

LARC

Capability Maturity Model

Updated as of 10/11/16

LARC Program Goals

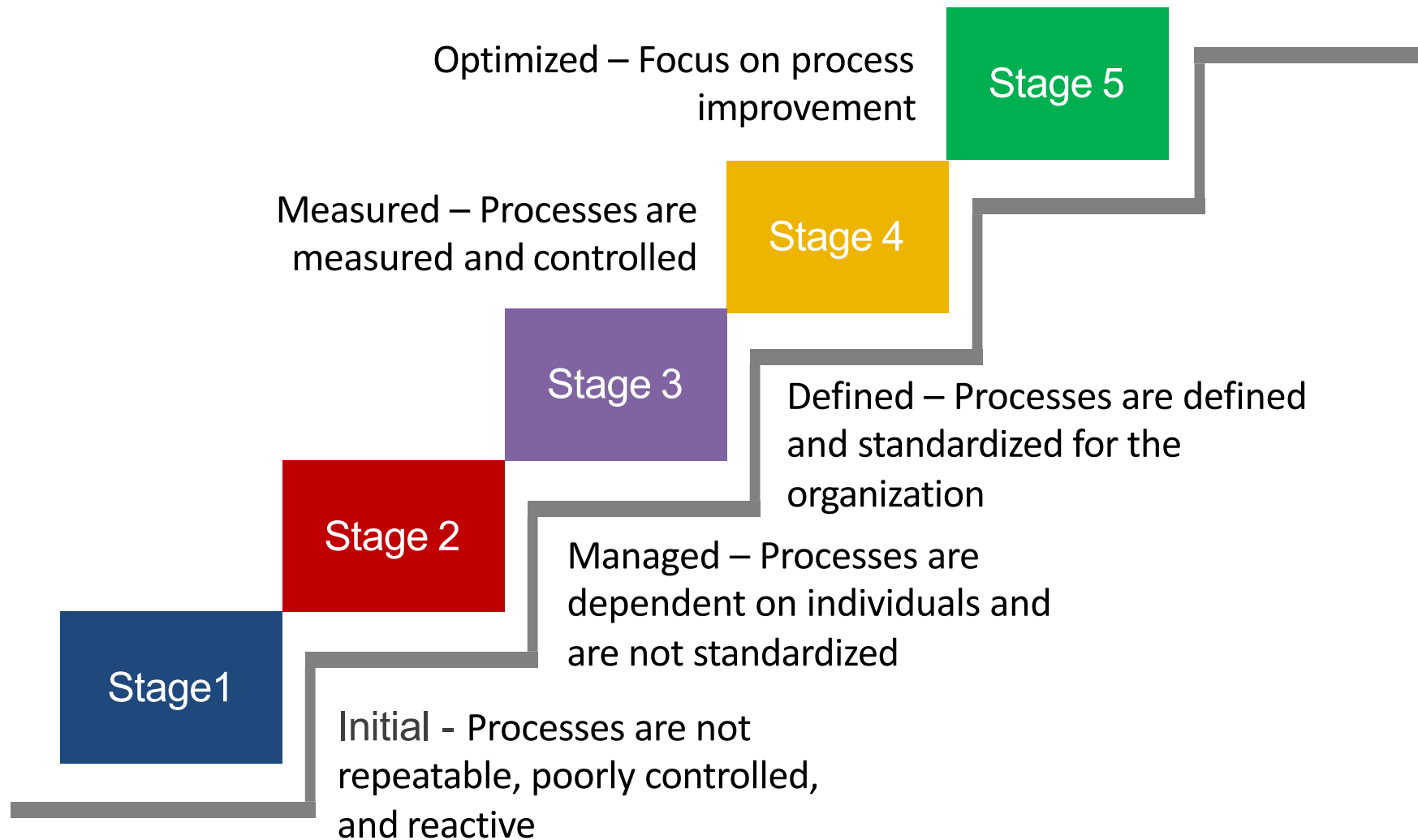
- To strengthen the viral load cascade to achieve better patient result (i.e., viral load suppression)
- To improve institutional capability for viral load scale-up

Program Goals	Measures
▪ Did the changes implemented at each site improve service delivery?	Facility-specific aims and metrics
▪ Was the institutional capability for viral load scale-up enhanced?	Capability Maturity Model (CMM)

Capability Maturity Model

- Developed by Carnegie-Mellon University Software Engineering Institute (1987)
- Introduced a process for assessing software capability through a structured, sequential manner
- Described the maturation of each function according to a linear scale of increasing capability
- Can be adapted to evaluate an organization (or regional initiative) capability

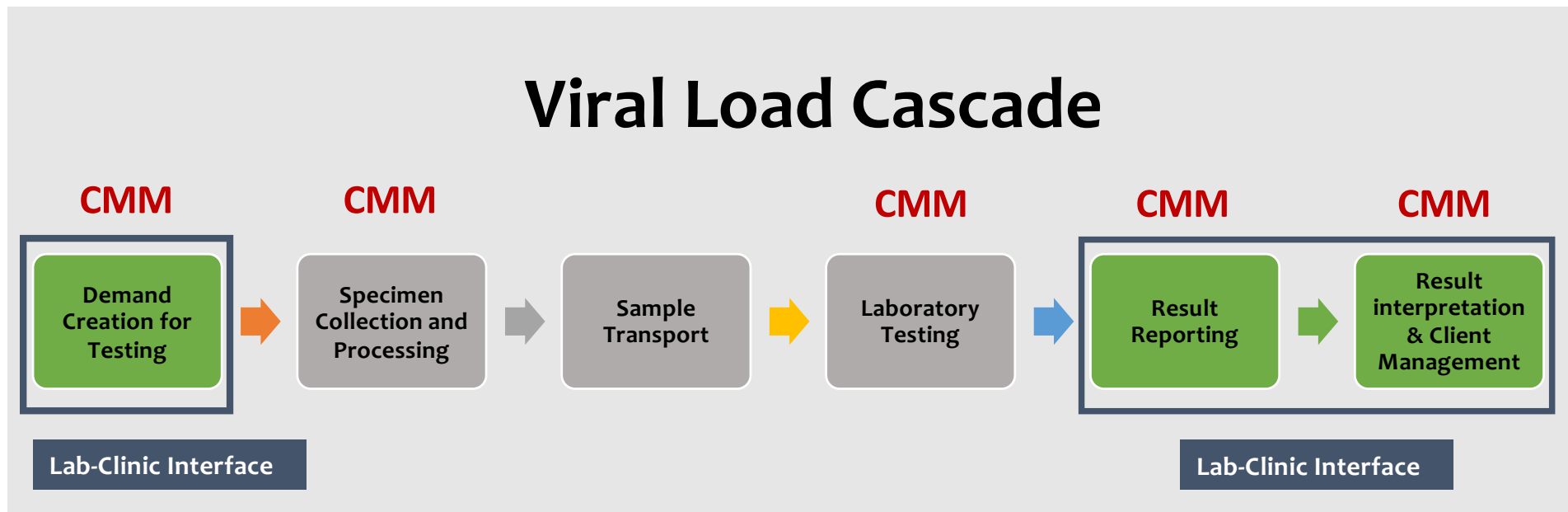
CMM Stages



Organizational Assessment with CMM

- Establish core functions in which capability is required
 - Based on the organizational goals, identify the essential functions
- Describe sequential stages of maturity of each function
 - Progression is step-wise and linear
 - Characteristics that define each maturational stage
 - Progress from one stage to the next reflects a meaningful improvement in a key function
 - Sets a clear path of achieving maturational goals

The LARC CMM tool covers 5 of the 6 phases in the viral load cascade.



Demand Creation for Testing

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
<p><input type="checkbox"/> Clinicians unaware of access to viral load testing and have not been educated on its role in ART monitoring</p> <p><input type="checkbox"/> Community leaders/CSOs unaware of access to viral load testing and have not been educated on its role in ART monitoring</p> <p><input type="checkbox"/> Clients unaware of access to viral load testing and have not been educated on its role in ART monitoring</p> <p><input type="checkbox"/> No standard operating procedures for viral load testing and education</p>	<p><input type="checkbox"/> Increased awareness of VL testing in clinicians, however minimal information is shared with clients</p> <p><input type="checkbox"/> Clinicians occasionally order viral load testing for clients</p> <p><input type="checkbox"/> Community leaders /CSOs have an increased awareness of viral load testing and its role in ART monitoring</p> <p><input type="checkbox"/> Clients have an increased awareness of viral load testing and its role in ART monitoring</p> <p><input type="checkbox"/> Standard operating procedures for viral load testing and education are in development</p>	<p><input type="checkbox"/> Clinicians routinely educate clients about viral load testing and its benefits</p> <p><input type="checkbox"/> Clinicians routinely order viral load testing in-line with national guidelines</p> <p><input type="checkbox"/> Community leaders /CSOs play an active role in educating their community about knowing their viral load status</p> <p><input type="checkbox"/> Clients are aware of and actively seek viral load testing</p> <p><input type="checkbox"/> Viral load testing and education standard operating procedures are established and implemented across the organization</p>	<p><input type="checkbox"/> Organization reviews routinely collected program data to measure performance in relation to standard operating procedures and national guidelines for clinician use of viral load testing and education of clients</p> <p><input type="checkbox"/> All stakeholders (e.g., clinicians, client groups, community leaders, etc.) play active role in community education about VL testing and promote campaigns for all individuals to know their VL</p>	<p><input type="checkbox"/> Organization uses rigorous evaluation procedures and findings to demonstrate effectiveness and improve the process of demand creation for viral load testing</p>

Specimen Collection and Processing

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
<p><input type="checkbox"/> No client access to viral load testing /specimen collection</p> <p><input type="checkbox"/> No standard supply chain system for specimen collection commodities (e.g., DBS bundles) so supplies limit ability to collect specimens</p> <p><input type="checkbox"/> Clinicians/personnel not trained to complete specimen requisition forms</p> <p><input type="checkbox"/> No standard operating procedures for appropriate viral load specimen collection and preparation</p>	<p><input type="checkbox"/> Viral load specimens are collected occasionally and only on certain days, limiting client access to testing and increasing burden for clients to return for VL sample collection</p> <p><input type="checkbox"/> Increased capacity for supply chain system for specimen collection commodities, however not standardized</p> <p><input type="checkbox"/> Increased awareness in clinicians/personnel for properly completing requisition forms</p> <p><input type="checkbox"/> Standard operating procedures for appropriate viral load specimen collection and preparation are in development</p>	<p><input type="checkbox"/> Viral load specimens are collected routinely with few barriers for clients</p> <p><input type="checkbox"/> Standardized supply chain system for specimen collection commodities</p> <p><input type="checkbox"/> Clinicians/personnel complete specimen requisition forms accurately and completely</p> <p><input type="checkbox"/> Viral load specimen collection and preparation standard operating procedures are established and implemented across the organization</p>	<p><input type="checkbox"/> Organization reviews routinely collected program data to measure performance in relation to standard operating procedures and national guidelines for specimen collection and collection preparation</p> <p><input type="checkbox"/> All stakeholders (e.g., clinicians, personnel, clients, etc.) play active role in appropriate viral load specimen collection and preparation to facilitate clients to know their VL</p>	<p><input type="checkbox"/> Organization uses rigorous evaluation procedures and findings to demonstrate effectiveness and improve the process of specimen collection and preparation</p>

Laboratory Testing

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
<p><input type="checkbox"/> Inadequate lab infrastructure for viral load testing (i.e. space/storage/equipment/reagents/kits for viral load testing)</p> <p><input type="checkbox"/> Laboratory staff are not properly trained nor competent to test viral load specimens</p> <p><input type="checkbox"/> Laboratory has little or no capacity for viral load testing</p> <p><input type="checkbox"/> No standard operating procedures or competency standards for laboratory viral load testing</p>	<p><input type="checkbox"/> Improved laboratory infrastructure, however, laboratory is only able to receive and test viral load specimens occasionally or must refer to another laboratory</p> <p><input type="checkbox"/> Laboratory staff are trained, however, competencies are minimal</p> <p><input type="checkbox"/> Laboratory is has minimal capacity and viral load testing is occasionally completed in a timely manner</p> <p><input type="checkbox"/> Standard operating procedures and competency standards for laboratory viral load testing are in development</p>	<p><input type="checkbox"/> Laboratory is able to regularly receive and test viral load specimens in timely manner</p> <p><input type="checkbox"/> Laboratory has appropriately trained and competent staff</p> <p><input type="checkbox"/> Laboratory is working at capacity and viral load testing is completed in a timely manner</p> <p><input type="checkbox"/> Laboratory viral load testing standard operating procedures and competency standards are established and implemented across the organization</p>	<p><input type="checkbox"/> Organization reviews routinely collected program data to measure performance in relation to standard operating procedures and national guidelines for viral load specimen testing</p>	<p><input type="checkbox"/> Organization uses rigorous evaluation procedures and findings to demonstrate effectiveness and improve the process of laboratory viral load specimen testing</p>

Results Reporting

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
<p><input type="checkbox"/> Results are not received in a timely manner at the clinic from the laboratory</p> <p><input type="checkbox"/> Results are not recorded in the client's chart in a timely manner</p> <p><input type="checkbox"/> No standard operating procedures for results reporting and documenting results in the client's chart</p>	<p><input type="checkbox"/> Results are occasionally received in a timely manner by the clinic from the laboratory</p> <p><input type="checkbox"/> Results are occasionally recorded in the client's chart in a timely manner but often not returned to clients</p> <p><input type="checkbox"/> Standard operating procedures for results reporting and documenting results in the client's chart are in development</p>	<p><input type="checkbox"/> Results are regularly received by the clinic in a timely manner from the laboratory</p> <p><input type="checkbox"/> Results are regularly recorded in the client's chart in a timely manner and returned to the client regularly</p> <p><input type="checkbox"/> Results reporting and chart documentation standard operating procedures are established and implemented across the organization</p>	<p><input type="checkbox"/> Organization reviews routinely collected program data to measure performance in relation to standard operating procedures and national guidelines for results reporting</p> <p><input type="checkbox"/> Clinic ensures a facility-based person is accountable for timely recording of VL results in client charts and notification of clients with VL>1000 to return to clinic prior to scheduled appointment</p>	<p><input type="checkbox"/> Organization uses rigorous evaluation procedures and findings to demonstrate effectiveness and improve the process for results reporting</p>

Results Interpretation and Client Management

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
<ul style="list-style-type: none"> <input type="checkbox"/> Viral load results are difficult to read and interpret and requires laboratory assistance <input type="checkbox"/> Clinicians are not properly trained to interpret viral load results <input type="checkbox"/> Clinicians are uncomfortable integrating viral load results into ART care <input type="checkbox"/> Clients do not understand their viral load results <input type="checkbox"/> Clinicians have no backup person to call to discuss difficult cases or clients who require 2nd line treatment <input type="checkbox"/> No standard operating procedures for result interpretation and client management 	<ul style="list-style-type: none"> <input type="checkbox"/> Viral load results are occasionally readable and interpretable and requires minimal laboratory assistance <input type="checkbox"/> Increased awareness of result interpretation by clinicians <input type="checkbox"/> Few clinicians are comfortable integrating viral load results into ART care <input type="checkbox"/> Clients have a limited understanding of their viral load results <input type="checkbox"/> Intermittent availability of consultation for 2nd line treatment <input type="checkbox"/> Standard operating procedures for result interpretation and client management are in development 	<ul style="list-style-type: none"> <input type="checkbox"/> Viral load results are consistently readable and interpretable by clinicians <input type="checkbox"/> Clinicians are adequately trained in viral load result interpretation <input type="checkbox"/> Clinicians regularly discuss VL results with clients <input type="checkbox"/> Clients understand their viral load results and can repeat their understanding back to the clinician <input type="checkbox"/> Standardized system in which all providers have a designated POC/referral system in place to consult for management of VL results and switch to 2nd line <input type="checkbox"/> Result interpretation and client management standard operating procedures are established and implemented across the organization 	<ul style="list-style-type: none"> <input type="checkbox"/> Organization reviews routinely collected program data to measure performance in relation to standard operating procedures and national guidelines for client management <input type="checkbox"/> All stakeholders (e.g., clinicians, personnel, clients, etc.) play active role in client management and their viral load <input type="checkbox"/> Clinic has ability to identify missed opportunities for ensuring VL results are integrated with client management 	<ul style="list-style-type: none"> <input type="checkbox"/> Organization uses rigorous evaluation procedures and findings to demonstrate effectiveness and improve the process of client management