Leveraging quality improvement to strengthen primary care systems in the face of NCDs: A Case Study from Ecuador
Roadmap

1. Background
2. The problem
3. The opportunity
4. Aim
5. Theory of change
6. Results
7. Lessons learned
8. Recommendations
Health care quality gaps

In 2016, approx. 8.6 million people died due to causes amenable to healthcare in LMICs (Kruk, Gage, Joseph, et al., 2018):

- 5 million due to poor-quality care
- 3.6 were due to non-utilization of health care services
- Economic loss = USD$ 6 trillion
The global healthcare quality chasm

Figure 5: Deaths from Sustainable Development Goal conditions due to poor-quality care and non-utilisation in 137 low-income and middle-income countries

Fuente: Kruk et. al, 2018
A growing epidemic of diabetes
- 41 million adults are living with DM2 in Latin America
- 25-50% patients remain undiagnosed
- Only 60% of patients receive regular, long-term treatment
- Only 10-25% of patients receiving treatment are under clinical control
The Opportunity
Primary care
Evidence-based care
- 35% and 54% average adherence to clinical guidelines for the management of childhood illnesses and the provision of antenatal care across primary care facilities in nine LMICs (appendix 2).

Competent systems: safety
- 32% mean compliance with appropriate infection prevention practices in primary care facilities in Kenya, ranging from 2% for hand hygiene to 87% for injection and blood sampling safety. 619

Competent systems: prevention and detection
- 48% of adults across six LMICs are up to date with preventive exams (blood pressure and cholesterol check). 619
- 20% of women aged 50–69 years across six LMICs had a mammogram in the past 3 years (appendix 2). 620

Competent systems: continuity
- 66% of respondents across six LMICs report that their regular doctor knows important information about their medical history (appendix 2). 619
- 40% of patients across six LMICs report assistance from their primary care doctors in coordinating their care (appendix 2). 619

User experience
- 23% effective access to primary care in Haiti, defined as the proportion of the population living within 5 km of a primary care facility of good quality. 621
- 49 min average waiting time in primary care facilities in a simulated patient study in Nairobi, Kenya. 622
- <5 min mean primary care physician consultation length across studies in 18 LMICs, covering about 50% of the world’s population. 623

Impacts: bypassing
- 44% of patients across six LMICs used emergency rooms for conditions that could have been treated at the primary care level (appendix 2). 619
- 40% of people in a study in Ethiopia sought routine maternal and child care (including antenatal care, family planning, and vaccinations) from hospitals. 614

Figure 9: Quality of care across health system platforms in low-income and middle-income countries (LMICs)
DALYs=disability-adjusted life-years. HDI=Human Development Index. References can be found in appendix 1.

Figure 2: Adherence to evidence-based guidelines and diagnostic accuracy
Dots represent country-specific means, vertical bars indicate median performance across countries, and boxes delineate the IQR. Indicator definitions are shown in appendix 1, and country-specific means are shown in appendix 2.
Quality and Safety as a cross-cutting theme

Source: Adapted from OMS, 2007; Kruk et al., 2018
High-Quality Primary Care Framework

The Opportunity

Implementing Partners

15 Primary care clinics

6 Quality Improvement Teams
Our approach: Building QI capacity to strengthen systems

Aim:
- Improve clinical outcomes for patients with DM2 across participating primary care facilities

KEY

LS = Learning Session
AP = Action Period

Planning and Preparation Phase
➤ Ongoing support

Pre-work call

LS1
Mar ‘18

LS2
Jul ‘18

LS3
Nov ‘18

AP1

AP2

AP3

12 months

Monthly calls + Ongoing Support:
Coaching calls, in-person visits, online support, leadership engagement
Continuous data collection, analysis and feedback

What are we trying to accomplish?
How will we know that a change is an improvement?
What change can we make that will result in improvement?

Act
Plan
Study
Do

Plan for Holding the Gains
Enable people to change on "their own terms"
Focus on priority conditions and populations

*Identify and prioritize health conditions with the highest burden of disease*
*Identify and prioritize health system needs*

Adopt a culture of continuous learning and improvement

*Adoption of learning systems and use of data for improvement*
*Build QI capacity and capability*
*Promote effective teamwork and communication*
*Actively communicate with and engage leadership*
*Standardize clinical processes*
*Build clinical capacity*
*Promote adherence to clinical best practices (protocols, guidelines, algorithms)*
*Provide accompaniment and supervision*
*Build provider-patient/family partnerships*
*Co-design and co-produce with patients, families and communities*
*Promote shared-decision making*
*Adapt health literacy and education approaches to local context*

Ensure clinical process reliability and continuity of care

*Supply chain strengthening*
*Adoption of task-sharing approaches*
*Improve workflow*
*Establish community partnerships*
*Partner with other Ministries and NGOs*

Build inter-sectoral collaboration to address SDH

*Improve health and wellbeing for ALL*
By December 2018, we will increase the percentage of patients with diabetes in clinical control (HbA1c <7) by 50% across 15 primary care clinics of Ecuador.

- **Timely and convenient access to care**
  - Diabetes screening
  - Linkage to care
  - Integration and coordination of services
  - Access to medications
  - Attendance to follow-up appointment
  - Treatment adherence

- **Follow-up**
  - Screening of at-risk population groups
  - Access to primary care, specialized care
  - Referral pathways
  - Follow-up with patients after clinical visit to review medications

- **Patient self-management**
  - Call patients 24 hours before next appointment
  - Medication card, patient information leaflet, adherence aid
  - Provide group sessions

- **Identifying and addressing social determinants of health**
  - Culturally sensitive and linguistically appropriate education programs
  - Multi-disciplinary teams and support
  - Development of self-management plans together with patients and their families

- **Quality Improvement infrastructure**
  - Linkage to transportation services (i.e. Lyft)
  - Partnership with local supermarkets
  - Active leadership involvement (i.e. regular huddles, meetings)
  - Quality improvement trainings
  - Access to subject-matter experts
1. Active case finding in clinic
2. Active case finding in the community
3. Prioritary scheduling for high-risk/uncontrolled patient
4. Accompaniment through CHWs

Active screening and early detection

Attendance to follow up visits

Attending to follow up visits

1. Identification of patients with highest no-show rates
2. Prioritary scheduling (i.e. assigning appointments based on patients’ availability)
3. Appointment reminders (calls, texts, home visits)
4. Improved access to diagnostic tests
% patients with DM2 who receive effective* care

- Clinical training
- Activation of referral network
- Development of clinical algorithms
- Home visits
- Push/pull system for supply chain strengthening

Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan '19
% patients with DM2 under clinical control (HbA1c <=7)
Building QI capacity within systems provides an opportunity to help re-orient processes and to enable the effective use and optimization of limited resources to unlock the untapped potential of systems to achieve better care and better health for ALL.
For more information, contact:

jarrieta@ihi.org

@arrieta_jafet