

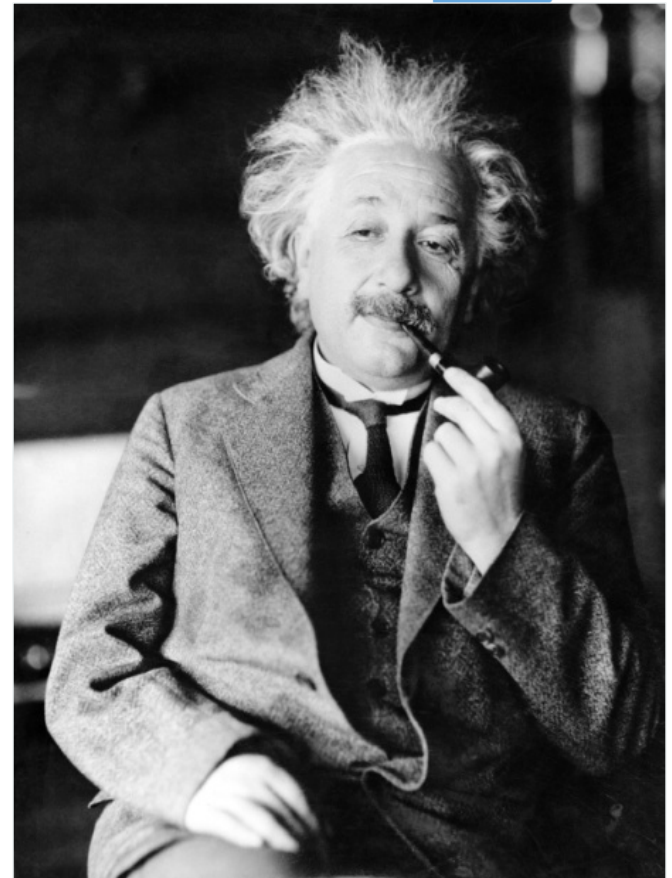


Bath Improvement System

A3 Thinking

“If I had an hour to solve a problem, I would spend 55 minutes thinking about the *problem* and 5 minutes on the *solution*”

Albert Einstein



What is A3 thinking?



An illustration of two hands holding a tablet. The tablet has a dark blue border and a white center containing text. The hands are light-skinned and are positioned at the bottom corners of the tablet.

Name refers to the minimum sized paper used to report the process

Provides a structured framework for thinking through a problem

This structure forces you to follow a process that helps ensure you understand the problem and causes before jumping to a solution

A 'live' document which can be updated as you progress and your work evolves

A communication tool, the A3 format allows us to tell the whole story on one page and allows contribution from all.

Title of A3
Team Members

Step 1: Problem Statement

Step 4: Analysis (Issues and Root Causes)

Step 6: Actions and Risks

Step 2: Current Situation

Step 5: Counter Measures and Future State

Step 7: Cost/Benefit

Step 3: Vision/Goals

Step 8: Insights

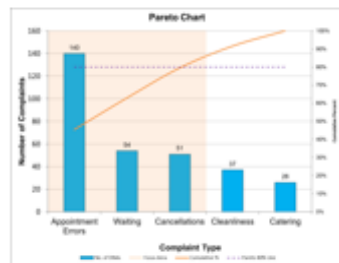
Title of A3: No. of complaints
Team Members: XYZ

Step 1: Problem Statement

The number of complaints has risen in the last 4 months from an average of 23 up to 39 complaints. This has sustained above our threshold of 28 complaints, across the last 3 months.

Patients are unhappy with the service they are receiving and raising complaints against us, and we need to address these issues.

Step 2: Current Situation



Step 3: Vision/Goals

Vision: to have 0 complaints each month
Goal: To reduce the number of complaints from 39 to our threshold of 28, by November 2019.

Step 4: Analysis (Issues and Root Causes)



Category	Occurrence (Sep)		Occurrence (Nov)	
	Category	Occurrence	Category	Occurrence
Wrong Date/Time on letter	Wrong Date/Time on letter	30	Wrong Date/Time on letter	30
Incorrect Team	Incorrect Team	12	Incorrect Team	12
Appointment Letter not received	Appointment Letter not received	8	Appointment Letter not received	8
Appointment not required	Appointment not required	2	Appointment not required	2

Appointment Errors Categories	No.
Wrong Date/time on letter	30
Incorrect Team	12
Appointment Letter not Received	8
Appointment Not required	2
Total	52

Step 5: Counter Measures and Future State

Concern	Cause	Countermeasure	Owner	Due Date	Status
Wrong date/time on appointment letters.	Lots of manual data entry.	Automatic formula in letter template.	JB	29/04/19	⊕
Wrong date/time on appointment letters.	Lots of manual data entry.	Create a standard work for new letter template.	BR	10/05/19	⊕
					⊕
					⊕

Step 6: Actions and Risks

Bath Improvement System ACTION LIST					
Action No	Details	First Raised Date (or record)	Action by	Progress Update	Last
1	Enter details of the action	Date to be completed by	Staff summary of current progress	Name of the person completing action	JB - 19/
2	Review template to include the automatic formula.	10/04/19	29/04/19		JB - 19/
3	Test the automatic formula with number of the team.	10/04/19	10/05/19		JB - 19/
4	Set a date and make alterations to a working session to create the standard work for new template.	10/04/19	10/05/19		JB - 19/
5	Set a date and time for training session, to train all team members in the standard work.	10/04/19	17/05/19		JB - 19/

Step 7: Cost/Benefit

- Improved customer experience, decrease in number of complaints.
- Expect to save X amount of time by removing the amount of time, [insert job role] spends manually inputting appointment letters. Time saving equates to a cost saving of £XY.

Step 8: Insights

- We have seen a reduction in the number of complaints, with a significant reduction in the number of complaints due to appointment errors.
- Valuable to collect manual data, it gave us a good insight into why we were producing errors, and gave us an area of focus.

What's the problem you need to address?



The starting point is describing the problem you want to improve!

Problem statement

The problem statement includes:

- The issue that you are wanting to address is quantified.
- Why it is important to address.
- The impact of the problem (remember to relate to True North).

What it should NOT describe:

- *Solutions.*
- *Why the problem is occurring.*
- *Who is to blame.*

We don't have enough staff

Cause

Patients are being treated in corridors

Symptom

Common mistakes of problem identification

Blame

Doctors aren't writing TTOs on time

Solutions

We need more beds

Example Problem Statements



FFT Response Rate

“The average FFT response rate is 14% for the last 6 months. This falls below the trust standard of 35 %. This means we are unable to capture our patients views and therefore can’t reflect on our practice.”

Length of Drug Rounds

“Our drug rounds are taking an average of >60 minutes to complete. The times range from 20 minutes to 2 hour 15 minutes. This has an impact on patient experience and on staff satisfaction.”

Cancer Performance

“The surgical division is failing to achieve its 62 day cancer performance target of 85% . The impact of this failure is that patients wait longer to have their cancer treatment. This will also impact on patient outcomes and Trust reputation.”

Title of A3
Team Members

Step 1: Problem Statement

I am consistently late for work, averaging 20 minutes each day across the five day working week. This is impacting on my ability to perform my job.



Step 2: Current Situation

Step 3: Vision/Goals

Step 4: Analysis (Issues and Root Causes)

Step 5: Counter Measures and Future State

Step 6: Actions and Risks

Step 7: Cost/Benefit

Step 8: Insights

What's the current situation?



Current Situation



What is the current process?



How are you managing this at the moment?

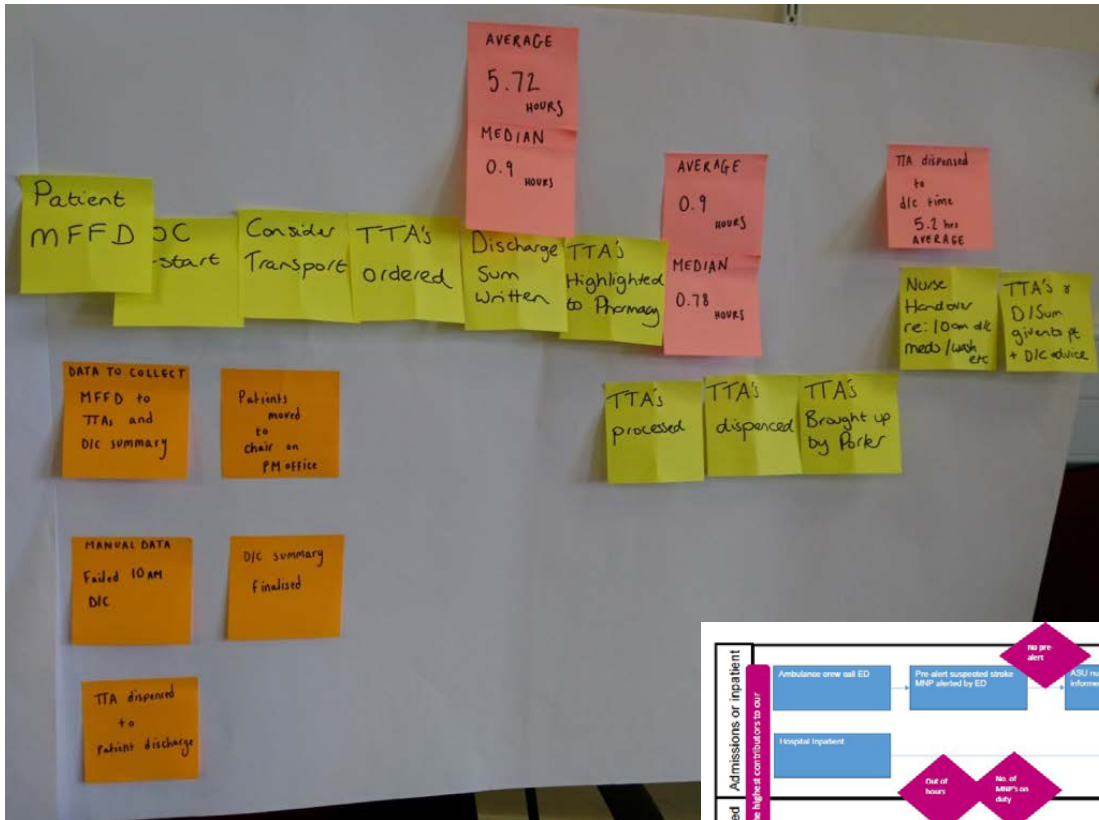


What is the data telling us?
What are your top contributors?

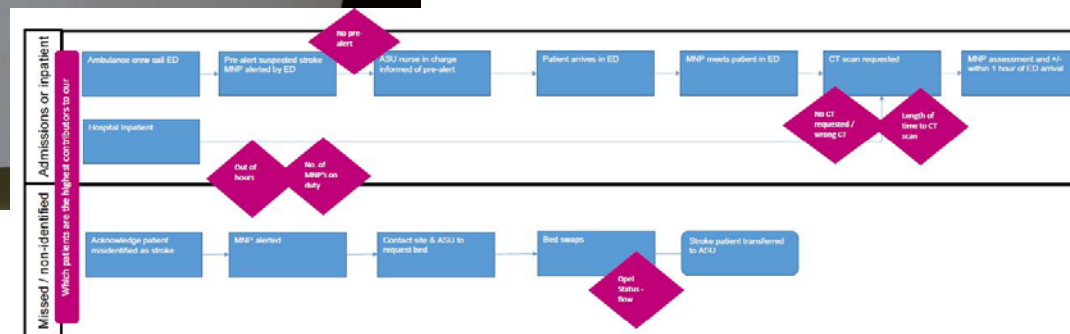


Include visuals (e.g. data, graphs, process maps)

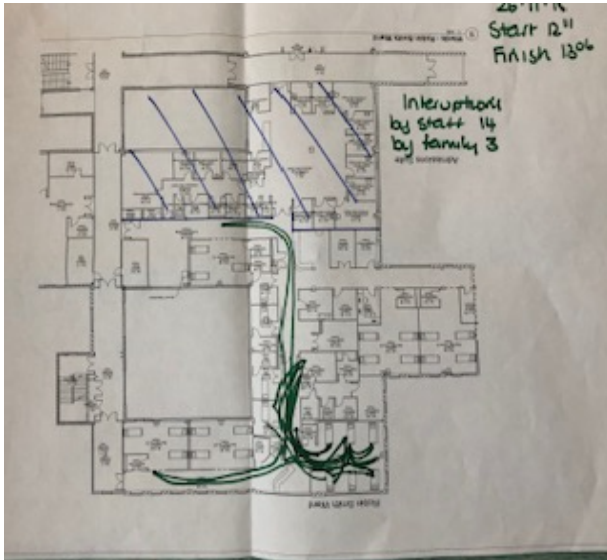
Process Mapping



Process map to capture the main process steps when discharging a patient.



Spaghetti Diagram



Spaghetti diagram to show motion waste during drug round.

Manual Tally Chart

Name:

Date:

		Interruptions:		
Start time:		Keys:	Patient / relative:	Telephone:
Finish time:		Drug check:	Commode:	Site Manager:
		Medical Bleep:	Doctor:	Drug cupboard:
		Stocking trolley:	Other:	
		Additional Comments		

Manual tally chart to capture the interruptions during a drug round.

Pareto Analysis

The 80/20 Rule (Pareto's Analysis)

The 80/20 rule essentially states that **80% of the results** come from **20% of the causes**.

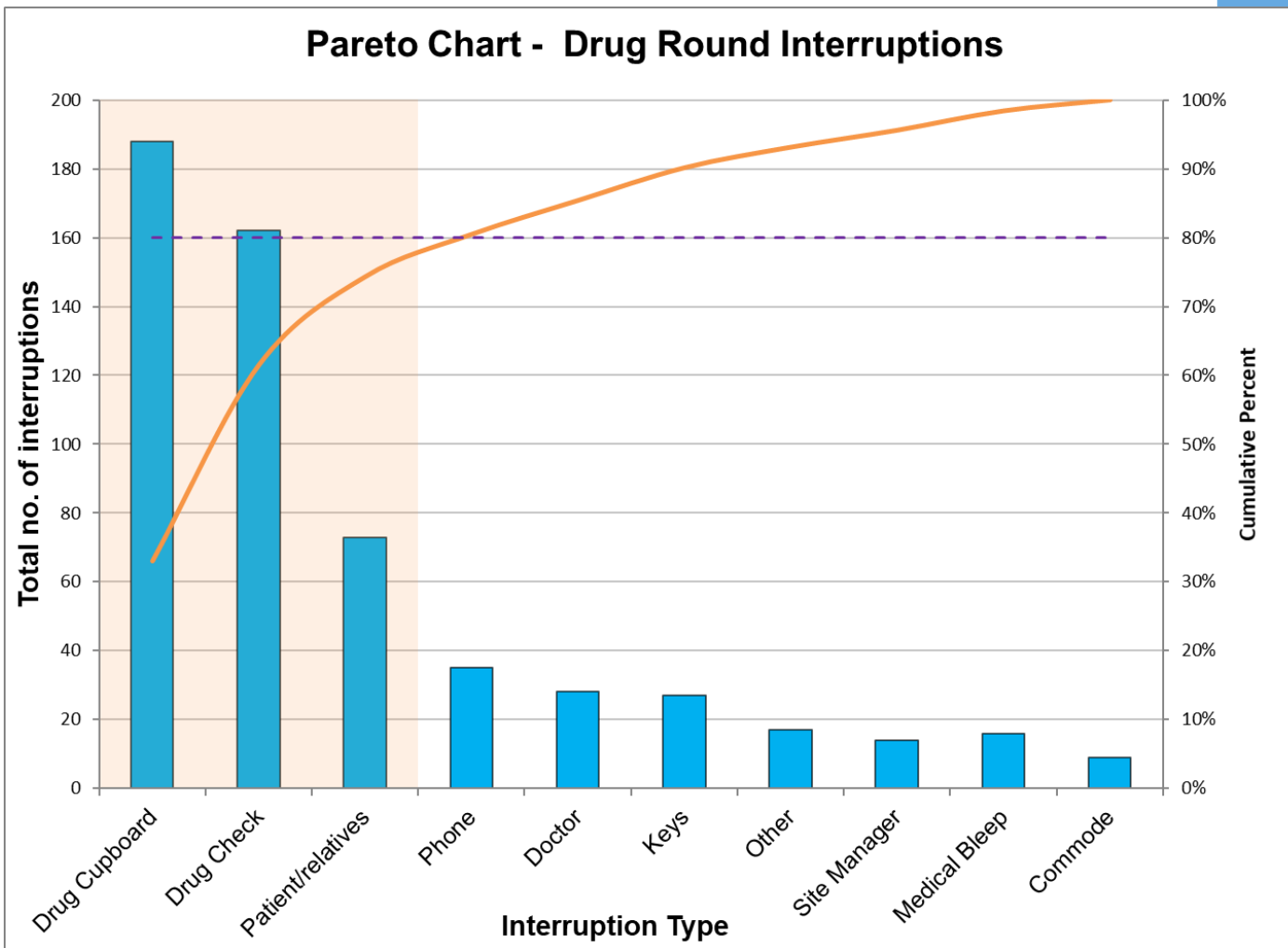
Examples:

We spend 80% of our time working with 20% of our patients.

80% of our falls happen on 20% of our units.

80% of agency spend is from 20% of agencies.

Pareto Analysis



Current Situation: tools to use



SPC Charts /
Run Charts

Process
Mapping

Spaghetti
Diagrams

Manual Tally
Charts

Pareto Charts

Surveys

Video: Current Situation



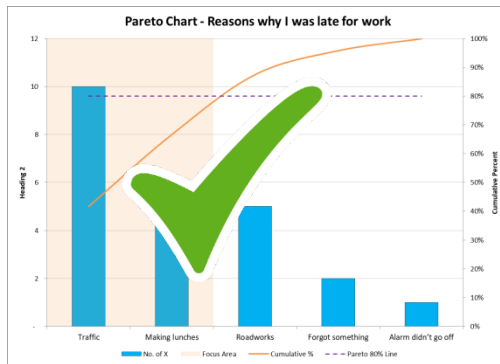
Title of A3
Team Members

Step 1: Problem Statement

I am consistently late for work, averaging 20 minutes each day across the five day working week. This is impacting on my ability to perform my job.



Step 2: Current Situation



Step 3: Vision/Goals

Step 4: Analysis (Issues and Root Causes)

Step 6: Actions and Risks

Step 7: Cost/Benefit

Step 5: Counter Measures and Future State

Step 8: Insights

Determine your vision & goals



Vision/Goals



Vision:

How would we know if perfection had been achieved?

Ultimate guiding direction.

Goals:

S-M-A-R-T

Measurement relating to your problem statement or current situation

Without measurement, there can be no certainty of improvement.

Goal definition: SMART



Specific

What exactly is it that you want to do?

Measureable

What is the unit of measurement? What measurement are you looking to achieve?

Attainable

Does this feel possible based on the information you have right now?

Relevant

Does this goal definitely relate directly to your problem statement and your current situation?

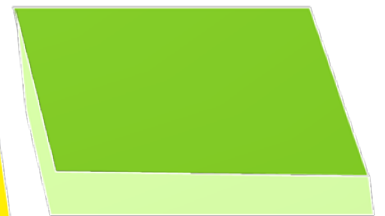
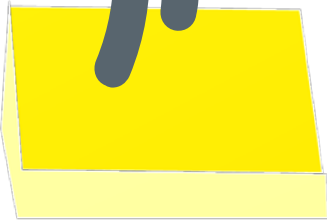
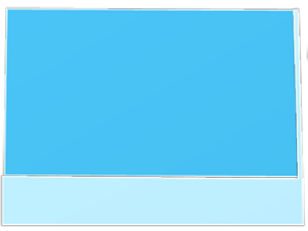
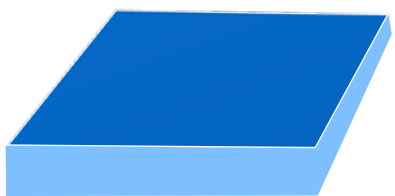
Time limited

At what point in time would you like to have achieved this by?

Vision & Goals

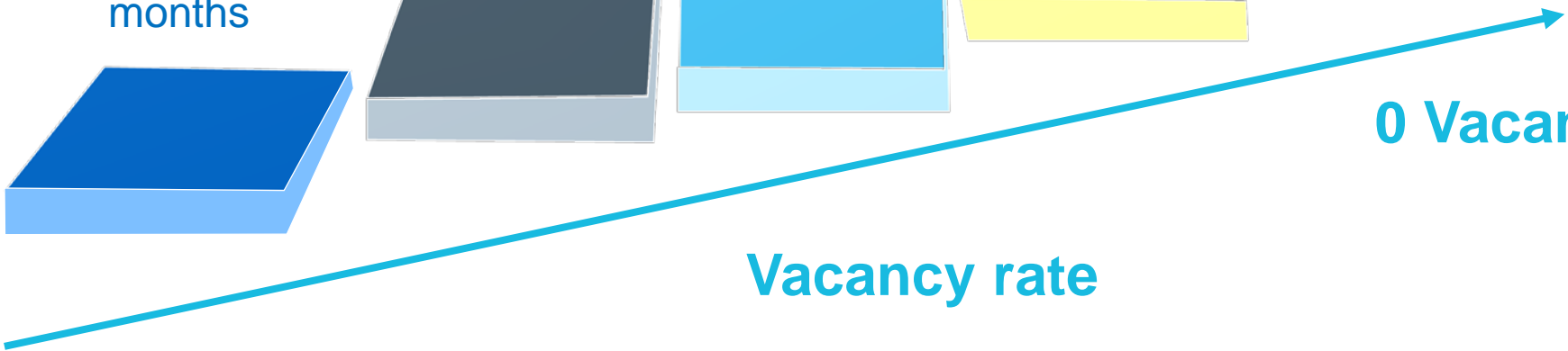


Recruit 5 WTE
Band 5's within 4
months



0 Vacancies

Vacancy rate



Examples:

Cancer Performance

Vision: To achieve the national standard of 85%

Goal: Top contributors to achieve a 5% increase within six months.

Length of Drug Rounds

Vision: An efficient safe medication round taking 30 mins or less with only essential interruptions

Goal: Reduce medication round to 45 mins

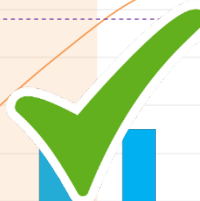
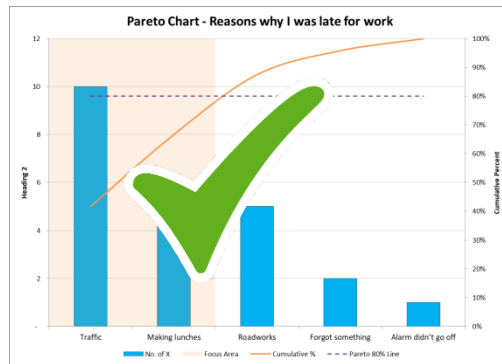
Title of A3
Team Members

Step 1: Problem Statement

I am consistently late for work, averaging 20 minutes each day across a five day working week. This is impacting on my ability to perform my job.

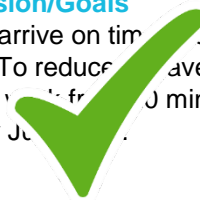


Step 2: Current Situation



Step 3: Vision/Goals

Vision: To arrive on time everyday for work.
First goal: To reduce average time that I am late for work from 20 minutes to 10 minutes by June.



Step 4: Analysis (Issues and Root Causes)

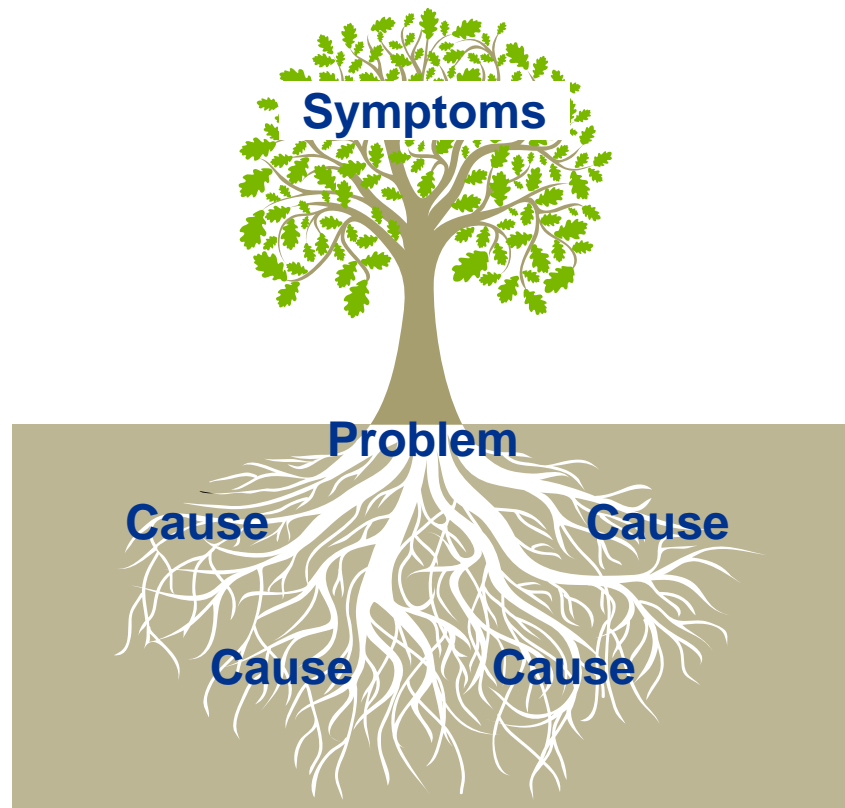
Step 6: Actions and Risks

Step 7: Cost/Benefit

Step 5: Counter Measures and Future State

Step 8: Insights

What are the root causes to your problem?



What is root cause analysis?



Has anyone ever made a change and it didn't have the desired effect? Or that the change wasn't sustained?

This could have been because the **root cause** wasn't directly addressed.

Need to understand **why** it is happening.

Benefits of RCA



Helps create focus on the core problem which needs to be addressed.

It allows better understanding of issues and prioritisation of improvement efforts.

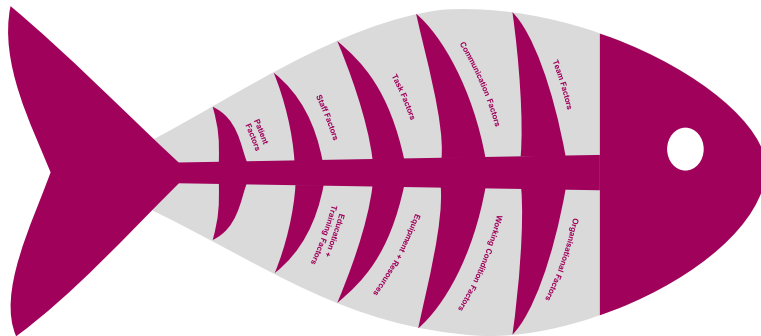
Makes improvement efforts more sustainable, rather than fire fighting.

Generates a large quantity a variable ideas in a short space of time.

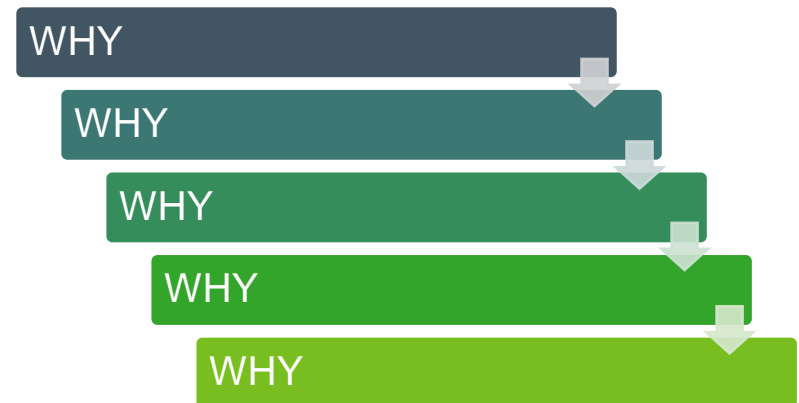
Root Cause Analysis Tools



Fishbone Diagrams

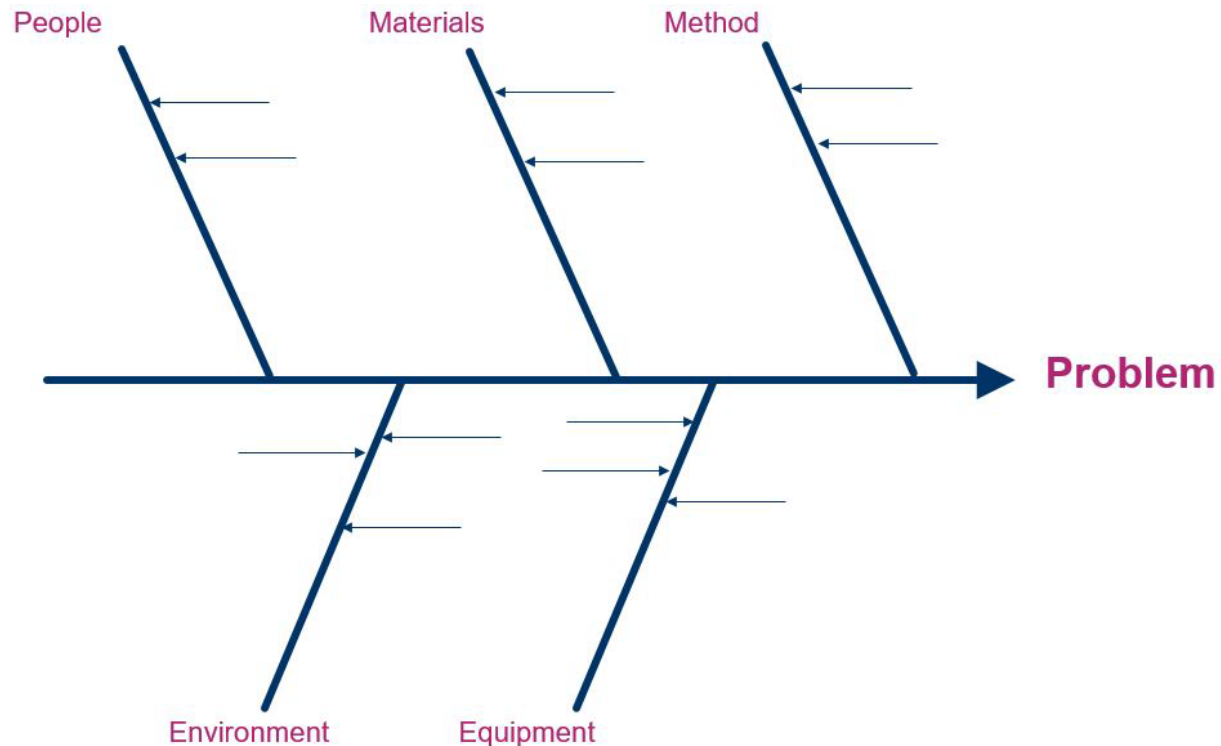


5 Why's

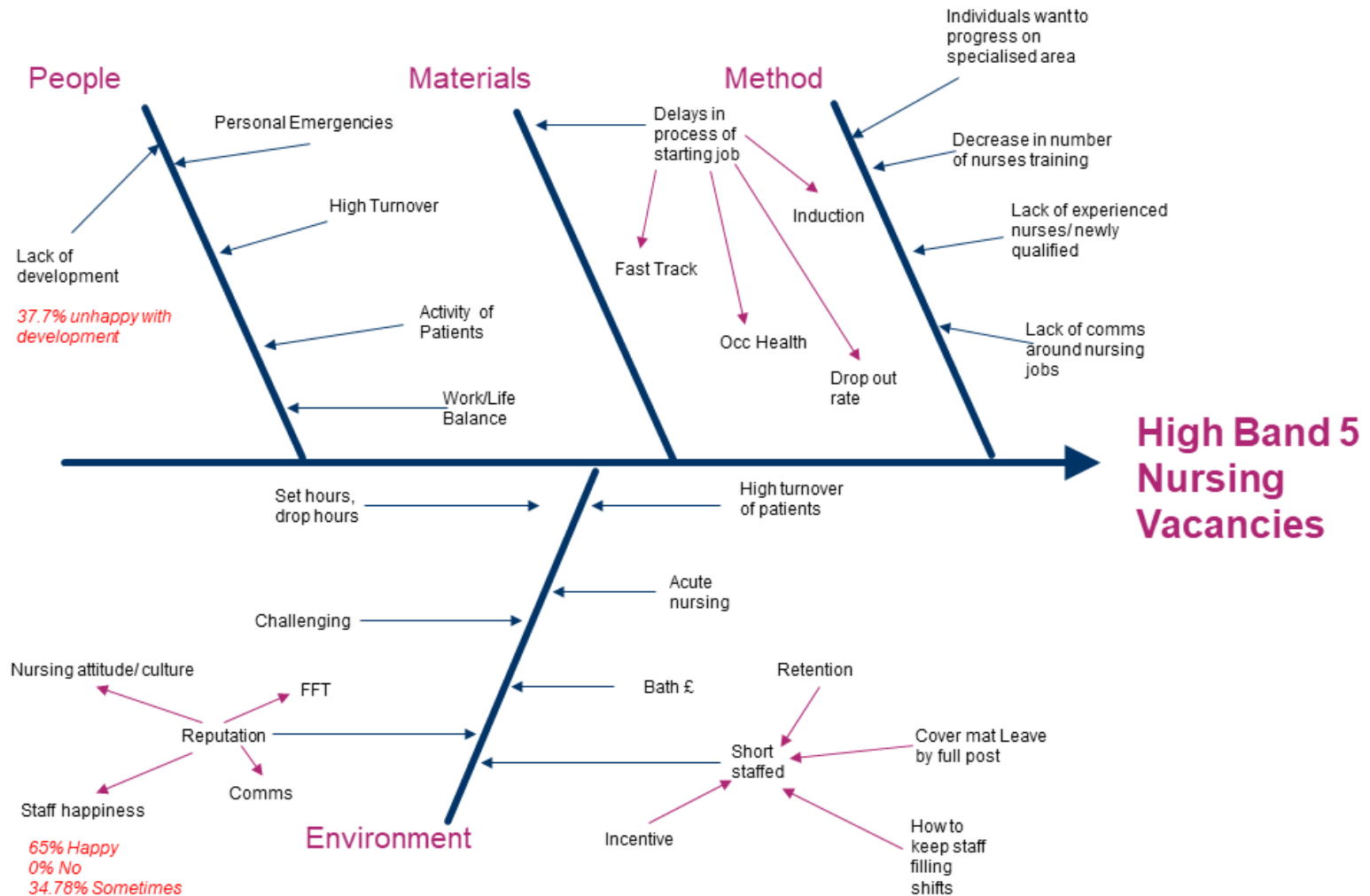


Fishbone Categories

Used to structure potential causes and root causes related to a problem or opportunity.



Example



Five Whys



Five Whys

Ask why five times

Don't stop at the first why, keep going until you reach the root cause

There may be multiple root causes to a problem, and different people will answer 'why' differently



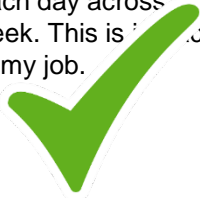
Five Whys: Tips & Tricks

- 1 Start with a specific measurable problem
- 2 Keep asking why until you get to a level where you can take action
- 3 Be cautious not to use the 5-Why's in an aggressive or condescending way. The discussion should be engaging and collaborative
- 4 Be patient and resist the opportunity to propose an answer outright. Time spent finding the right root cause(s) can save time later
- 5 The team may not have to ask why 5 times to identify the root cause. In some cases teams may have to ask why 9 times and in other cases they may only have to ask why 3 times

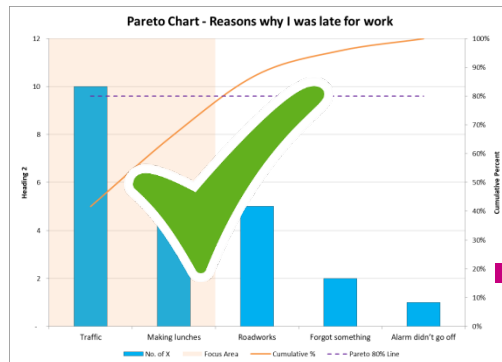
Title of A3
Team Members

Step 1: Problem Statement

I am consistently late for work, averaging 20 minutes each day across the five day working week. This is impacting on my ability to perform my job.

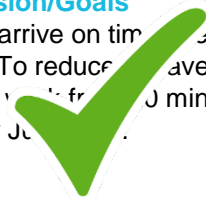


Step 2: Current Situation

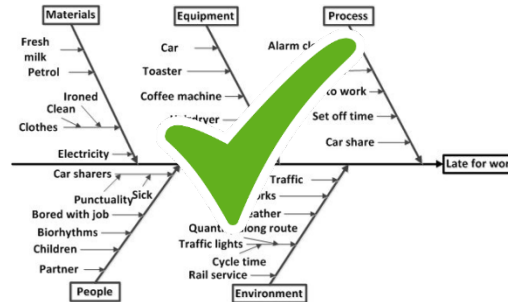


Step 3: Vision/Goals

Vision: To arrive on time every day for work.
First goal: To reduce the average time that I am late for work from 20 minutes to 10 minutes by June.



Step 4: Analysis (Issues and Root Causes)



Step 6: Actions and Risks

Step 7: Cost/Benefit

Step 5: Counter Measures and Future State

Step 8: Insights

What countermeasures
can we put in place?



Countermeasures

Solution

Vs.

Countermeasure

Solution

- Insinuates you have found a permanent 'fix' to a root cause
- Finality

Countermeasure

- Refers to the way a proposed action directly addresses a root cause in **existing** circumstances
- Countermeasures may change as → continuous improvement

Countermeasures

Countermeasures are the actions taken to address root causes.

Countermeasures can come from:

- Best practice research/literature
- Design workshops
- Ideas from your stakeholders
- Based on data analysis
- Learning from other organisations.

3C's Template



Concern	Cause	Countermeasure
My alarm doesn't always go off.	My phone runs out of battery.	Charge my phone in the evening.
There is a lot of traffic.	I drive past a school on my way to work and clash with school drop off.	Drive a different route to work.
There is a lot of traffic.	I drive past a school on my way to work and clash with school drop off.	Leave the house ten minutes earlier to avoid school drop off.

Status Key



Planned



Being implemented



Implemented



Reviewed

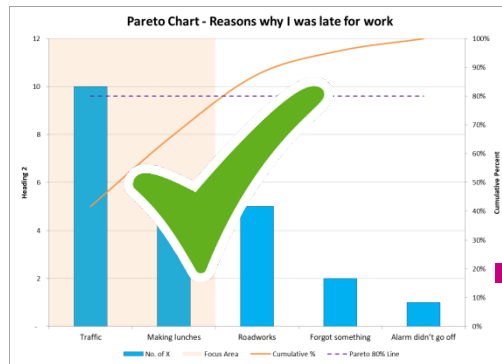
Title of A3
Team Members

Step 1: Problem Statement

I am consistently late for work, averaging 20 minutes each day across the five day working week. This is impacting on my ability to perform my job.

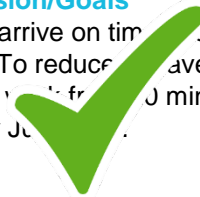


Step 2: Current Situation

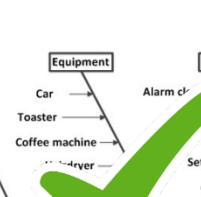
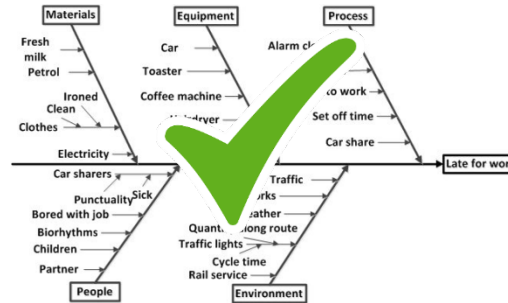


Step 3: Vision/Goals

Vision: To arrive on time every day for work.
First goal: To reduce the average time that I am late for work from 20 minutes to 10 minutes by June.



Step 4: Analysis (Issues and Root Causes)



Step 5: Counter Measures and Future State

Concern	Cause	Countermeasure
My alarm doesn't always go off.	My phone battery	Charge phone in the evening.
There is a lot of traffic.	Drive past school on way to work and school drop off.	Drive a different route to work.
There is a lot of traffic.	Drive past school on way to work and school drop off.	Leave the house ten minutes earlier to avoid school drop off.

Status Key: + Planned + Being Implemented + Implemented + Reviewed



Step 6: Actions and Risks

Step 7: Cost/Benefit

Step 8: Insights

How do we take forward
our countermeasures?



Actions risks, benefit and insights

Step 6: Actions and risk

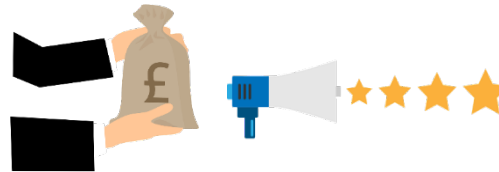
Key Activities	Lead	Week 1	Week 2	Week 3	Week 4	Week 5
Meet with Lisa to review sustainability plan	Leah					
Agree with timelines and resources	Leah					
Weekly progress update	Leah					
Ensure cut the band manual is up to date	Connie					
Develop auditing process document	Connie					
Establish auditing ownership	Leah / Connie					
Ensure transfer of care manual is up to date	Ashley / Mo					
Coaching staff on units (Medicine and ED) with the transfer of care process	Ashley / Mo					
Follow-up investigation on root cause delays on transfer of care	Cindy					
Follow-up on root causes of delays	Cindy					
Finalize data collection process with admitting (Deana)	Leah					
Create documentation for data collection process	Leah / Connie					
Finalize ownership of data collection process	Leah / Connie					
Develop program to reward good performance	Cindy / Lisa					

The plan of action, who will do what, when and how?

Are there any risks associated with your countermeasures?

What actions do you need to put in place to mitigate against these?

Step 7: Benefits



Hard Benefits - releasing money back into the system.

Soft Benefits – a benefit that is not financial e.g. staff morale.

Step 8: Insights



What's worked well?

What hasn't worked well?

What needs to be done differently?

What did we learn from this?

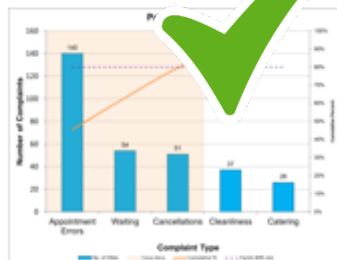
Title of A3: No. of complaints
Team Members: XYZ

Step 1: Problem Statement

The number of complaints has risen in the last 4 months from an average of 23 up to 39 complaints. This has sustained above our threshold of 28 complaints, across the last 3 months.

Patients are unhappy with the service they are receiving and raising complaints against us, and we need to address these issues.

Step 2: Current Situation



Step 3: Vision/Goals

Vision: to have 0 complaints every month
Goal: To reduce the number of complaints from 39 to our threshold of 28 by November 2019.

Step 4: Analysis (Issues and Root Causes)



Category	Occurrence (Sep)		Occurrence (Nov)		Occurrence (Dec)
	Category	Occurrence	Category	Occurrence	
Wrong Date/Time on letter	Wrong Date/Time on letter	30	Wrong Date/Time on letter	12	12
Incorrect Team	Incorrect Team	12	Incorrect Team	8	8
Appointment Letter not received	Appointment Letter not received	8	Appointment Letter not received	2	2
Appointment not required	Appointment not required	2	Appointment not required	0	0

Appointment Errors Categories	No.
Wrong Date/time on letter	30
Incorrect Team	12
Appointment Letter not Received	8
Appointment Not required	2
Total	52

Step 5: Counter Measures and Future State

Concern	Cause	Countermeasure	Owner	Due Date	Status
Wrong date/time on appointment letters.	Lots of manual data entry.	Automatic formula in letter template.	JB	29/04/19	⊕
Wrong date/time on appointment letters.	Lots of manual data entry.	Create a standard work for new letter template.	BR	10/05/19	⊕
					⊕
					⊕

Step 6: Actions and Risks

Bath Improvement System ACTION LIST					
Action No	Details	First Raised Date for record	Action by	Last Update	Lead
1	Check template to include the automatic formula.	10/04/19		100% of current progress	Name of the person completing action: JB
2	Test the automatic formula with new team.				JB
3	Get a date and make alterations to a new session to create the standard work for new template.				BR
4	Test date and time for training session, to train a team members in the standard work.	17/05/19			BR

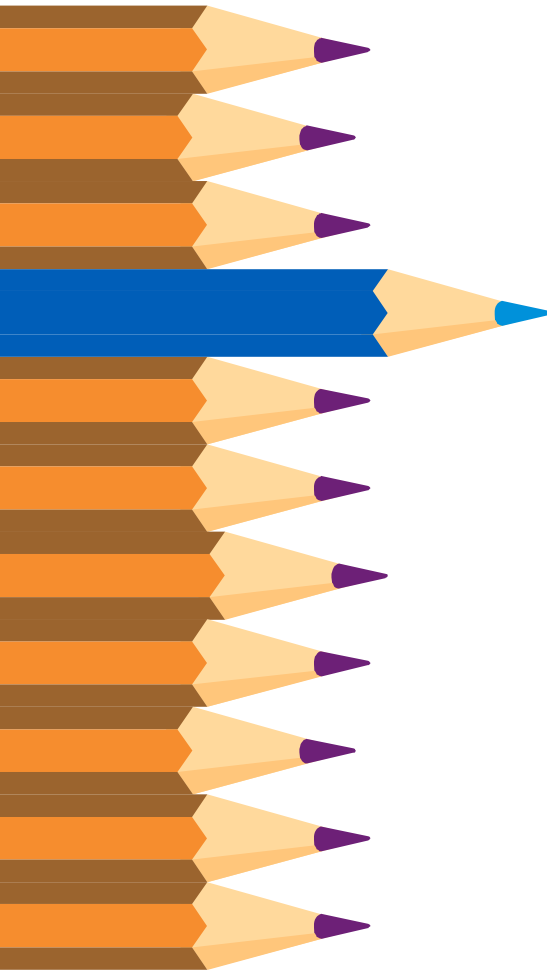
Step 7: Cost/Benefit

- Improved customer experience, decrease in number of complaints.
- Expect to save [time] of time by removing the amount of time, [job role] spends manually inputting appointment letters. Time saving equates to a cost saving of £xY.

Step 8: Insights

- We have seen a reduction in the number of complaints, with a significant reduction in the number of [job role] due to appointment errors.
- Valuable to collect annual data, it gave us a good insight into why [job role] were producing errors, and gave us an area of focus.

An A3 should....



Tell a simple easy to understand story

Use graphics whenever possible (pictures, charts, diagrams)

Be displayed in a place where it can be seen

Serve as a 'live' and evolving document, contributed to by a team of people

Be updated regularly as the teams go through PDSA cycles

Involve the use of Root Cause Analysis tools



Visit our webpages to find
out more about **Scorecard**



For help & support applying this tool in your area, please contact the Coach House on...



ruh-tr.ruhodprogramme@nhs.net



ext. 5516