

SPC (XmR) tool

Chart title: **xxx trust IV Antibs performance**

Team/unit name: **xxx trust IV Antibs performance**

Your measure: **% patients receiving IV Antibs**

Target: **20**

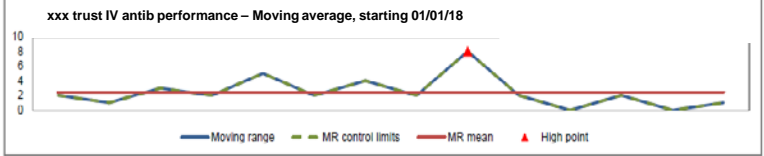
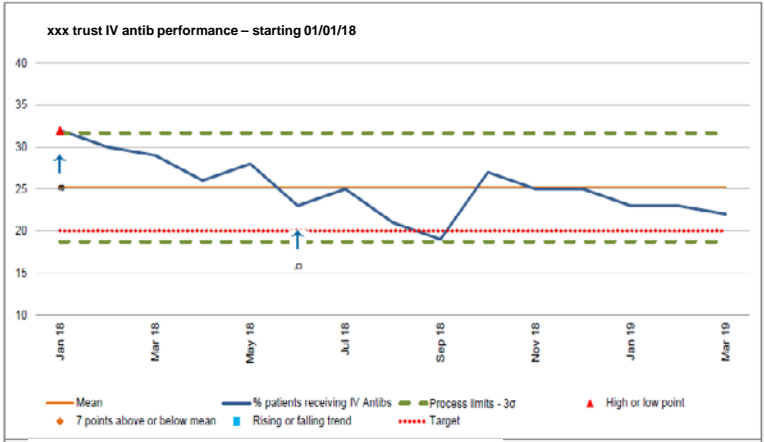
Maximum number: **24**

Start date: **01/01/18** please select date <= 28th

Planned duration: **24 Months**

Set baseline: **Months** (choose baseline period 12 - 20*)

Date	% patients	Date	% patients	Date	% patients	Date	% patients
01 Jan 18	32						
01 Feb 18	30						
01 Mar 18	29						
01 Apr 18	26						
01 May 18	28						
01 Jun 18	23						
01 Jul 18	25						
01 Aug 18	21						
01 Sep 18	19						
01 Oct 18	27						
01 Nov 18	25						
01 Dec 18	25						
01 Jan 19	23						
01 Feb 19	23						
01 Mar 19	22						
01 Apr 19							
01 May 19							
01 Jun 19							
01 Jul 19							
01 Aug 19							
01 Sep 19							
01 Oct 19							
01 Nov 19							
01 Dec 19							



Summary statistics

Mean observation - \bar{x}		25.20
Average moving range - \bar{mR}		2.43
Three sigma - 3σ		6.46
Upper/lower process limit		31.7/ 18.7
Upper moving range Limit		7.94

Data observations

This type of chart (SPC) allows you to identify statistically significant changes in data. The dotted lines (process limits) represent the expected range for data points if variation is within expected limits - that is, normal. You can apply a number of rules to identify when the process is not in control - that is, special variation.

Rule 1	Points which fall outside the green dotted lines (process limits) are unusual and should be investigated. They represent a system which may be out of control. There is 1 data point which is above the line.
	On the moving range chart points which fall above the moving range process limit - green dotted line - are unusual and suggest that the system is out of control. This should be investigated. There is 1 data point which is above the line.

Appendix 2: Example of a statistical process control (SPC) chart for paediatric CAP – produced using tools available at <https://improvement.nhs.uk/resources/statistical-process-control-tool/>. The chart provides a visual representation of the percentage of patients with CAP who receive intravenous antibiotics. It is possible to set a target and planned duration. As depicted, the chart provides summary statistics that enable a robust assessment of the impact of change initiatives.