



HSE Quality Profile

March 2021

Quality Indicators	Safe	Hospital acquired new cases of <i>S. aureus</i> bloodstream infection per 10,000 bed days used Hospital acquired new cases of <i>C. difficile</i> infection per 10,000 bed days used
	Effective	
	Person-centred	Percentage of all attendees aged 75 years and over at ED who are discharged or admitted within 24 hours of registration
	Timely	Percentage of new patients attending rapid access breast, lung & prostate clinics within recommended timeframe Percentage of people waiting <13 weeks following a referral for routine colonoscopy or OGD Hip fracture surgery within 48 hours
	Efficient	Weekly number of delayed transfers of care Day of surgery admission rate
	Equitable	Disability Act compliance: percentage of child assessments completed within the timelines as provided for in the regulations
	Better Health & Wellbeing	MMR vaccination rate

HSE Quality Profile

March 2021

In developing a picture of quality to support a standing agenda item at Executive Management Team meetings, the EMT agreed a set of 12 measures to be included in a Quality Profile. These measures are aligned to 7 Domains of Quality that include Person Centred, Safe, Effective, Timely, Equitable, Efficient, Better Health and Wellbeing.

The information is presented using Statistical Process Control (SPC) charts. This helps EMT members in understanding the variation in the data and supports effective decision making.

The profile was co-designed and tested through a series of 6 PDSA cycles from January 2018 to May 2019. It is recommended that the content of the Quality Profile be reviewed at least annually to ensure it includes the most relevant information.

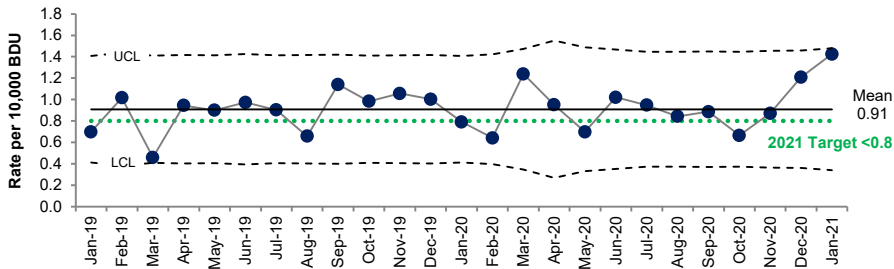
Following the EMT Workshop in October 2019, a number of measures were removed from the Quality Profile, and the EMT requested the addition of seven new indicators and investigation of the possibility of adding indicators in eight further areas. These will be assessed for suitability for inclusion in the profile and added over time.

This version of the Quality Profile includes the summary presentation of indicators previously included in the Quality Profile, with the exception of the indicator on flu vaccine uptake rate among healthcare workers which has been removed. This indicator will be included again once data for the 2020/21 flu season is available. One new indicator has been included in the Quality Profile since November 2020: Percentage of new patients attending rapid access breast, lung & prostate clinics within recommended timeframe. The COVID-19 measures previously included are not included in this version, as these indicators are presented in a separate report.

Hospital acquired new cases of *S. aureus* bloodstream infection per 10,000 bed days used

Desired Direction 

National Rate



Average national performance is stable, but worse than the 2021 target.

There are no signals of a change in the rate of Staph Aureus per 10,000 bed days used since January 2019. While the rate for Jan-21 is above average, it is within the control limits and is not a signal of disimprovement.

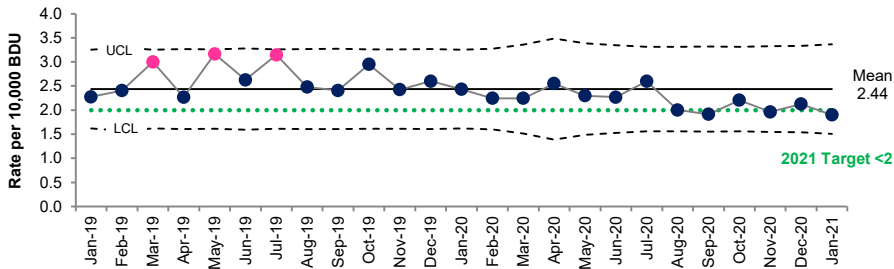
NEW DATA

Latest data available: January 2021

Hospital acquired new cases of *C. difficile* infection per 10,000 bed days used

Desired Direction 

National Rate



Average national performance is worse than the target but has been stable since August 2019.

The rate of hospital acquired new cases of *C. difficile* per 10,000 bed days used remains stable since Aug-19. While the rates for Sept-20, Nov-20 & Jan-21 were below target, using SPC rules they were within the expected range of variation and so are not signals of improvement.

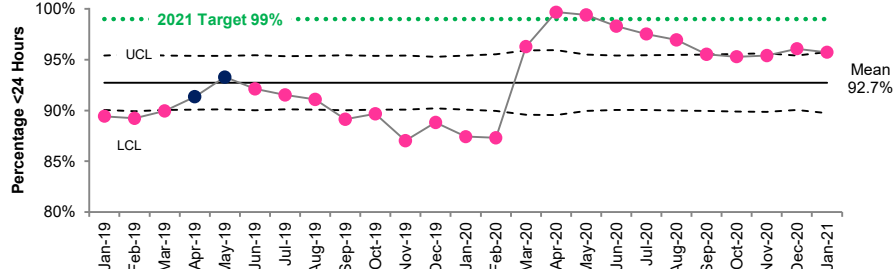
NEW DATA

Latest data available: January 2021

Percentage of all attendees aged 75 years and over at ED who are discharged or admitted within 24 hours

Desired Direction 

National Rate



Average national performance shows signals a number of signals of change since March 2020, but overall has improved compared to 2019. However it remains worse than the target since June 2020.

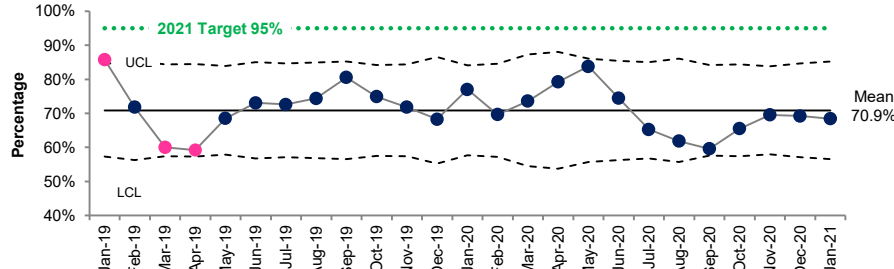
NEW DATA

Latest data available: January 2021

Percentage of new patients attending rapid access breast, lung & prostate clinics within recommended timeframe

Desired Direction 

National Rate




Average national performance is worse than the target but has been stable since May 2019.

Note that there are no signals of change in this measure during the COVID-19 pandemic. While there are a series of 5 months where the rate decreased between May-20 & Sep-20, using SPC rules this is not a signal.

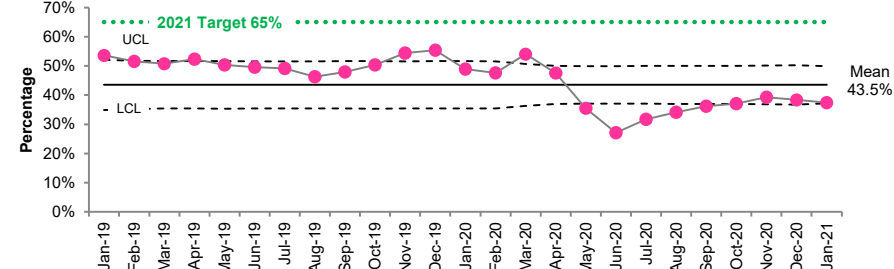
NEW DATA

Latest data available: January 2021

Percentage of patients waiting <13 weeks following a referral for routine colonoscopy or OGD

Desired Direction 

National Rate



Average national performance is worse than the target and shows signals of further disimprovement since May 2020.

Note that there has been an increase in the number of people waiting for a routine colonoscopy or OGD since the start of the pandemic. The number waiting in January 2021 was up 62% on January 2020

NEW DATA

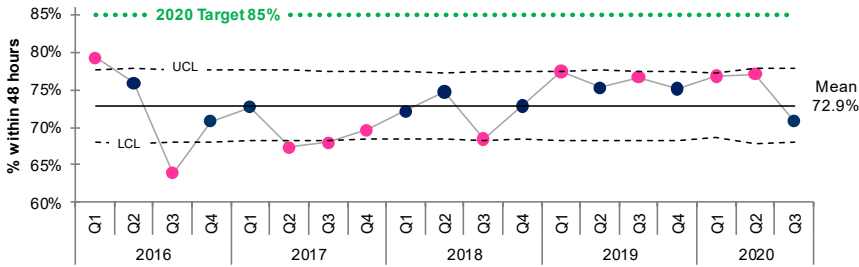
Latest data available: January 2021

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

Desired Direction ↑

Timely

National Rate



Average national performance is worse than the target, although there were signals of improvement in 2019 and in Q1 & Q2 2020.



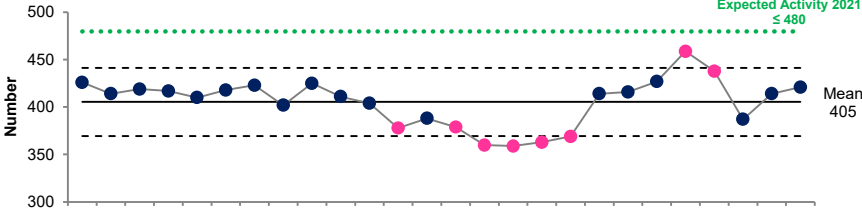
Latest data available: Q3 2020

Weekly number of delayed transfers of care

Desired Direction ↓

Efficient

National Data



Delayed transfers of care remain below the expected level of activity after decreasing since the start of the pandemic. There were signals of a further decrease between 24th Nov & 5th Jan 2021, followed by signals of an increase in early February. However this increase was not sustained and the number since then has been stable.



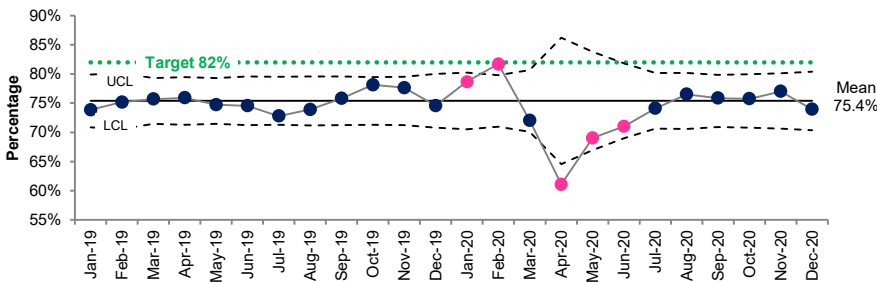
Latest data available: 02 Mar 2021.

Day of surgery admission (DOSa) rate

Desired Direction ↑

Efficient

National Rate



Average national performance is worse than the target but showed signals of improvement in January & February 2020. However there were signals of disimprovement between April & June 2020. Since July 2020 performance is stable but below target.

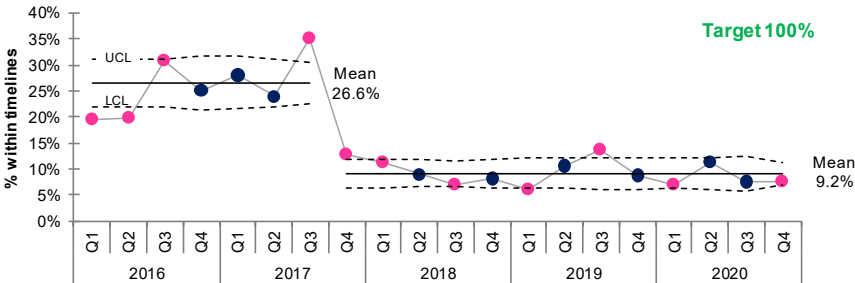


Latest data available: Dec 2020

Disability Act Compliance: percentage of child assessments of need completed within the timelines

Equitable

National Rate



Average national performance is worse than the target with a sustained reduction since Q4 2017. The control limits have been recalculated to reflect this. Performance is unstable, with more variation than expected between quarters.



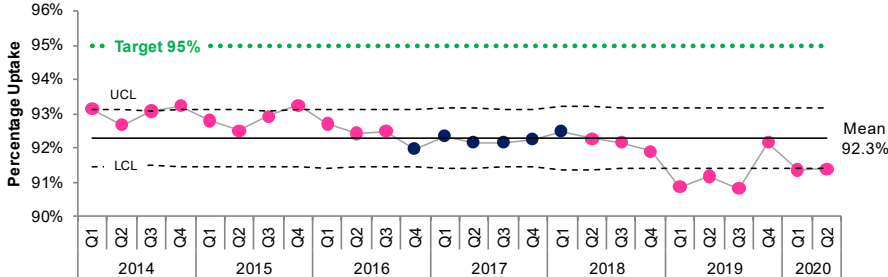
Latest data available: Q4 2020

MMR vaccination rate

Desired Direction ↑

Better Health & Wellbeing

National Rate



Average national performance is worse than the target, with a signal of a reduction between Q4 2016 and Q1 2018 relative to previous quarters, and a signal of a further sustained reduction in the uptake rate since Q2 2018.



Latest data available: Q2 2020
Note: data for Q3 2020 is incomplete and therefore not presented in this version.



Used to highlight a change in the assessment from last month; unexpected variation; or variance from the target.



Indicates updated data for this measure this month



Indicates no updated data available for this measure this month



Indicates a new measure this month



Used to highlight findings from the funnel plot



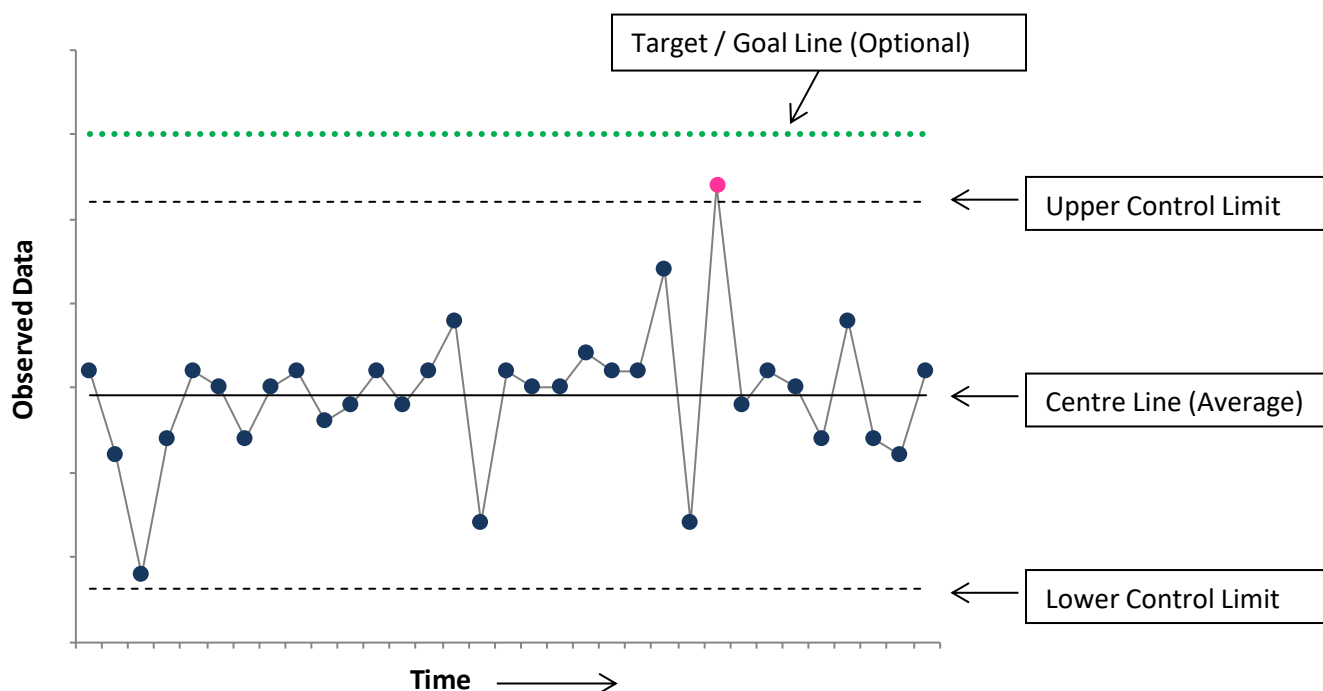
Anatomy of a Statistical Process Control Chart

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.



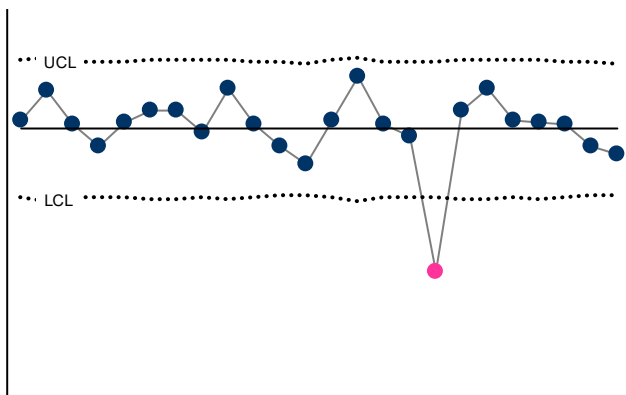
References

Provost L, Murray S. The Healthcare Data Guide: Learning from Data for Improvement. San Francisco: Jossey-Bass, Publication, 2011

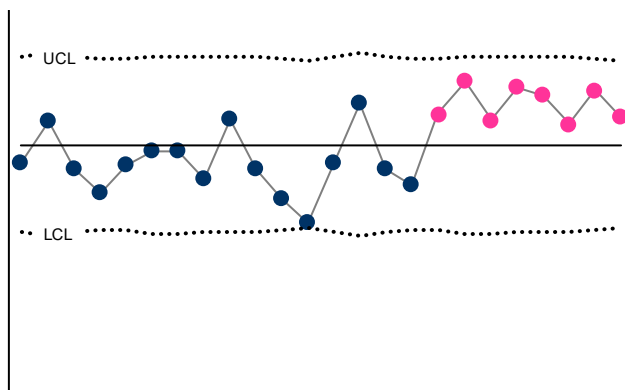


Rules for detecting special cause variation using statistical process control charts

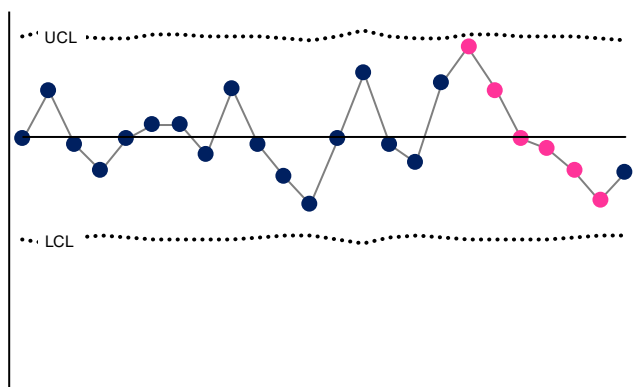
1. A single point outside the control limits (this doesn't include points exactly on the limit)



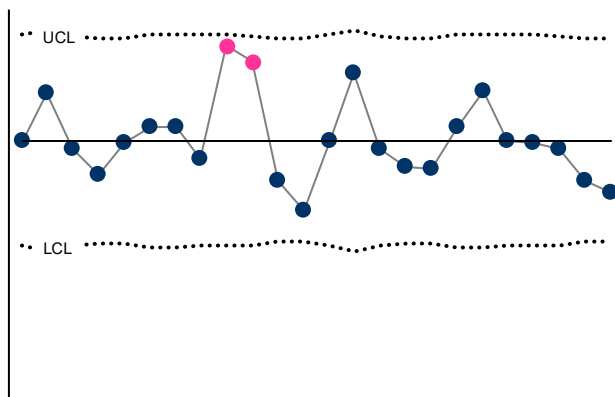
2. A run of 8 or more consecutive points above or below the centre line



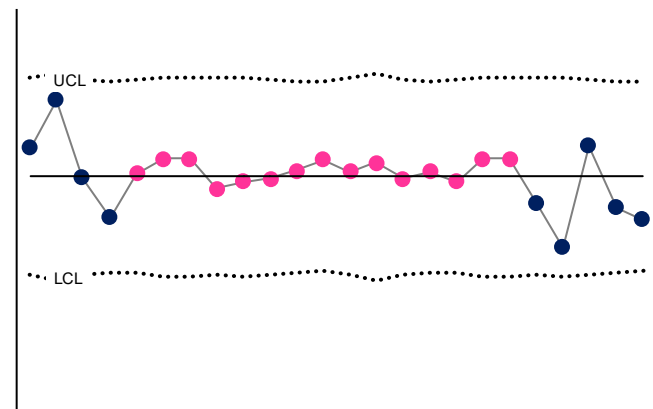
3. A trend of at least 6 consecutive points all going up or down



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)



Quality Profile Metadata

Safe: Hospital acquired new cases of <i>S. aureus</i> bloodstream infection per 10,000 bed days used	
Calculation	Numerator: Number of new cases of hospital acquired <i>S. aureus</i> 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 2018.
Data source	HCAI Monthly Report / Acute Management Data Report
Data frequency	Monthly
Notes	
Further information	https://www.hse.ie/eng/services/publications/kpis/2020-acute-hospitals-metadata.pdf

Safe: Hospital acquired new cases of <i>C. difficile</i> infection per 10,000 bed days used	
Calculation	Numerator: Number of cases of acute hospital acquired <i>C. difficile</i> 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 2018.
Data source	HCAI Monthly Report / Acute Management Data Report
Data frequency	Monthly
Notes	
Further information	https://www.hse.ie/eng/services/publications/kpis/2020-acute-hospitals-metadata.pdf

Person-centred: Percentage of attendees aged over 75 at ED who are in ED <24 hours	
Calculation	Numerator - All ED patients aged >75 years of age, who are admitted to a ward or discharged in less than 24 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 2018.
Data source	Acute Management Data Report
Data frequency	Monthly
Notes	
Further information	https://www.hse.ie/eng/services/publications/kpis/2020-acute-hospitals-metadata.pdf

Timely: Percentage of new patients attending rapid access breast, lung and prostate clinics within recommended timeframe	
Calculation	Numerator : The number of new patients attending rapid access breast, lung and prostate clinics within recommended timeframe. Denominator: the number of new patients attending rapid access breast, lung and prostate clinics
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
Notes	
Further information	https://www.hse.ie/eng/services/publications/kpis/2020-acute-hospitals-metadata.pdf

Quality Profile Metadata

Timely: Percentage of patients waiting <13 weeks following a referral for routine colonoscopy or OGD (Oesophagogastrroduodenoscopy)	
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 2018.
Data source	Acute Management Data Report
Data frequency	Monthly
Notes	
Further information	https://www.hse.ie/eng/services/publications/kpis/2020-acute-hospitals-metadata.pdf

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/2020-acute-hospitals-metadata.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 year (53 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/2020-acute-hospitals-metadata.pdf

Efficient: Day of surgery admission (DOSA) rate	
Calculation	Numerator: The number of elective surgical inpatients who had their primary surgical procedure on date of admission Denominator: The total number of elective surgical inpatients who had a primary surgical procedure.
Details of analysis	National level data are displayed in an SPC P Prime chart since January 2018.
Data source	Hospital Inpatient Enquiry (HIPE)
Data frequency	Monthly
Notes	
Further information	https://www.hse.ie/eng/services/publications/kpis/2020-acute-hospitals-metadata.pdf

Quality Profile Metadata

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
Notes	
Further information	https://www.hse.ie/eng/services/publications/kpis/2019-disabilities-metadata.pdf

Better Health & Wellbeing: MMR vaccination rate

Calculation	Numerator: the number of children who have received the MMR vaccine at 24 months of age Denominator: the number of eligible children.
Details of analysis	National level data are displayed in an SPC P Prime chart since Quarter 1 2014.
Data source	Community Healthcare Metric Report – QlikView
Data frequency	Quarterly in arrears
Notes	Data for 3 LHOs (Cavan Monaghan, Louth & Meath) are missing for Q1 to Q3 2018.
Further information	https://www.hse.ie/eng/services/publications/kpis/-former-health-wellbeing-division-metadata-2018-final.pdf

Better Health & Wellbeing: Flu vaccine uptake rate among healthcare workers (acute hospitals)

Calculation	Numerator: Overall number of vaccinated healthcare workers Denominator: Overall number of eligible healthcare workers
Details of analysis	National level data are displayed in a line chart since the 2011/12 flu season.
Data source	HPSC
Data frequency	Annual, based on the flu season
Notes	
Further information	https://www.hpsc.ie/a-z/respiratory/influenza/seasonalinfluenza/influenzaandhealthcareworkers/hcwinfluenzavaccineuptakereports/