**Chart Review**

Chart review is an audit process to assess the actual care delivered.

**WHY**

Chart review (or audit) provides an opportunity to assess, at a granular level, how the current processes are reflected in the actual care given to patients. Chart reviews are critical to the improvement process – to collect data, analyze data, and to make, assess, and sustain improvement efforts related to the patient care provided.

**WHEN**

Throughout the DMAIC process:

* DEFINE/MEASURE - Initially, at the time of process mapping or before, to assess the baseline state of patient care
* ANALYZE – to identify the defects in patient care
* IMPROVE – to periodically track the results of the tests of change (i.e., improvements) and make necessary adjustments to meet the aim
* CONTROL – Ongoing auditing to assure sustenance of the improvements in patient care

**HOW TO**

1. Select the patient care process and the patient population that will be evaluated
2. Select the charts for review
   * For a research project, statistical methods will be required for chart selection
   * For a proper baseline data, select at least 25 charts for review
   * For improvement purposes, reviewing 5 charts prior to or during the process mapping will provide initial information to guide improvement efforts and help process mapping participants gain insights into how the process is working. This is part of the “ah-ha” moment in process mapping when participants use data to evaluate the process rather than “feelings.”
     + Select the last 5 charts, or a random sample from the last 6 months
     + See **Tips** below
3. Create a data collection template. Include the key steps in the process to be assessed.
   * For HIV Viral Load Cascade, the country algorithm is an excellent resource to define the requirements and criteria for expected level of care.
   * A template for evaluating HIV Viral Load Cascade is provided.
4. Review charts, while populating the data collection template.
5. Collate data
6. Analyze data – There are two possible metrics.

|  |  |
| --- | --- |
| Numerator:  # patients that met expected level of care  Denominator:  Total number of patients | This metric evaluates how many patients received all the appropriate care as prescribed by the country algorithm. This metric assesses whether the entire algorithm was followed or not. (See example) |
| Numerator:  # of Patients that met Parameter “X”  Denominator:  Total number of patients | This metric looks at individual components in the algorithm (i.e. 85% of patients did not receive an ***Enhanced Adherence Counseling*** Session within the specified timeframe). Consider using Pareto Chart to prioritize gaps. |

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| **TIPS**  When using Chart Review as part of a process mapping exercise, pre-planning is required to ensure an efficient and effective chart review. Two options are available (below) depending on the time available and the number and expertise of the participants. The following suggestions may be helpful in facilitation of the desired “ah-ha” moment.   |  |  | | --- | --- | | **Group Chart Review**  Completed as ***part of*** the 2-Day on-site Smart Start Session & Process Mapping exercise | **Prior Chart Review**  Completed ***prior to*** the 2-Day on-site Smart Start Session & Process Mapping exercise | | Prior to Smart Start,   * + Select 5 charts for the review   + Print the data collection template   At Smart Start,   * + Gather the group in a conference room for the review   + Distribute the charts & template to the participants for “hands-on” review   + Guide the participants through the chart review     - Assign roles and responsibilities (who captures data from which chart, for example)     - Facilitate the report back to the entire group   + Debrief the chart review process, asking the participants to reflect on the experience (use of data versus “feelings”) | Prior to Smart Start,   * + Select 5 charts for review   + Print the data collection template   + Complete chart review and capture data on the template   At Smart Start,   * + Facilitate a discussion of the Chart Review Tool   + Share the data collected   + Debrief the chart review process, asking the participants to reflect on the experience (use of data versus “feelings”) | |

**Template:**

* Chart Review Template

**Related Tools:**

* Process Mapping (2-Day on-site Smart Start)
* Pareto Chart

**Resources:**

Agency for Healthcare Research and Quality (AHRQ) – Module 8: Collecting Data with Chart Audits

<https://www.ahrq.gov/ncepcr/tools/pf-handbook/mod8.html>

**Chart Review Example**

4/5 (80%) patients did not have high viral load follow-up per country algorithm

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| --- | --- | --- | --- | --- |
| **Patient** | **VL Result / Date Validated** | **Clinic Visits / Adherence% /**  **Drug Supply** | **IAC** | **VL #2** |
| A | 1,653 copies  17 Aug 2015 |  |  | 5 Jan 2017  No Result |
| B | 223,888 copies  10 Mar 2016 (C) 9 May 2016 (V) | 16 Jun 2016 / 93% / 3 mo.  29 Sep 2016 / 85% / 3 mo.  29 Dec 2016 / 101% / 3 mo. | IAC #1 – 23 Mar 2017 |  |
| C | 6,588 copies  2 Nov 2016 |  |  | 5 Jan 2017  No Result |
| D | 82,201 copies  4 Nov 2016 |  | IAC #1 - 25 Jan 2017  IAC #2 – 15 Feb 2017  IAC #3 – 15 Mar 2017 | Drawn 12 April 2017 |
| E | 17,863 copies  28 Feb 2017 | 16 Feb 2017 / 96% / 3 mo. |  |  |

C = Sample Collected, V = Sample Validated by Laboratory

**Chart Review Template**

Viral Load Cascade – Result Reporting & Patient Management

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Patient # | VL #1 ordered / drawn date | Date VL returned to chart | Date VL noted by clinician / action | IAC/EAC  #1 | IAC/EAC  #2 | IAC/EAC  #3 | VL #2 ordered / drawn date | Is VL suppressed?  / action |
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