Tuberculosis Clinic-Laboratory Interface Continuous Quality Improvement (CLICQ!) Project Implementation in Nigeria

Eke Ofuche
September 20th, 2022
Notable gaps occur between steps where patients and/or specimens transit between HIV and TB clinics, TB laboratories and TB treatment centers.
**Project Name:** Tuberculosis Clinic-Laboratory Interface Continuous Quality Improvement (TB-CLICQ!)

**Partnerships:** National/State TB and HIV Programs, CDC, IRESSEF

**No of States:** 1 + 2

**No of facilities:** 5 Facilities + 10

**Funded by:** CDC/IRESSEF
Project Objectives

Obj 1
Increase the number of persons with presumptive TB receiving timely TB testing and results

Obj 2
Increase the number of people initiated on TB treatment

Obj 3
Increase the number of people initiated on TB preventive treatment by increasing capacity to rule out active disease

Obj 4
Reduce TB diagnostic cascade turnaround times
<table>
<thead>
<tr>
<th>Activities</th>
<th>May 2019</th>
<th>June 2019</th>
<th>July 2019</th>
<th>Aug 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre workshop preparations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DiCE Entry Assessment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshop 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TA Vist</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshop 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TA Visit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshop 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TA Visit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow-up Assessment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CQI Workshops

Workshops are held including participants from National and State-level TB and HIV programs, ART clinic, TB clinic, lab, and M&E staff. Participants:

• Examine results of the DiCE assessments

• Complete process mapping and learn principles of CQI

• Identify improvement projects and metrics to monitor weekly site progress
DiCE Tool – Example Cascade Analysis

Figures are auto-populated from job aids.

Issue identified: More specimens collected than are received by the lab.

TB Diagnostic Cascade

Issue identified:
More specimens collected than are received by the lab.

46% success rate.

1. Presumptive TB
2. Presumptive TB with specimen collected
3. Presumptive TB with specimen received by lab
4. Presumptive TB with specimen successfully tested
5. Presumptive TB with Xpert MTB/RIF test result
6. Presumptive TB with test result in clinic
7. Presumptive TB with Xpert "MTB Detected" result in lab
8. Presumptive TB with "MTB Detected" result in clinic
9. Patients initiating TB treatment
10. Patients cured or completing TB treatment
### First Improvement Project on referral interface

<table>
<thead>
<tr>
<th>Clinics</th>
<th>Gaps</th>
<th>Before</th>
<th>After</th>
<th># Additional Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinic 1</td>
<td>Patient referral records</td>
<td>59%</td>
<td>100%</td>
<td>+ 100</td>
</tr>
<tr>
<td>Clinic 2</td>
<td>Specimen collection</td>
<td>79%</td>
<td>96%</td>
<td>+ 147</td>
</tr>
<tr>
<td>Clinic 3</td>
<td>Patient referral records</td>
<td>103%</td>
<td>104%</td>
<td>- 8*</td>
</tr>
<tr>
<td>Clinic 4</td>
<td>Patient referral</td>
<td>87%</td>
<td>100%</td>
<td>+ 59</td>
</tr>
<tr>
<td>Clinic 5</td>
<td>Specimen referral</td>
<td>70%</td>
<td>100%</td>
<td>+ 29</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>+20%</td>
<td>+ 327</td>
</tr>
</tbody>
</table>

* More presumptive TB patients with specimen received in the lab than was documented in the clinic TB Presumptive register
Over the 4-month pilot in Nigeria, improvement was observed across all sites:

- 27% increase in total # with presumptive TB
- 25% increase in number of TB treatment initiations
- Percent with a specimen collected increased from 91% to 98%
- Percent with a specimen tested by Xpert increased from 80% to 97%
Due to success of CLICQ!, all Nigeria CDC IPs that support TB/HIV patient management have updated their operational scopes of work to include CLICQ!

As of 2020, CLICQ! has been taken up by the Nigerian NTP and incorporated into routine site visits and assessments.

CLICQI is being scaled up to other states in a phased approach with support from CDC partners.

CLICQI is being integrated into routine CQI program (State CQI Multidisciplinary Teams has been established).
Gaps exist along the TB treatment cascade, and these affect the quality of TB services.

These gaps are usually not recognized because HCW providing TB services are not working as a multidisciplinary team.

As a structured and mentorship-based program CLICQ! helps facilities to continuously improve the lab-clinic interface.

It brings together ART clinic, TB clinic and TB laboratory staff at the facility level as a team.

Improvements are easier achieved working together as a team.

It brings together facilities in a ‘collaborative’ to share experiences, successes, challenges and instill healthy competition.
Challenges

- Human resource challenges / high work load
- Incomplete data and entry errors at facility level
- Inadequate commitment on CQI activities
- Absence of facility CQI teams in some facilities
Acknowledgements

• National TB and Leprosy Control Program (NTBLCP)
• National AIDS and STD Control Program (NASCOP)
  • Benue State Government
  • CDC Atlanta and Nigeria
  • IRESSEF/ASLM
THANK YOU

APIN Public Health Initiatives
Plot 1551, Apo Resettlement | Zone E | Apo FCT | Abuja | Nigeria
☎️ +234-9-7809-377
| www.apin.org.ng