Introduction to Quality Improvement

Workbook

High



INTEREST

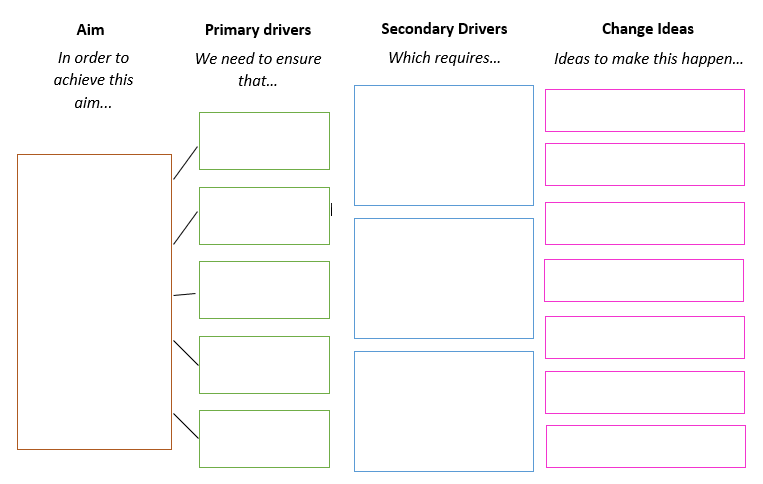
Low

**Creating an aim**

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| SPECIFIC | Is the statement precise about what the team hopes to achieve? |
| MEASURABLE | Are the objectives measurable? Will you know whether the changes resulted in improvement? |
| ACHIEVABLE | Is this doable in the time you have? Are you attempting too much? Could you do more? |
| RELEVANT | Do you have the resources needed (people, time, support?) |
| TIME BASED | Do you identify the timeline for the project – when will you accomplish each part? |

Now write your SMART aim below:

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**Measurement**

Three Types of Measures

Use a balanced set of measures for all improvement efforts: outcomes measures, process measures, and balancing measures.

**Outcome Measures**

How does the system impact the values of patients, their health and wellbeing? What are impacts on other stakeholders such as payers, employees, or the community?

* For diabetes: Average haemoglobin A1c level for population of patients with diabetes
* For access: Number of days to 3rd next available appointment
* For critical care: Intensive Care Unit (ICU) percent unadjusted mortality
* For medication systems: Adverse drug events per 1,000 doses

Now write some outcome measures below:

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**Process Measures**

Are the parts/steps in the system performing as planned? Are we on track in our efforts to improve the system?

* For diabetes: Percentage of patients whose haemoglobin A1c level was measured twice in the past year
* For access: Average daily clinician hours available for appointments
* For critical care: Percent of patients with intentional rounding completed on schedule.

Now write some process measures below:

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**Balancing Measures** (looking at a system from different directions/dimensions)

Are changes designed to improve one part of the system causing new problems in other parts of the system?

* For reducing time patients spend on a ventilator after surgery: Make sure reintubation rates are not increasing
* For reducing patients' length of stay in the hospital: Make sure readmission rates are not increasing

Now write some balancing measures below:

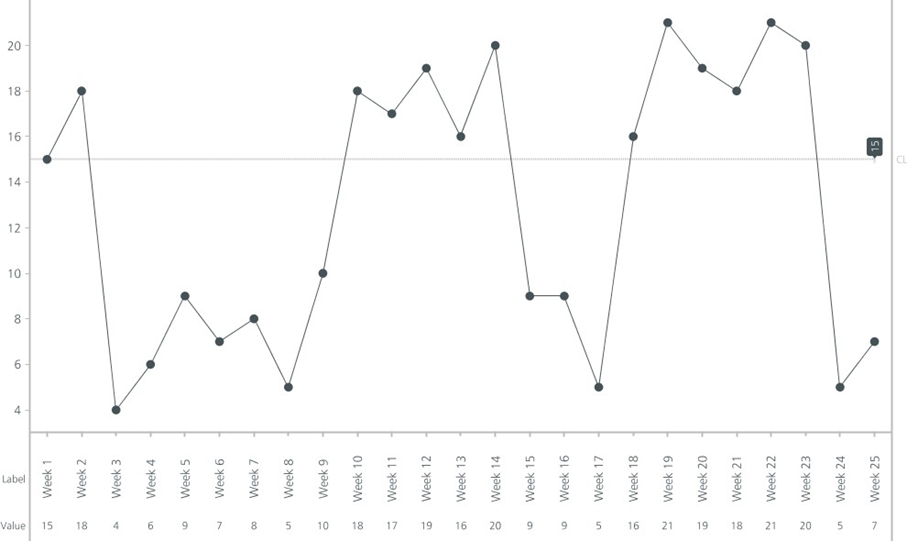
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**NOTES**

Run Chart Exercise

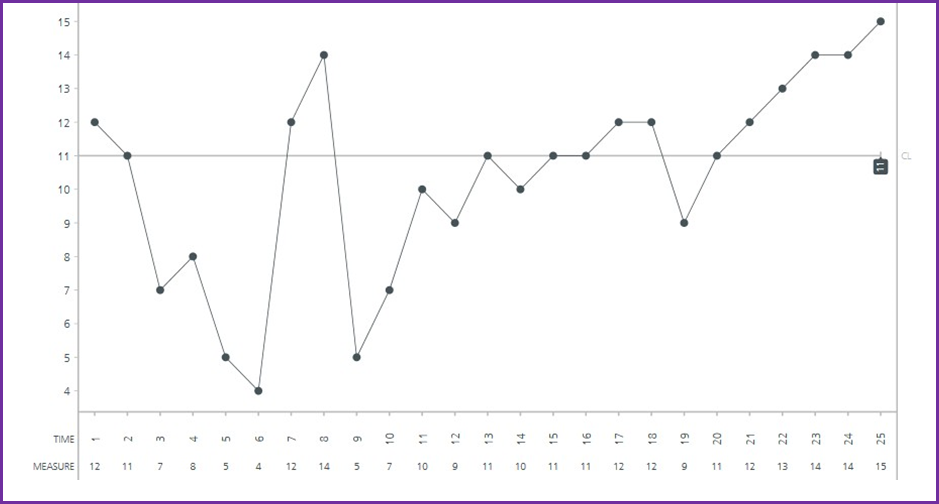
**Identify the shift:**

*6 or more consecutive data points above or below the median.* (Values that fall directly on the median are not included in this count and neither break nor add to a shift)

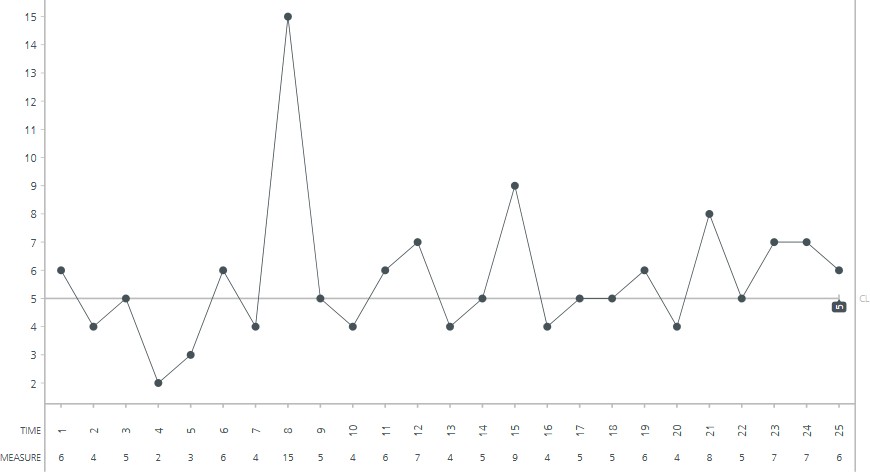
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**Identify the trend:**

*5 or more consecutive data points in the one direction.* (Where the value of two or more consecutive points is the same, only include one in the count)

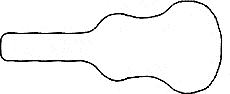
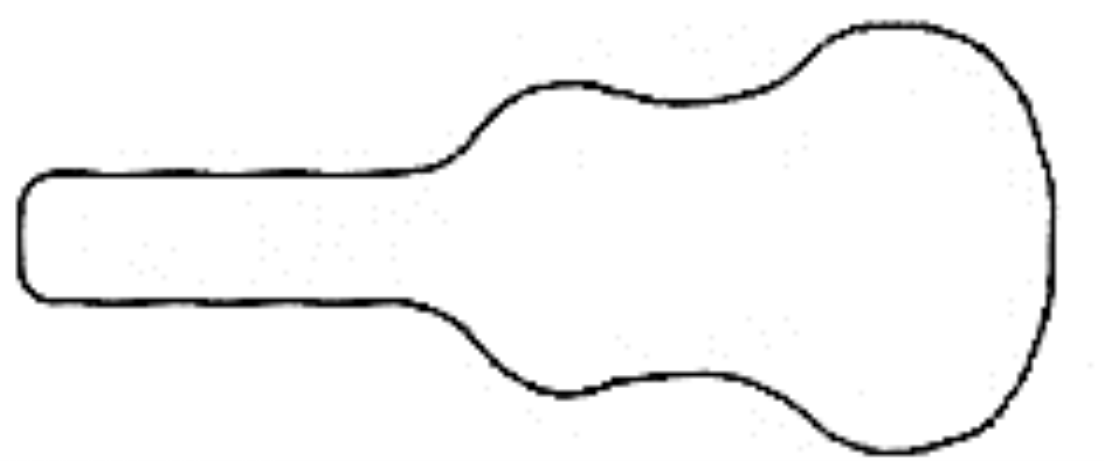


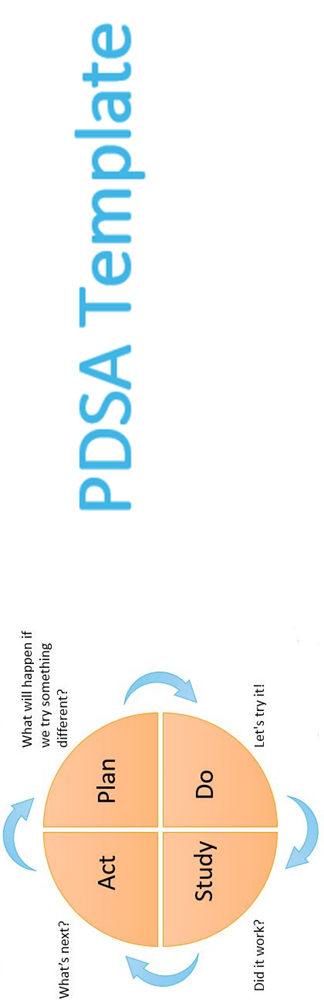
**Identify the astronomical data point:**

*One data point is clearly different from all others.*

**NOTES**

Guitar game





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| List the tasks needed to set up this test of change | **Person responsible** | **When to be done?** | **Where?** |
| Predict what will happen when the test is carried out (what do you expect to learn?) | How will you know whether the change is an improvement? (What will you measure and how?) | | |

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| **PLAN: Describe your test of change**  What do you want to learn from this cycle?  What question do you intend to answer? |
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| **Do**  Describe what actually happened when you ran the test. Note any unexpected events or problems.  Record any adjustment to the stated plan/analyse the data. |
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| **A close up of a logo  Description automatically generatedStudy**  Describe the measured results and how they compared to the predictions and what you learned from the cycle; what have you not learned?  Did your change lead to improvement? Why? Why not? |
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| **Act**  Describe modifications for the next cycle based on what you learned. What are your next questions? What is your updated hypothesis? |
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Tennis Ball Game score sheet: theories and results

Use this sheet to record your test of change and data for the time taken and number of times the balls dropped.

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| Test of change  What are you going to do differently? | Time taken | No of times ball dropped |
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