HSE Quality Profile
Methodology & Metadata
Updated February 2022

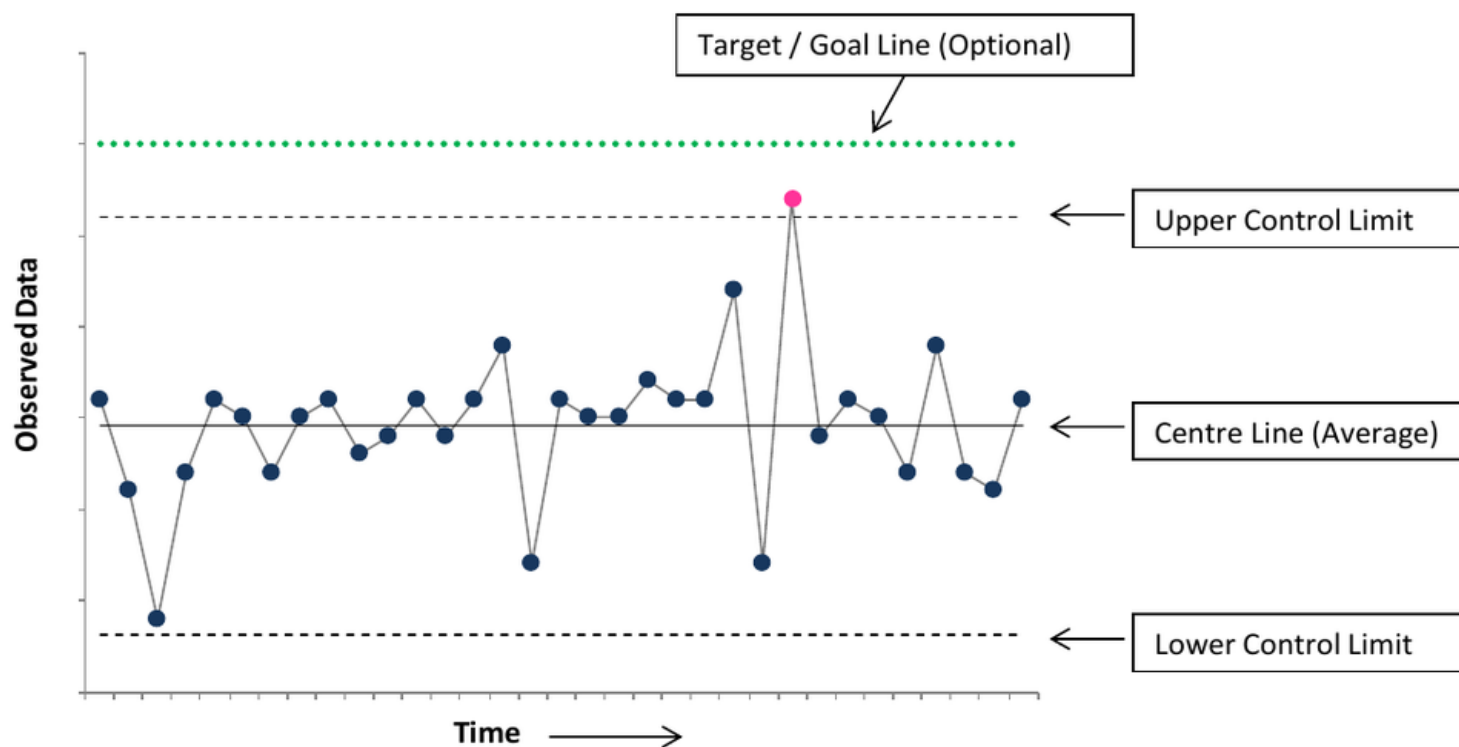| Quality Indicators		
	Safe	Hospital acquired new cases of *S. aureus* bloodstream infection per 10,000 bed days used Health service staff absence rate (including COVID-19 absence)
	Effective	Percentage of emergency re-admissions for acute medical conditions to the same hospital within 30 days of discharge
	Person-centred	Percentage of all attendees aged 75 years and over at ED who are discharged or admitted within 6 hours of registration
	Timely	Percentage of ophthalmology patients on waiting list for treatment ≤52 weeks Percentage of patients waiting <52 weeks for first access to OPD services Percentage of people waiting <13 weeks following a referral for routine colonoscopy or OGD Percentage of hip fracture surgery carried out within 48 hours of initial assessment
	Efficient	Percentage of ambulances that have a time interval ≤30 minutes from arrival at ED to when the ambulance crew declares the readiness of the ambulance to accept another call (clear and available) Weekly number of delayed transfers of care
	Equitable	Disability Act compliance: percentage of child assessments completed within the timelines as provided for in the regulations
	Better Health & Wellbeing	Percentage of child health & development assessments completed on time or before 12 months of age

Anatomy of a Statistical Process Control Chart

A **Statistical Process Control** (SPC) Chart consists of data plotted in order, usually over time (weeks, months etc). It includes a centre line based on the average (mean) of the data. It also includes upper and lower control limits based on statistical calculations (3 sigma deviations from the average).

The control limits are based on the variation in the observed data. The control limits reflect the expected range of variation within the data, and do not reflect the desired range of variation in terms of quality of care. The probability of any data point falling outside of the control limits by chance alone is very small.

Points that are above or below the control limits are an indication of special cause variation. In addition to a data point outside of the control limits, there are four other rules that indicate non-random (special cause) variation.

The target / goal line is interpreted differently to the other lines in the chart. It is not determined by the data and so is not normally part of an SPC chart, but it can be useful to display it to help focus improvement efforts.
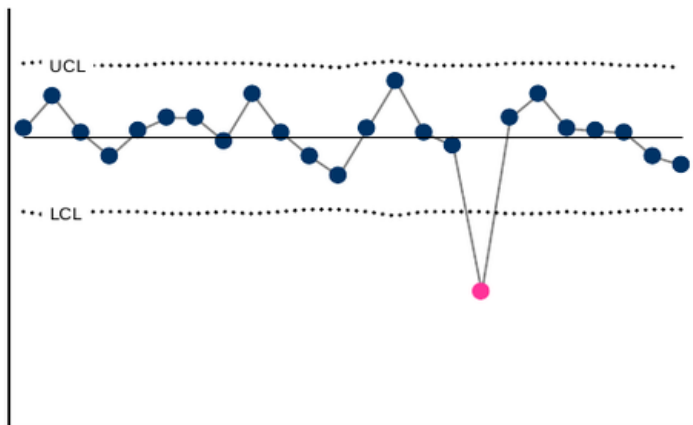

References
Provost L, Murray S. The Healthcare Data Guide: Learning from Data for Improvement. San Francisco: Jossey-Bass, Publication, 2011
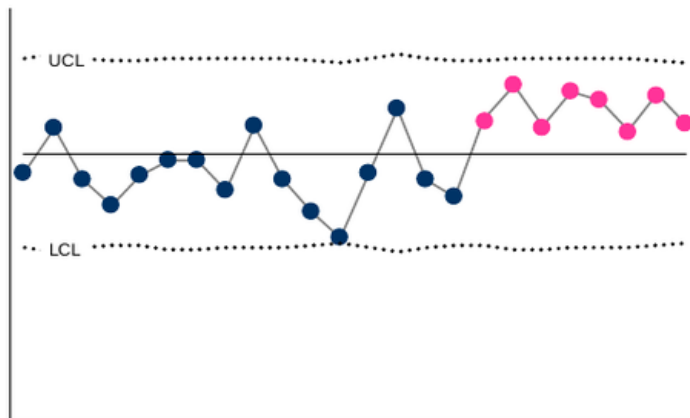
Rules for detecting special cause variation using statistical process control charts
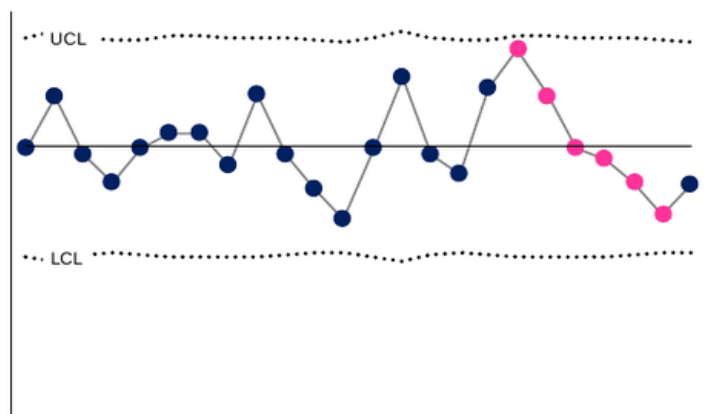
1. A single point outside the control limits (this doesn't include points exactly on the limit)
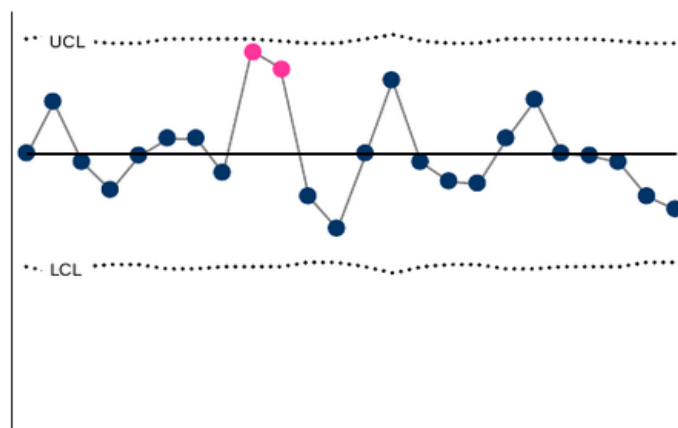
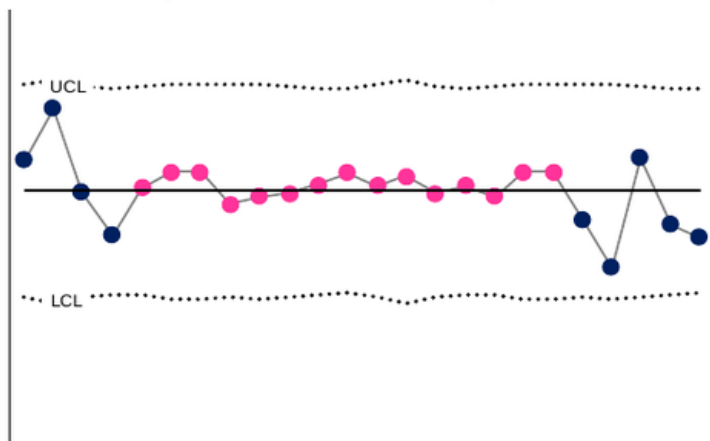## 2. A run of 8 or more consecutive points above or below the centre line

3. A trend of at least 6 consecutive points all going up or down

4. Two out of three consecutive points in the outer third (or beyond)

5. A series of 15 consecutive points close to the centre line (in the inner one-third)

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Prepared by Quality & Patient Safety Directorate
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Quality Profile Indicators Metadata

Safe: Hospital acquired new cases of *S. aureus* bloodstream infection per 10,000 bed days used	
Calculation	Numerator: Number of new cases of hospital acquired S. *aureus* bloodstream infection. Denominator: Number of bed days used Rate is calculated as the numerator/denominator*10000.
Details of analysis	National level data are displayed in an SPC U chart since January 2019
Data source	HCAI Monthly Report / Acute Management Data Report
Data frequency	Monthly
Further information	https://www.hse.ie/eng/services/publications/kpis/acute-hospitals-metadata-2021.pdf

Safe: Health service staff absence rate (including COVID-19 absence)	
Calculation	% absence rate = Total hours lost due to Absenteeism / Available Hours
Details of analysis	National level data are displayed in an SPC I chart since January 2019
Data source	HR Workforce Reports https://www.hse.ie/eng/staff/resources/our-workforce/workforce-reporting/national-reports.html
Data frequency	Monthly
Further information	https://www.hse.ie/eng/services/publications/kpis/system-wide-metadata-2019.pdf

Effective: Percentage of emergency re-admissions for acute medical conditions to the same hospital within 30 days of discharge	
Calculation	Numerator: Number of medical inpatient discharges in the denominator period which resulted in an emergency readmission to the same hospital within 30 days Denominator: Number of medical inpatient discharges (elective and emergency) in the denominator period (denominator period is set 30 days in arrears).
Details of analysis	National level data are displayed in an SPC P Prime chart since January 2019.
Data source	Acute Management Data Report
Data frequency	Monthly
Further information	https://www.hse.ie/eng/services/publications/kpis/acute-hospitals-metadata-2021.pdf

Person-centred: Percentage of attendees aged over 75 at ED who are in ED <6 hours	
Calculation	Numerator - All ED patients aged >75 years of age, who are admitted to a ward or discharged in less than 6 hours from their Arrival Time. Denominator - All patient attendances at ED who are aged over 75 years of age who are admitted or discharged
Details of analysis	National level data are displayed in an SPC P Prime chart since January 2019.
Data source	Acute Management Data Report
Data frequency	Monthly
Further information	https://www.hse.ie/eng/services/publications/kpis/acute-hospitals-metadata-2021.pdf

Timely: Percentage of ophthalmology patients on waiting list for treatment ≤52 weeks	
Calculation	Numerator: Number of ophthalmology patients in all age bands on the treatment waiting list for 0-52 weeks Denominator: Total number of ophthalmology patients in all age bands on the treatment waiting list.
Details of analysis	National level data are displayed in an SPC P Prime chart since January 2019.
Data source	Community Healthcare Metric Report – QlikView
Data frequency	Monthly
Further information	https://www.hse.ie/eng/services/publications/kpis/primary%20care%20metadata%202020.pdf

Timely: Percentage of patients waiting <52 weeks for first access to OPD services	
Calculation	Numerator: Number of outpatient patients waiting to be seen less than 52 weeks Denominator: Total number of patients waiting to be seen in Outpatients
Details of analysis	National level data are displayed in an SPC P Prime chart since January 2019.
Data source	Acute Management Data Report
Data frequency	Monthly
Further information	https://www.hse.ie/eng/services/publications/kpis/acute-hospitals-metadata-2021.pdf

Quality Profile Indicators Metadata

Timely: Percentage of emergency hip fracture surgery carried out within 48 hours of initial assessment

Calculation	Numerator: The number of inpatient discharges aged over 60 in the reporting period where emergency hip fracture surgery was carried out within 48 hours of initial assessment. Denominator: The number of inpatient discharges aged over 60 in the reporting period where emergency hip fracture surgery was carried out.
Details of analysis	National level data are displayed in an SPC P chart since Quarter 1 2016 .
Data source	Irish Hip Fracture Database (IHFD)
Data frequency	Quarterly in arrears
Notes	Note that the data source for this indicator has been changed to the Irish Hip Fracture Database in the March 2020 Quality Profile to align with the Performance Profile.
Further information	https://www.hse.ie/eng/services/publications/kpis/acute-hospitals-metadata-2021.pdf

Timely: Percentage of patients waiting <13 weeks following a referral for routine colonoscopy or OGD (Oesophagogastroduodenoscopy)

Calculation	Numerator: Number of patients waiting to be seen less than 13 weeks for routine colonoscopy or OGD. Denominator: Total number of patients waiting to be seen for routine colonoscopy or OGD.
Details of analysis	National level data are displayed in an SPC P Prime chart since January 2019.
Data source	Acute Management Data Report
Data frequency	Monthly
Further information	https://www.hse.ie/eng/services/publications/kpis/acute-hospitals-metadata-2021.pdf

Efficient: Weekly number of delayed transfers of care

Calculation	Weekly number of delayed transfers of care
Details of analysis	Weekly data at national level are displayed in an SPC I chart for the most recent 26 weeks.
Data source	Delayed Transfers of Care National Report / Acute Management Data Report
Data frequency	Weekly
Notes	
Further information	https://www.hse.ie/eng/services/publications/kpis/acute-hospitals-metadata-2021.pdf

Efficient: % of ambulances that have a time interval ≤30 minutes from arrival at ED to when the ambulance crew declares the readiness of the ambulance to accept another call (clear and available)

Calculation	% of ambulances that have a time interval of ≤30 minutes from arrival at the Emergency Department (ED) from ambulance arrival time through clinical handover in ED to when the ambulance crew declares readiness of the ambulance to accept another call in line with the process / flow path in the ambulance turnaround framework.
Details of analysis	National level data are displayed in an SPC P Prime chart since January 2019.
Data source	Acute MDR
Data frequency	Monthly
Further information	https://www.hse.ie/eng/services/publications/kpis/acute-hospitals-metadata-2021.pdf

Equitable: Disability Act compliance: percentage of child assessments completed within the timelines as provided for in the regulations

Calculation	Numerator: The number of Assessments of Need completed within three months of their commencement or within a revised time frame negotiated as per the regulations. Denominator: The total number of Assessments of Need completed.
Details of analysis	National level data are displayed in an SPC P chart since Quarter 1 2016.
Data source	Community Healthcare Metric Report – QlikView
Data frequency	Quarterly
Further information	https://www.hse.ie/eng/services/publications/kpis/2019-disabilities-metadata.pdf

Quality Profile Indicators Metadata

Better Health & Wellbeing: Percentage of child health & development assessments completed on time or before 12 months of age	
Calculation	Numerator: The number of babies having a health and development assessment completed by 12 months of age in the reporting period Denominator: The number of babies reaching 12 months of age in the reporting period
Details of analysis	National level data are displayed in an SPC P Prime chart since January 2019
Data source	Community Healthcare Metric Report – QlikView
Data frequency	Monthly in arrears
Note	Data for 2019 and 2020 refers to child health & development assessments completed on time or before 10 months of age. Following a recommendation by the Developmental Surveillance Subgroup of the National Steering Group for the Revised Child Health Programme and based on the latest evidence on developmental surveillance, the timeframe for the provision of this child health contact was changed from 7 to 9 months to 9 to 11 months, and so from 2021 the KPI is reported based on assessments on time or before 12 months of age.
Further information	https://www.hse.ie/eng/services/publications/kpis/primary%20care%20metadata%202020.pdf