

Cycle Time, Lead Time, Takt Time

Standard operations uses three measures of times.

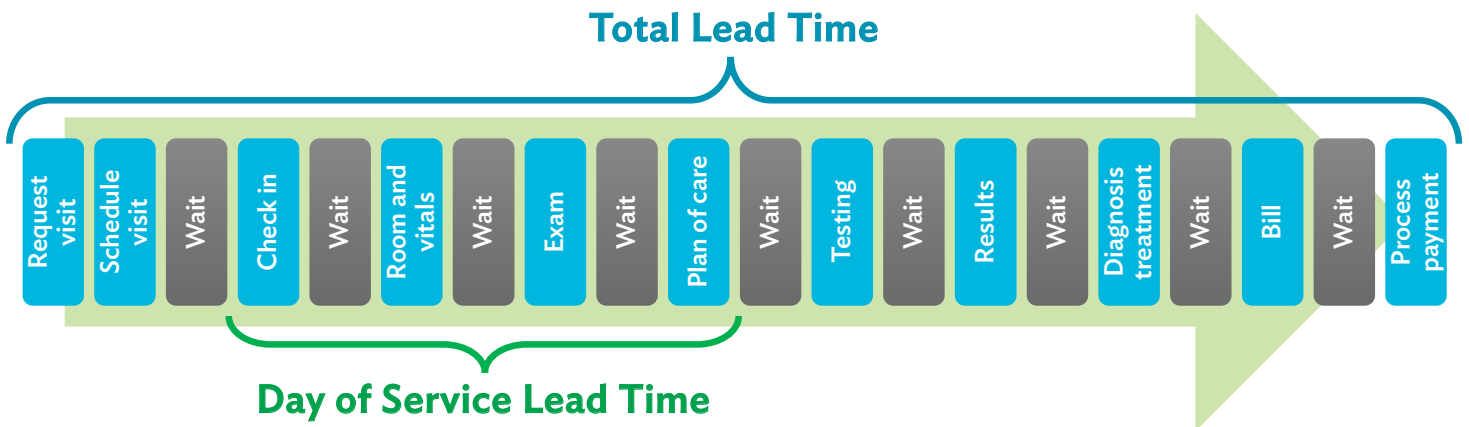
Two of the elements are **measured** with a stopwatch.



The third is **calculated**.

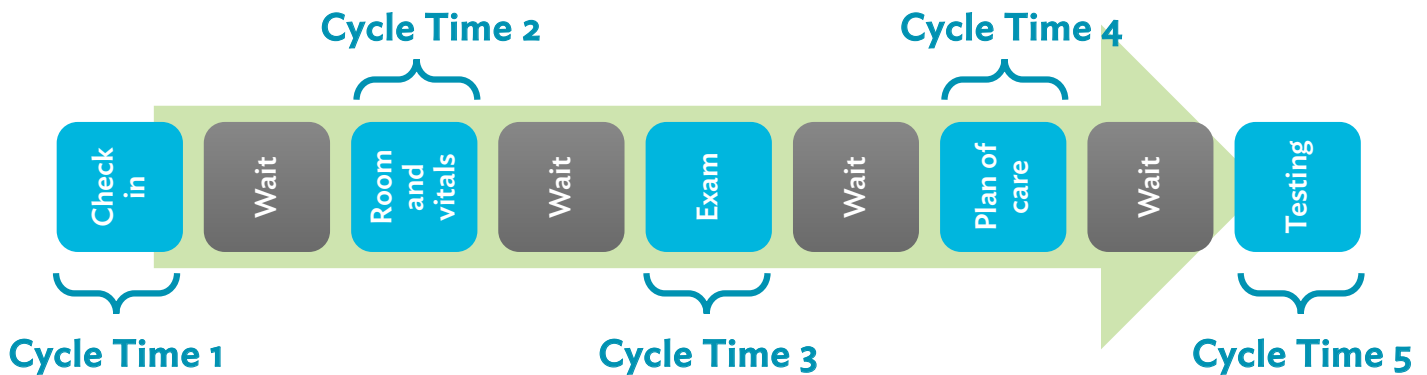
Lead Time

- Is the entire time required to provide a product or service, from request to completion
- Includes waits between cycles
- Includes “off hours” and weekends



Cycle Time

- Is the time required for one operator or machine to complete one cycle of work
- Is measured with a stopwatch
- Includes the waste within the cycle
- Does not include waiting time before or after



Documenting Flows and Times

1. Collect the tools you will need.
2. Watch the process two or three times.
3. Document the flows on the Standard Work Sheet.
4. Time and document the cycles of work, six to ten times, on either the Detailed Time Observation Form (D-TOF) or the Time Observation Form (TOF).
5. Calculate the cycle times between steps.
6. Determine the steps and transfer to the TOF (if not used initially).
7. Complete the summary boxes on the TOF for each observation.
8. Summarize your findings.
9. Complete the information boxes.