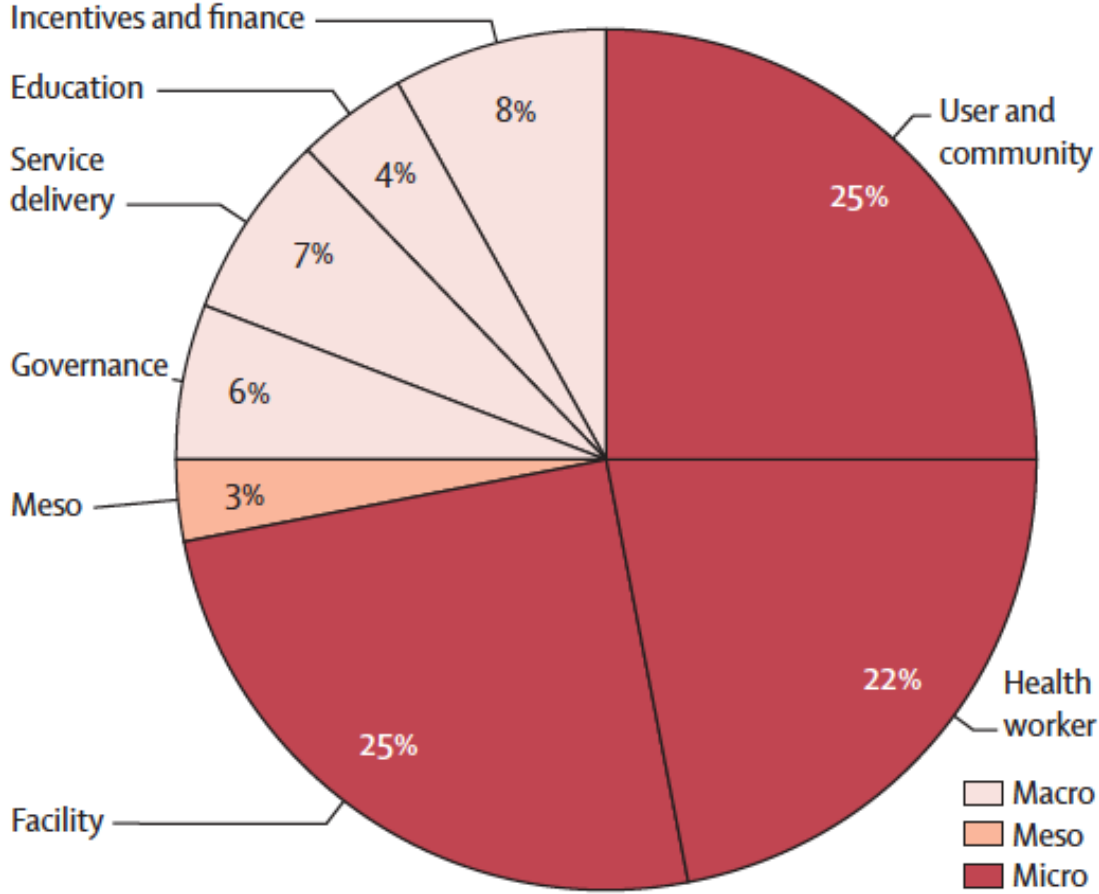


TB care cascades in India and South Africa



5. Improving quality at scale will require thinking beyond the clinic; political commitment and system-wide action are imperative

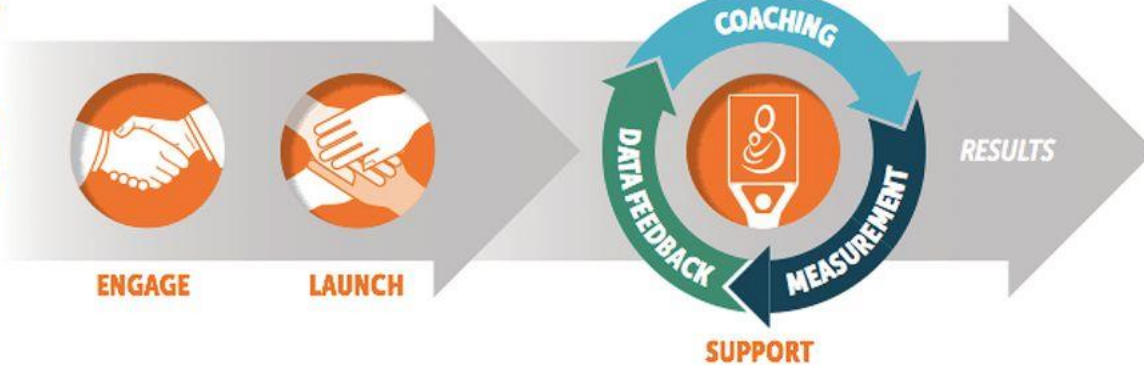
Most improvement research is at point of care



Types of interventions and levels targeted to improve quality of primary healthcare in LMICs according to the published literature from 2008-2017

Weak health systems defeat micro-level "fixes"

THE CHECKLIST



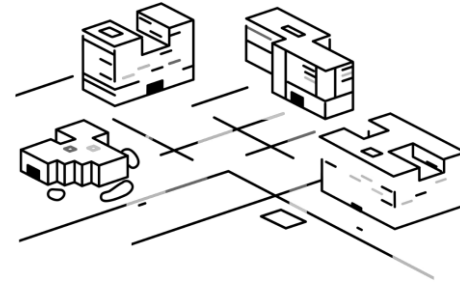
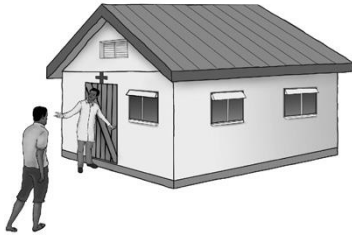
Strengthened Individual & System Standards

LEADING TO



Improved Maternal & Neonatal Quality of Care

We need to expand solution space for improvement



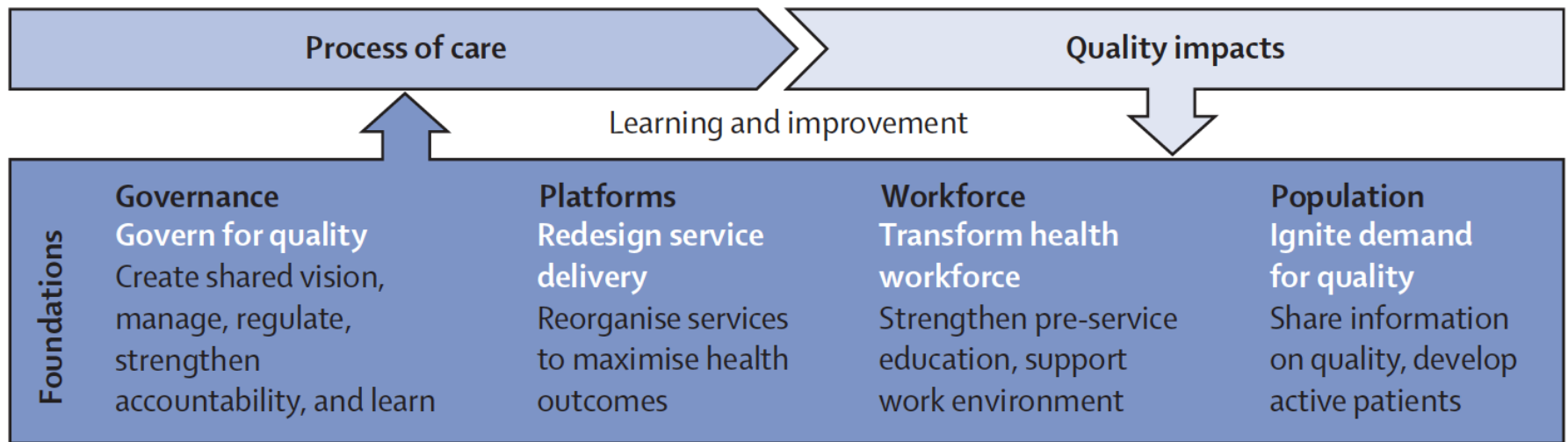
Local (micro)

Facility level
Behavior change
Local scale

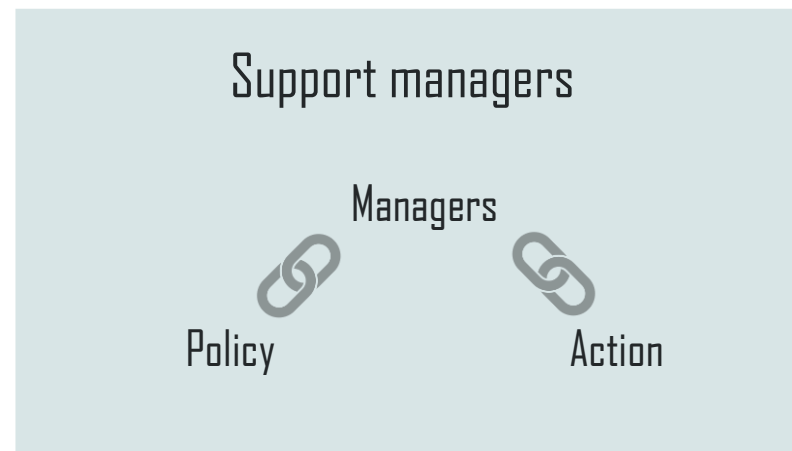
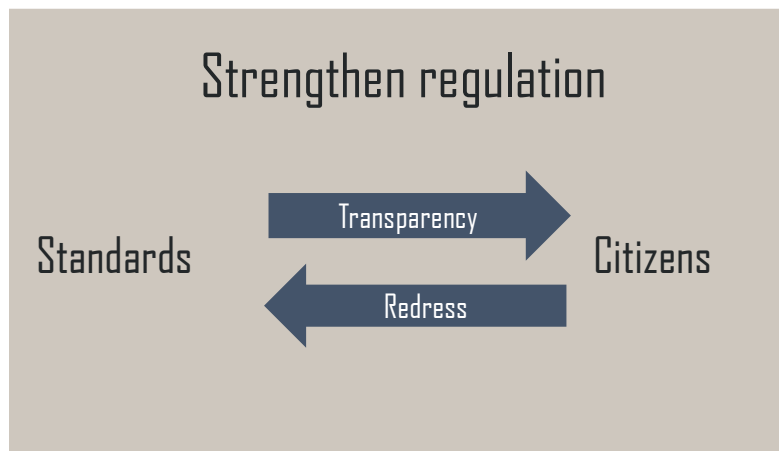
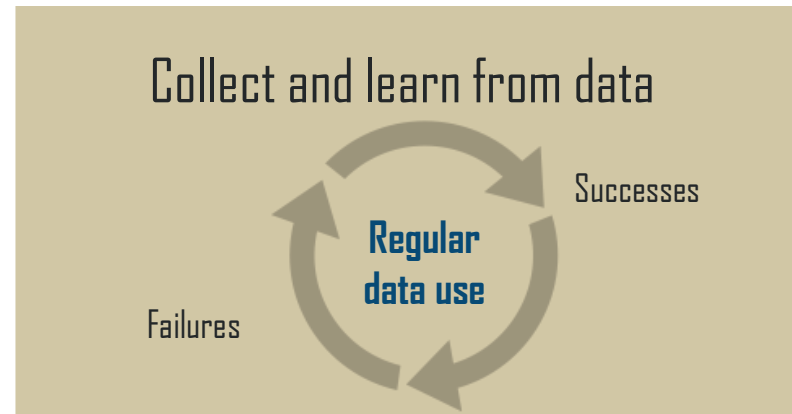
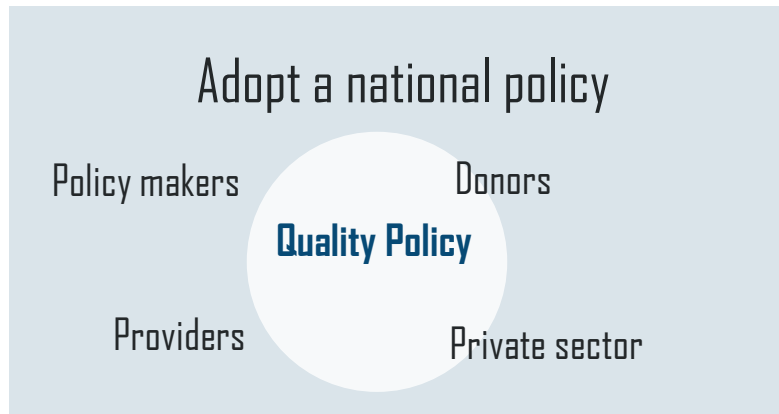
Structural (macro)

System level
Slower to implement
Large scale

Structural reforms: four universal actions



1. Govern for quality



As countries expand health care to UHC, services must be accompanied by a minimum guarantee of quality



Do
no harm

Be respectful
and people-
centered

Provide
health
benefit

Other elements of national quality guarantees must be context specific

2. Redesign service delivery

Reorganize services to maximize health outcomes

Conditions that demand advanced clinical expertise



Tertiary



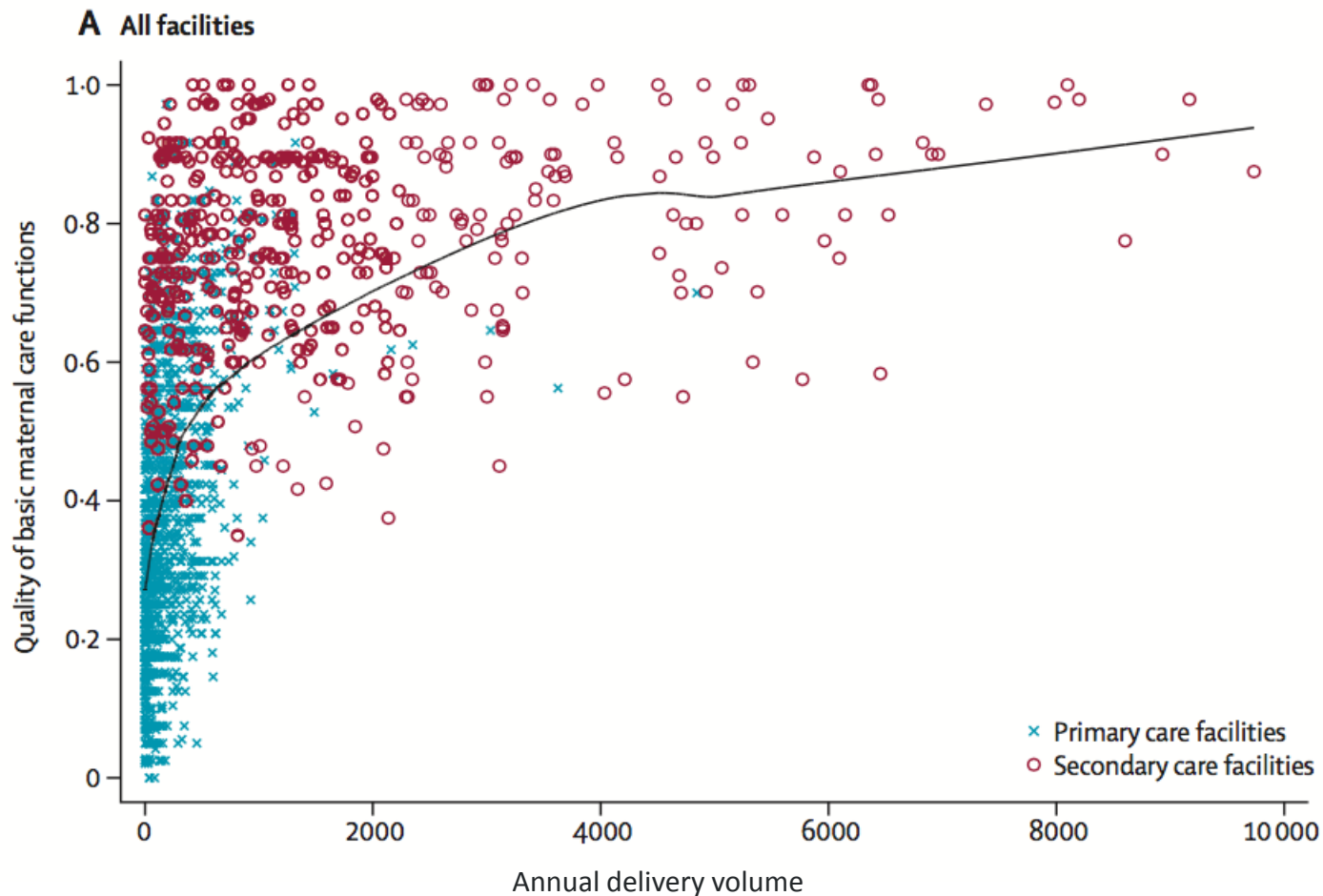
Secondary



Primary

Low-acuity conditions requiring coordinated, continuous care

In 5 countries hospitals performed much better than clinics for delivery



3. Transform health workforce

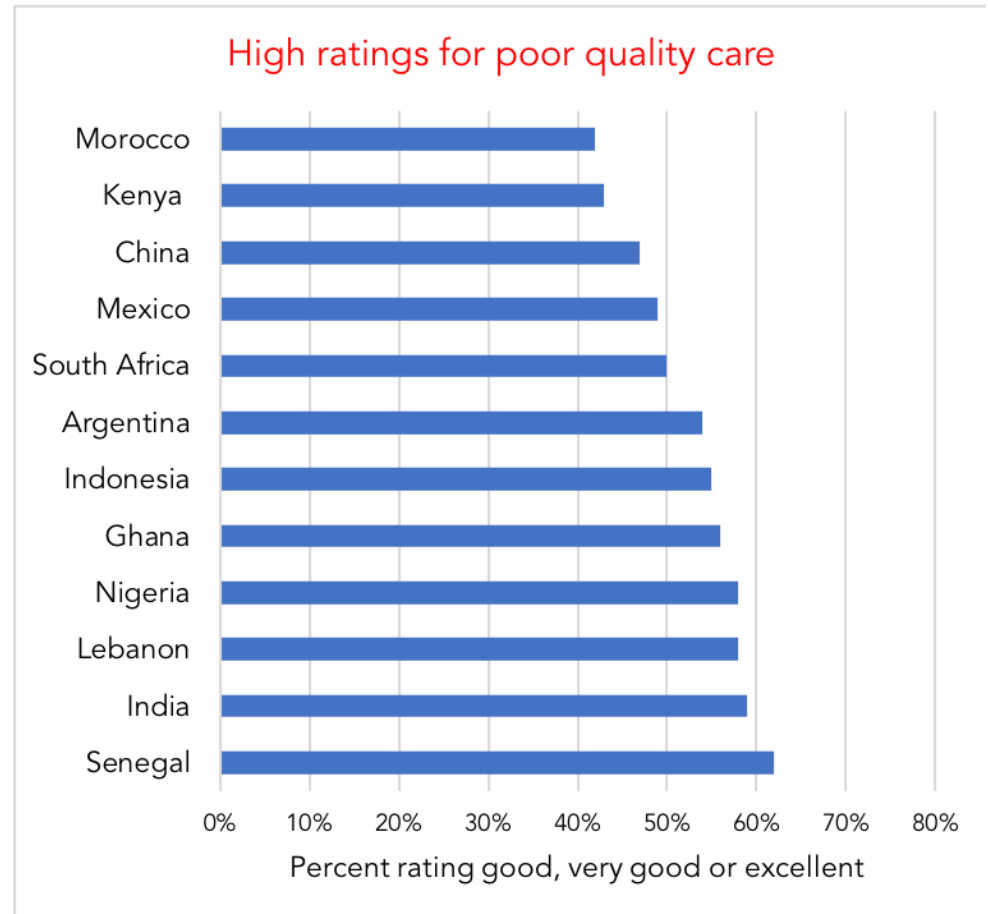
Strengthen health professional education

Build an enabling work environment beyond graduation






4. Ignite demand for quality

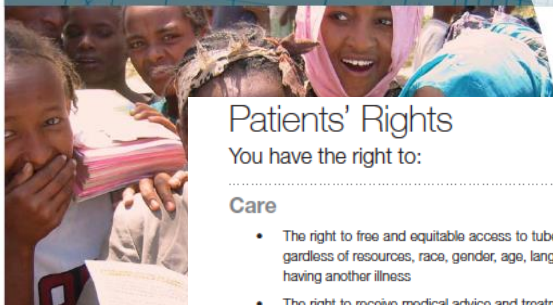
[Anthony] is a 45-year old man with high blood pressure who needs a regular check up. At the health facility the nurse does greet him and introduce herself and change his medication. She does not ask about his symptoms or check his blood pressure.



Inform and involve communities; make feedback count

<p>Quality reporting</p> <p>Share data on quality with communities</p> 	<p>Community monitoring</p> <p>Establish community boards to assess performance and provide feedback</p> 	<p>Redress mechanisms</p> <p>Provide channels for effective feedback and health system response</p> 
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Tuberculosis Care



Patients' Rights

You have the right to:

Care

- The right to free and equitable access to tuberculosis care, from diagnosis through treatment completion, regardless of resources, race, gender, age, language, legal status, religious beliefs, sexual orientation, culture, or having another illness
- The right to receive medical advice and treatment which fully meets the *new International Standards for Tuberculosis Care*, centering on patient needs, including those with multidrug-resistant tuberculosis (MDR-TB) or tuberculosis-human immunodeficiency virus (HIV) coinfections and preventative treatment for young children and others considered to be at high risk
- The right to benefit from proactive health sector community outreach, education, and prevention campaigns as part of comprehensive care programs

Dignity

- The right to be treated with respect and dignity, including the delivery of services without stigma, prejudice, or discrimination by health providers and authorities
- The right to quality healthcare in a dignified environment, with moral support from family, friends, and the community

Information

- The right to information about what healthcare services are available for tuberculosis and what responsibilities, engagements, and direct or indirect costs are involved
- The right to receive a timely, concise, and clear description of the medical condition, with diagnosis, prognosis (an opinion as to the likely future course of the illness), and treatment proposed, with communication of common risks and appropriate alternatives
- The right to know the names and dosages of any medication or intervention to be prescribed, its normal actions and potential side-effects, and its possible impact on other conditions or treatments
- The right of access to medical information which relates to the patient's condition and treatment and to a copy of the medical record if requested by the patient or a person authorized by the patient
- The right to meet, share experiences with peers and other patients and to voluntary counseling at any time from diagnosis through treatment completion

Choice

- The right to a second medical opinion, with access to previous medical records
- The right to accept or refuse surgical interventions if chemotherapy is possible and to be informed of the likely medical and statutory consequences within the context of a communicable disease
- The right to choose whether or not to take part in research programs without compromising care

Confidence

- The right to have personal privacy, dignity, religious beliefs, and culture respected
- The right to have information relating to the medical condition kept confidential and released to other authorities contingent upon the patient's consent

Justice

- The right to make a complaint through channels provided for this purpose by the health authority and to have any complaint dealt with promptly and fairly
- The right to appeal to a higher authority if the above is not respected and to be informed in writing of the outcome

Organization

- The right to join, or to establish, organizations of people with or affected by tuberculosis and to seek support for the development of these clubs and community-based associations through the health providers, authorities, and civil society
- The right to participate as "stakeholders" in the development, implementation, monitoring, and evaluation of tuberculosis policies and programs with local, national, and international health authorities

Security

- The right to job security after diagnosis or appropriate rehabilitation upon completion of treatment
- The right to nutritional security or food supplements if needed to meet treatment requirements

Patients' Responsibilities

You have the responsibility to:

Share Information

- The responsibility to provide the healthcare giver as much information as possible about present health, past illnesses, any allergies, and any other relevant details
- The responsibility to provide information to the health provider about contacts with immediate family, friends, and others who may be vulnerable to tuberculosis or may have been infected by contact

Follow Treatment

- The responsibility to follow the prescribed and agreed treatment plan and to conscientiously comply with the instructions given to protect the patient's health, and that of others
- The responsibility to inform the health provider of any difficulties or problems with following treatment or if any part of the treatment is not clearly understood

Contribute to Community Health

- The responsibility to contribute to community well-being by encouraging others to seek medical advice if they exhibit the symptoms of tuberculosis
- The responsibility to show consideration for the rights of other patients and healthcare providers, understanding that this is the dignified basis and respectful foundation of the tuberculosis community

Show Solidarity

- The moral responsibility of showing solidarity with other patients, marching together towards cure
- The moral responsibility to share information and knowledge gained during treatment and to pass this expertise to others in the community, making empowerment contagious
- The moral responsibility to join in efforts to make the community tuberculosis free

6. New research is vital for the transformation to high quality health systems

Research agenda

Measurement

New quality metrics: trust, patient experience, timeliness, competence, effective coverage

Agile facility surveys

Updated population surveys

Course of care trackers

Improvement

Evaluation of universal actions

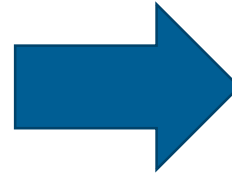
- Governance innovation
- Service redesign
- Clinical education reform
- Igniting demand

Best performer studies

Implementation science studies of targeted strategies

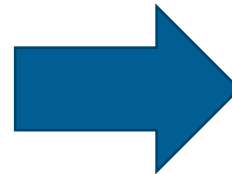
Research: develop new measurement

- Interactive vignettes
- Human diagnosis project



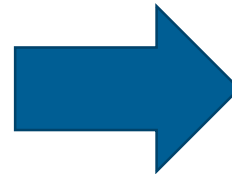
Care
competence

- SMS patient surveys
- Happyornot



Patient
experience

- E-cohort
- Patient registries



System
competence

High Quality Health System Dashboard

Country, Year

SYSTEM COMPETENCE

Prevention and detection



Children with complete immunization per national guidelines: 00%



Adults with up to date NCD screening per national guidelines: 00%

Timely care

Percentage of cancer treated in early stage



Percentage of women receiving oxytocin within 1 min of delivery



Median time from injury to admission:
XX minutes

Safety

Percentage of hospital-acquired infection



Percentage of unsafe injections

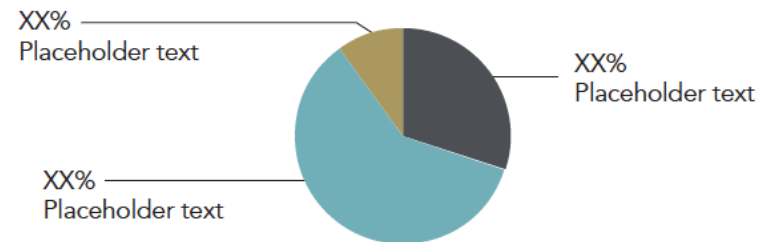


Integration

Proportion of adults with NCD screened for multimorbidity (e.g., TB/diabetes, hypertension/diabetes)



Nutrition for mothers and children



R&D Centers for Health System Quality

Problem

- Major evidence gaps in measurement and improvement science
- Research on quality is focused on the point of care
- Measures are out of date, slow and miss important dimensions
- Countries looking for advice on how to design systems for high quality performance
- Countries should learn from each other and avoid expensive failures

Solution

- R&D centers to build evidence for countries, produce science and global public goods, and train health system scientists

Utilization x **Quality** = Health