**Introduction to Continuous Quality Improvement for Project Coordinators**

Ciheb’s outcomes, monitoring, and evaluation program in Nigeria combines continuous quality improvement (CQI) and evaluation activities to measure success at the patient level, provider level, and program level. These activities are accomplished through five fundamental strategies:

1. Continuous observation and measurement of standards of care delivery and program management.
2. Linking available patient health information and program characteristics as a predictor of treatment outcomes.
3. Collecting information on adherence to treatment and treatment support.
4. Comprehensive and useful feedback of the information.
5. Utilization of outcomes analysis to design site-specific improvement activities.

**Program cycle for an HIV quality improvement program**

* Step 1: Develop and plan the program.
  + Form a quality improvement committee.
  + Develop a quality improvement management plan.
  + Strategize to implement the quality plan.
  + Develop a workplan.
* Step 2: Facilitate the implementation of the program.
  + Establish performance measurement systems.
  + Establish improvement project teams.
  + Build support for the HIV quality program.
* Step 3: Evaluate the program.
  + Evaluate HIV quality program effectiveness and facilitate future planning.
  + Evaluate project team performance.
  + Strategize to sustain the HIV quality program and its activities.

**1. Continuous Quality Improvement**

***This is an approach to the continuous study and improvement of the processes of providing services to meet the needs of the individual and others. It is very important for the following reasons:***

* ***It ensures and improves the quality of the overall program.***
* ***It will determine the ability to scale antiretroviral (ARV) treatment programs, which are dependent on efficient and sustainable care.***

Continuous quality improvement methods include the following:

1. **Performance measures (NigHIVQual)**

Currently, SEEDS measures the following indicators every six months in line with the indicators for the Nigerian HIVQual. There are more indictors that are currently being measured in various HIV programs and can be assessed on the webpage of the National Quality Center or the Institute for Healthcare Improvement.

* Continuity of care and appointment adherence.
* Basic clinical care.
* CD4 monitoring.
* Cotrimoxazole preventive therapy.
* Tuberculosis.
* Treatment preparation.
* Medication adherence counseling and assessment.
* Home visits and patient tracking.
* Early infant diagnosis.
* Antiretroviral therapy (ART) initiation.

At the end of each round (Q2 and Q4), results will be shared with site management.

1. **Small test of change (STOC)**

Either following an HIVQual measurement or based on observed challenges resulting in poor performance of an indicator, a STOC is initiated to improve this indicator.

The small test of change (STOC) process is shorthand for testing a change in the real work setting — by planning it, trying it, observing the results, and acting on what is learned. This is the scientific method used for action-oriented learning. The steps of the STOC process are:

1. **See**

Plan the test or observation, including a plan for collecting data. State the objective of the test. Make predictions about what will happen and why. Develop a plan to test the change. (Who? What? When? Where? What data need to be collected?)

1. **Try/Track**

Try the test on a smallscale. Carry out the test. Document problems and unexpected observations and begin analysis of the data.

1. **Observe**

Set aside time to analyze the data and study the results. Complete the data analysis. Compare the data to your predictions. Summarize and reflect on what was learned.

1. **Continue**

Refine the change, based on what was learned from the test. Determine what modifications should be made. Prepare a plan for the next test.

1. **Quality of Care (QoC) (for HIV counseling and testing (HCT)/preventing mother to child transmission (PMTCT) facilities only)**

This aims to institute standards of care as the quality of care at the provider level. This tool enables providers to determine indicators that are below expected levels and provide them with timely action items to respond to and address deficiencies within a month cycle.

**Methods**

* The tool is made up of a data entry sheet and an indicator action step interpreter for each service area (HCT and PMTCT services).
* Each indicator is defined by its performance measurement, expressed as the numerator and denominator. Information for the numerator and denominator are numerical values can be obtained from registers (PMTCT and HCT), chart reviews, electronic software, and/or hospital logs.
* Once the values for the numerator and denominator are entered, the indicator level is determined and a suggested action step suggested. A chart of indicator levels and corresponding action steps are also provided.
* The tool will be used to assess the HCT and PMTCT components within the program. It can be completed by the head of department or his/her assistant. A standing committee comprising all component areas is then required for a comprehensive review of the indicator results. These standing committees currently exist in the form of the project management team (PMT) at every facility.
* The tool will be completed at the end of the third week of every month. The action step interpreter will be a guide to what line of action should be taken after data entry depending on the results. The results and action steps will be shared with the whole team during the facility’s monthly PMT meeting.

1. **Medical documentation**

A system of longitudinal patient records that is easily available, accessible, user-friendly, and up to date is very important in the management of HIV infected patients.

**Patient’s folder:** The folders are compartmentalized to ensure that forms are arranged by type and in descending order from the most recent visit.

**Patient management forms:** These forms include the initial evaluation, HIV enrollment, HIV care profile, ART and non-ART follow-up, lab requests, pharmacy orders, home visits, counselor encounters, nurse refills, treatment preparation, and contact and tracking forms. These forms are used at various points in the clinic flow for patient management.

**Clinical documentation audit** is a quality improvement process that seeks to improve patient care and outcomes through the systematic review of documented care against explicit criteria set for clinical documentation and the implementation of change to achieving the set standards.

**Procedure:**

1. Randomly select between 20–50 medical records of patients seen in clinic on the third Monday of the month.
2. Complete the 10-question audit form. The focus should be on the presence or absence of the form/indicator.
3. Present the aggregated findings to the CQI team at the site.
4. In the meeting, discuss barriers to completing documentation from the staff and help identify opportunities for improvement.

**Registers:** These are either national or program-specific registers that serve to capture patient activity at each point of care. The registers need to be updated on a daily basis to enable accuracy of reporting. A checklist is available for routine monitoring of completion of the registers.

**2. Evaluation**

*“If you can’t describe what you are doing as a process, you don’t know what you are doing”*

*- W. Edwards Deming*

These are a series of methods that are employed for evaluating various levels of the program in order to be cost competitive, efficient, to increase the impact of the program, to verify what “we say we are doing,” and to be able to describe the model that we are currently running.

**Evaluations are carried out based on the needs identified**

* Goal based
  + Are we meeting targets?
  + Where are we in our work plans?
  + Do we have enough resources?
* Process based
  + How does the program work?
  + This method is best if we intend to replicate the program.
  + This method works to improve inefficiencies.
* Outcomes Based
  + What is the benefit to the client?
  + Determine the impact and outcomes on clients.

**Evaluations carried out are:**

1. **Patient evaluation** 
   1. Patient satisfaction survey

*Are patients, clients, and customers satisfied with provided services? Are there any patterns of complaints and concerns*?

Quality care also means that the voices of the patients are heard. The patient satisfaction survey aims to provide a mechanism whereby patients are able to evaluate the facility and the services that are provided to them. The surveys should be completed annually as this gives time for all suggestions and recommendations to be reviewed, implemented, and assessed.

Method

* The site administrator appoints a staff member responsible for facilitating the process and agreeing on timelines.
* Make copies of the questionnaire available (it should be translated to the local language of patients if possible) and writing material.
* Inform patients (either through posters or at support group meetings) and staff when the survey will be completed.

1. Once forms have been completed, assigned staff members collate results, present it to management, who then come up with plans for addressing any issues raised. Feedback should be provided to patients during support groups meetings, morning pep talks, and posters.
2. **Healthcare worker (HCW) evaluation** 
   1. HCW satisfaction survey

*Are providers (coordinators, nurses, physicians, lab scientists, etc.) satisfied with services they provide*?

*Are there areas that providers need to address to facilitate job satisfaction?*

Perception of quality care delivered to clients varies from that of the patients. This means that the voices of the providers should be heard. The provider satisfaction survey aims to provide a mechanism for providers to evaluate the facility and the services that are provided to their patients.

The surveys should be completed annually as this gives time for all suggestions and recommendations to be reviewed, implemented, and assessed.

Method

* The site administrator appoints a staff member responsible (usually the human resources personnel) for facilitating the process and agreeing on timelines.
* Make copies of the questionnaire available (it should be translated to the local language of patients if possible) and writing material.
* Inform healthcare workers (either through posters or at PMT meetings) when the survey will be completed.
* Once forms have been completed, assigned staff members collate results, present it to management, who then come up with plans for addressing any issues raised. Feedback should be provided to patients during support groups meetings, morning pep talks, and posters.

1. **Provider evaluation** 
   1. Site checklist
   2. Trends of monthly reports
2. **Program evaluation**
   1. Clinical component assessment and site capacity assessment
   2. Mortality/morbidity (MM) and loss to follow up (LTFU) reviews

These reviews are conducted retrospective at the end of each month to evaluate and provide a detailed description and analysis of all reported patients whose care has been terminated. This activity should be carried out within the first quarter of the year.

Method

* Inform site ahead of time of review for team to be involved and all patient charts removed.
* The review can be done using an abstraction form or reports of MM and LTFU reviews carried out routinely by the site.
* The results are completed and shared with the site and the clinical team at the program level.
  1. Patient safety reviews

This looks at the outcomes of a register in the pharmacy that capture mistakes in prescriptions by providers and mistakes in taking medication by patients. A STOC should be initiated to address these issues based on outcomes in registers.

**3. Training and mentorship**

A. Trainings as planned

* Training of trainers
* CQI symposium

B. Mentoring on all areas of outcomes and evaluation will be carried out once per quarter