

Planning for Improvement

PDSAs the fun way!!

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Improvement Foundation





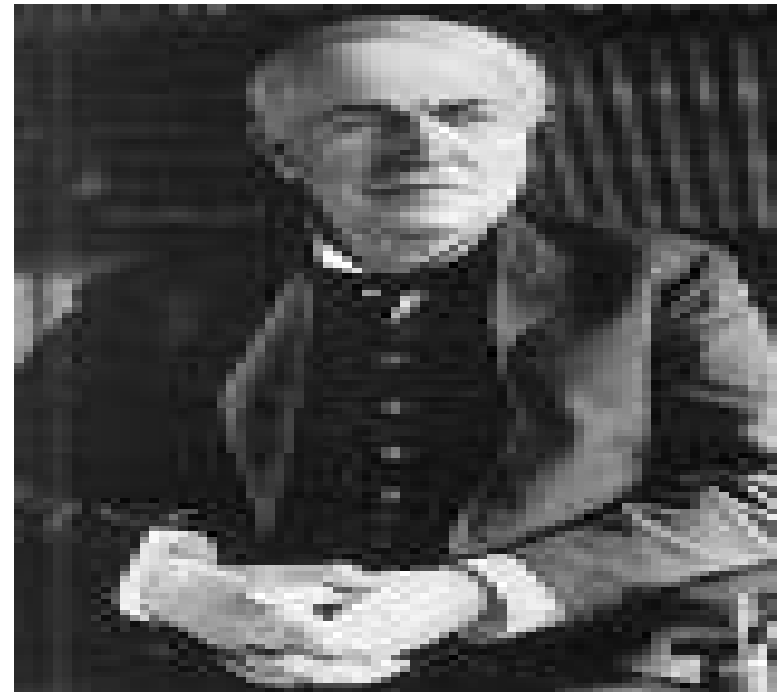


**Ice
breaker**



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Thomas Edison



What was the problem?



Fun Easy and Popular!



A Root Cause

- Is the single biggest contributory factor to a systems failure
- Is a fundamental cause, which, if eradicated, will resolve or significantly contribute to the resolution of the problem, widely across a system



Ground Rules



- Everyone must be honest with each other & show respect
- Everyone involved in the event attends the meeting
- No blame, only 'I' statements
- The event is recalled by each individual involved
- These recollections are agreed & documented

Gathering Information

- Information is the lifeblood of knowledge & wisdom
- 60% of the time should be spent information gathering
- Everyone involved in the patient's care should be included



Multiple Professional Review Meeting

- Invite delegates, explain process
- OHP flipcharts
- Transpose incident chronology onto wall
- Note-pads, pens, different coloured post-its and blue tack
- Refreshments
- Facilitator



Root Cause Analysis



- Success is all in the preparation
- Generally people too readily jump to **Solutions**
- In the long run we pay heavily for not
 - **Defining & Analysing the Problem**

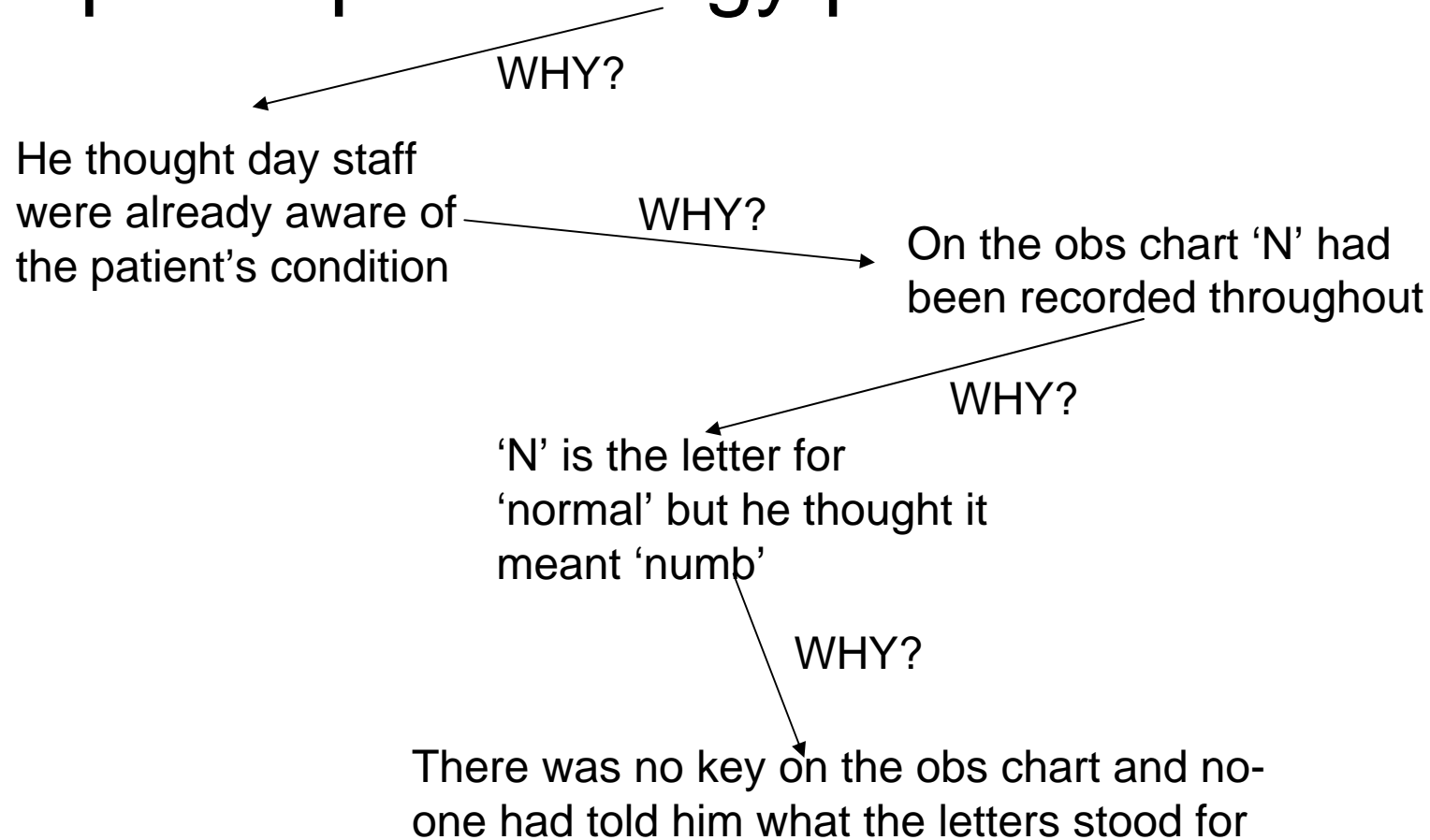
Tools For Defining The Problem

- 5 Whys
- Gap Analysis
- Process and Mind Mapping
- Ishikawa (Fishbone)
- Gathering Information
- Pareto Analysis
- Brainstorming
- Affinity diagram
- Tree diagram

Root Cause Analysis

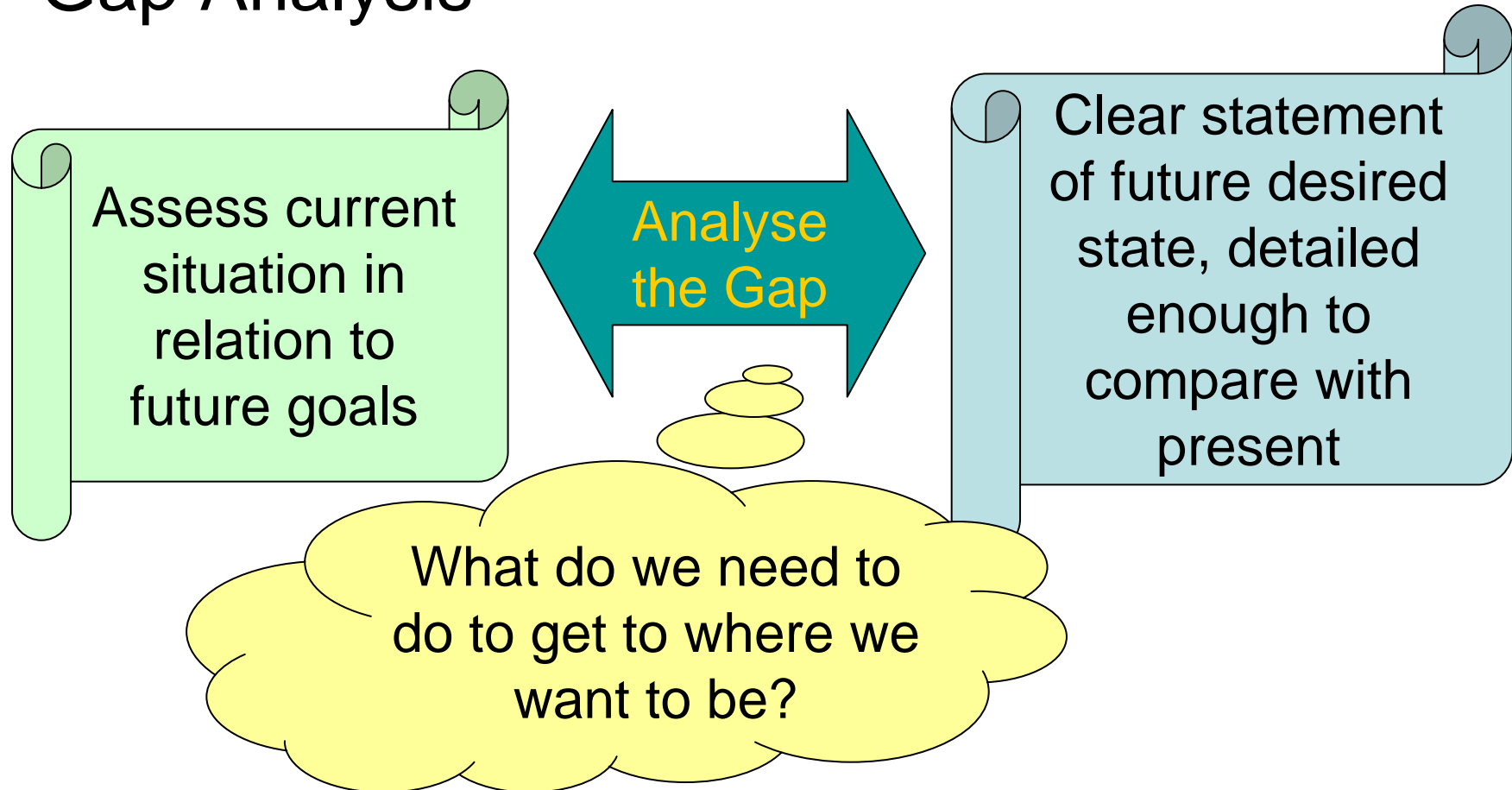
- The 5 Whys
- **WHY?**
 WHY?
 WHY?
 WHY?
 WHY?

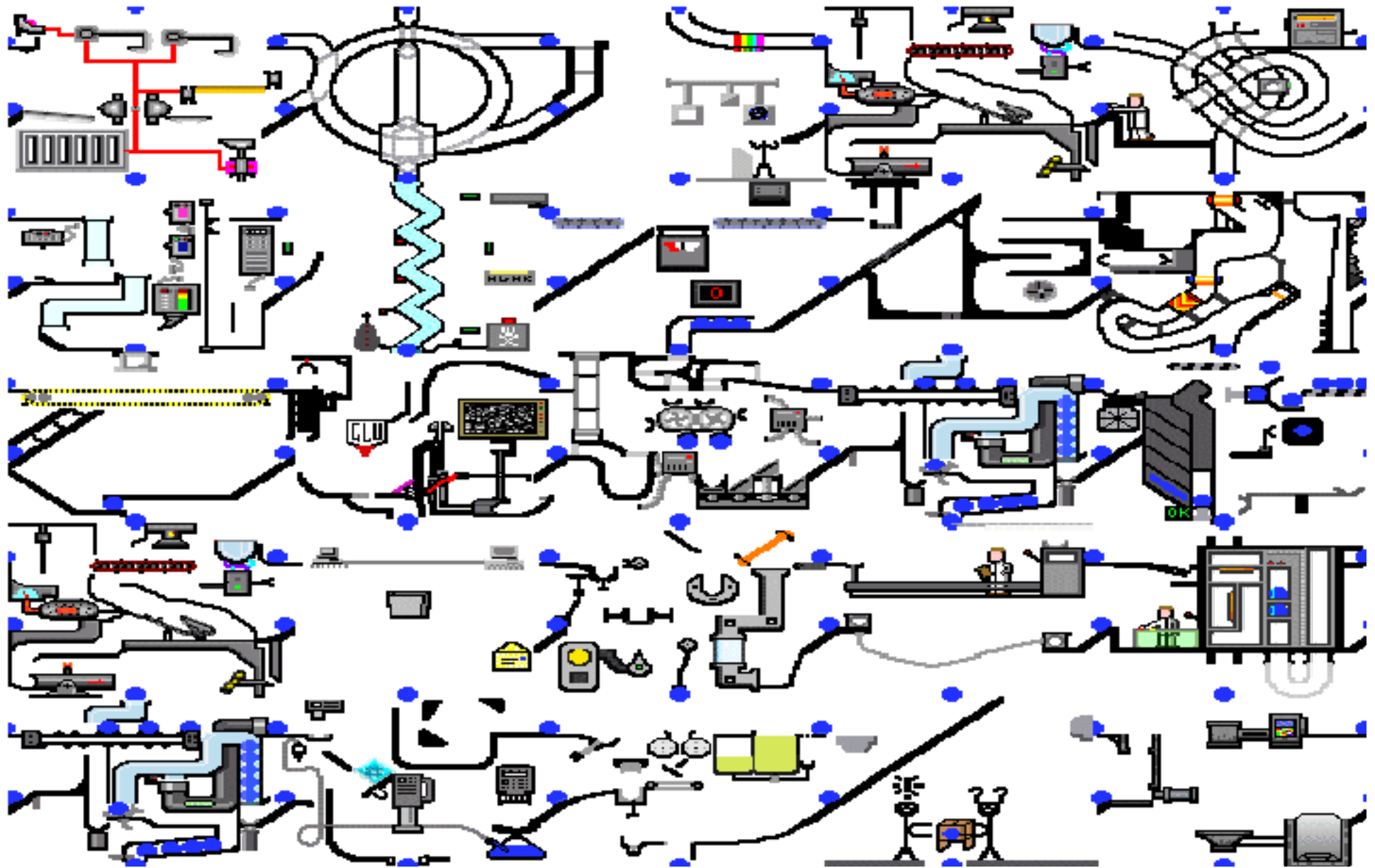
Nurse did not alert staff to deterioration in post-op neurology patient



Root Cause Analysis

Gap Analysis





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Root Cause Analysis

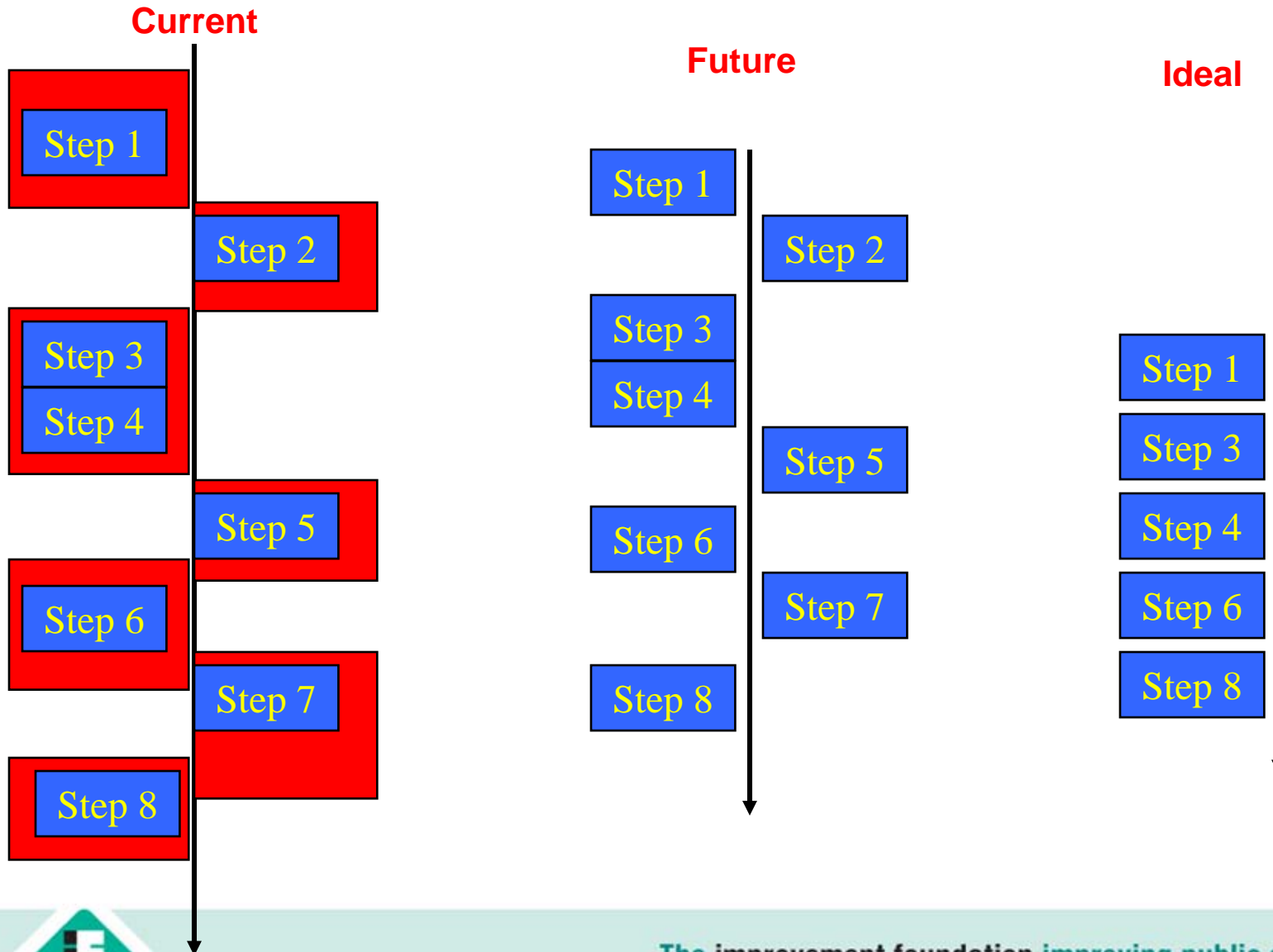
- Process Mapping
- The patient journey
 - Who does what to the patient?
 - Define which group of patients
 - Define the scope (beginning and end)
 - Identify everyone involved
 - Together, write it down or draw it
- Other (sub-) processes
 - Transport,
 - Communication

What to write on the post-it note

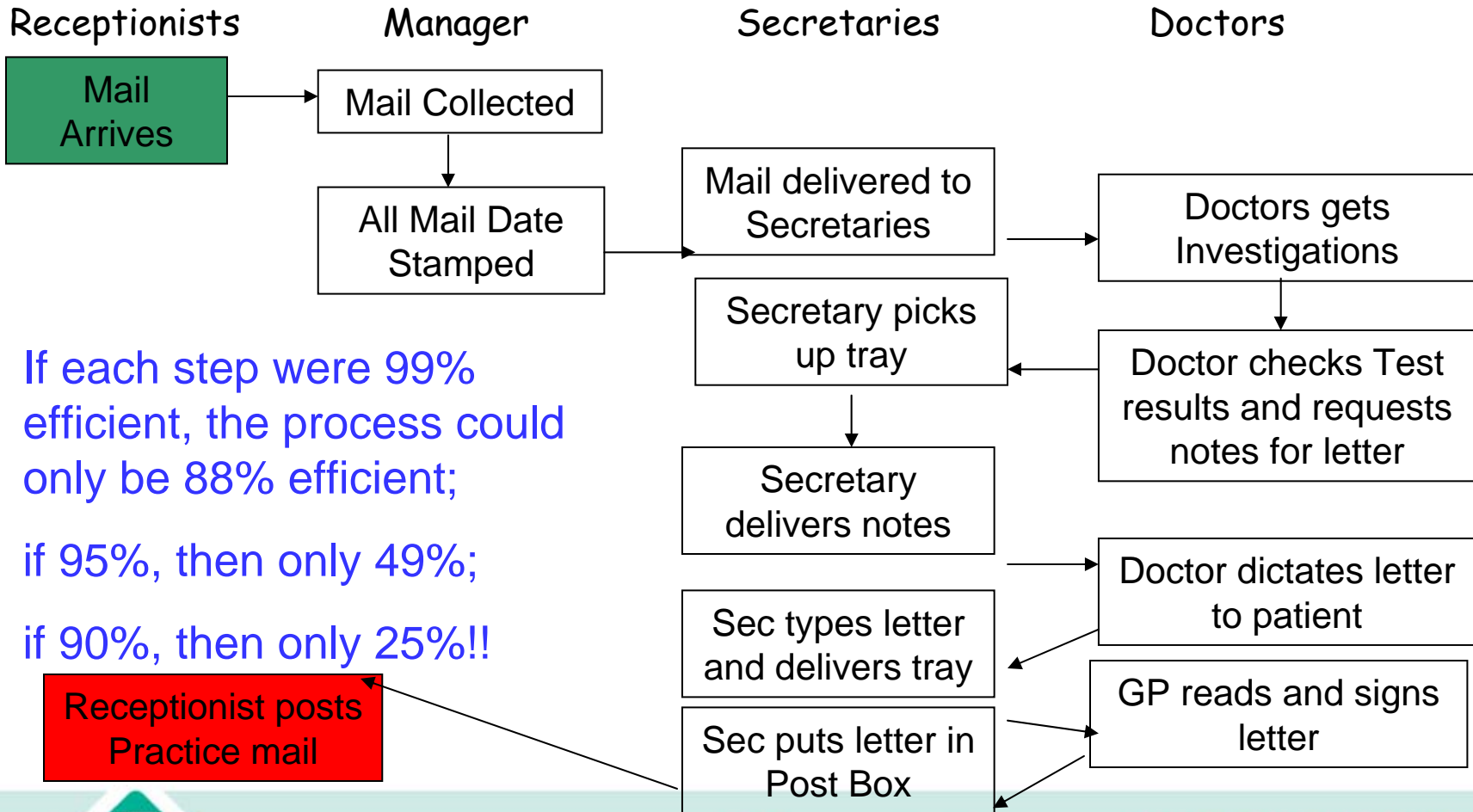
Name of person
completing task
+
verb

WHO DOES WHAT?

Directions for elapsed time graph



Process Map re Patient Test Results



If each step were 99% efficient, the process could only be 88% efficient;

if 95%, then only 49%;

if 90%, then only 25%!!

Receptionist posts Practice mail



Mind Maps (What can the future look like)



Mind maps

- Encourage Problem Solving by allowing new opportunities.
- See the whole picture
- Organise action plans, activities, meetings and journeys.
- Mind maps speak louder than a thousand words
- Fun team work

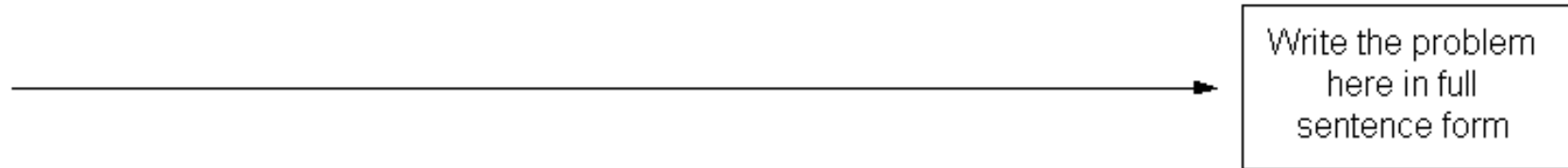
Mind map – Holiday or Shopping



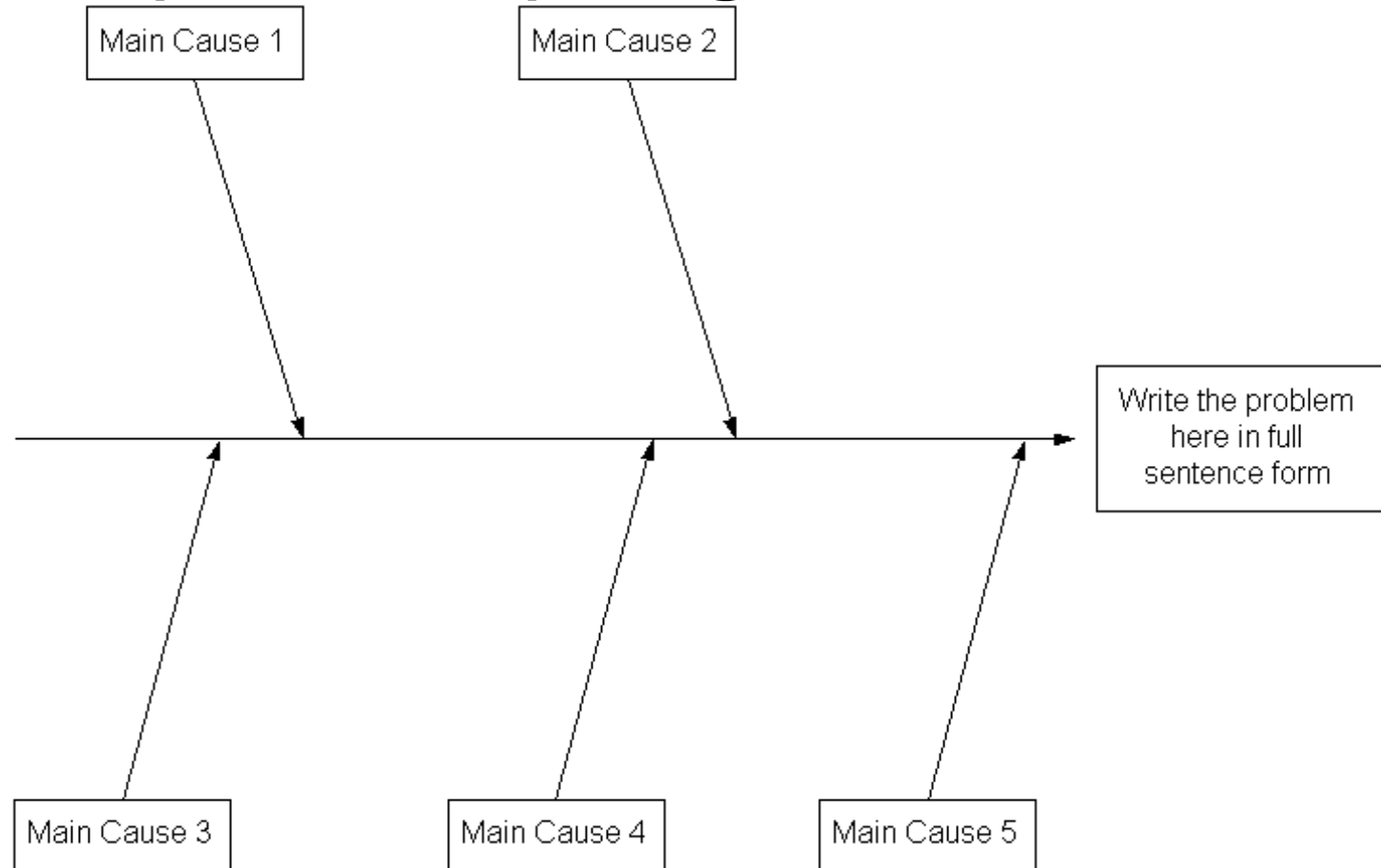
Root Cause Analysis

Ishikawa (Fishbone) Diagrams

-- Cause and Effect Diagram --

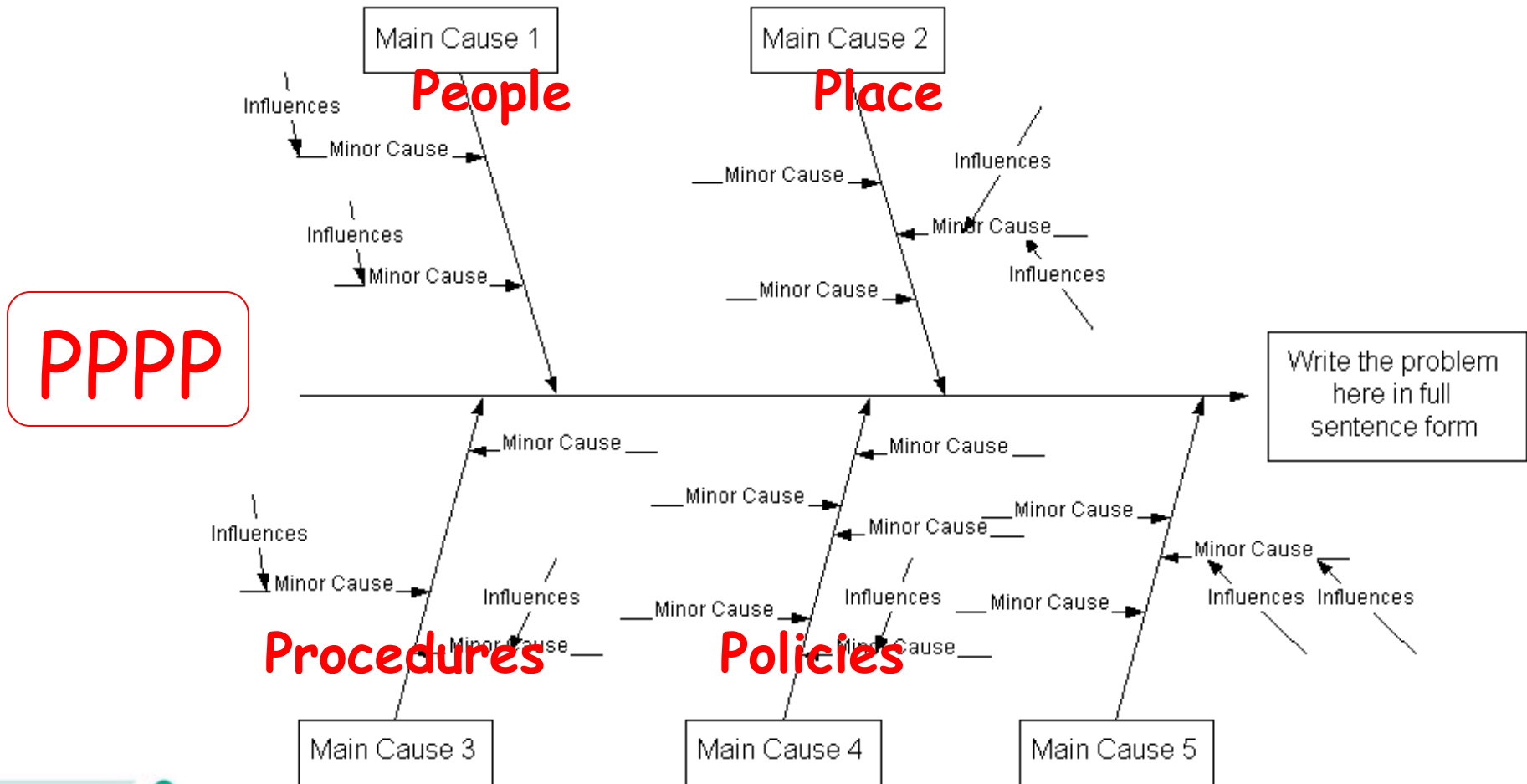


Root Cause Analysis Ishikawa (Fishbone) Diagrams

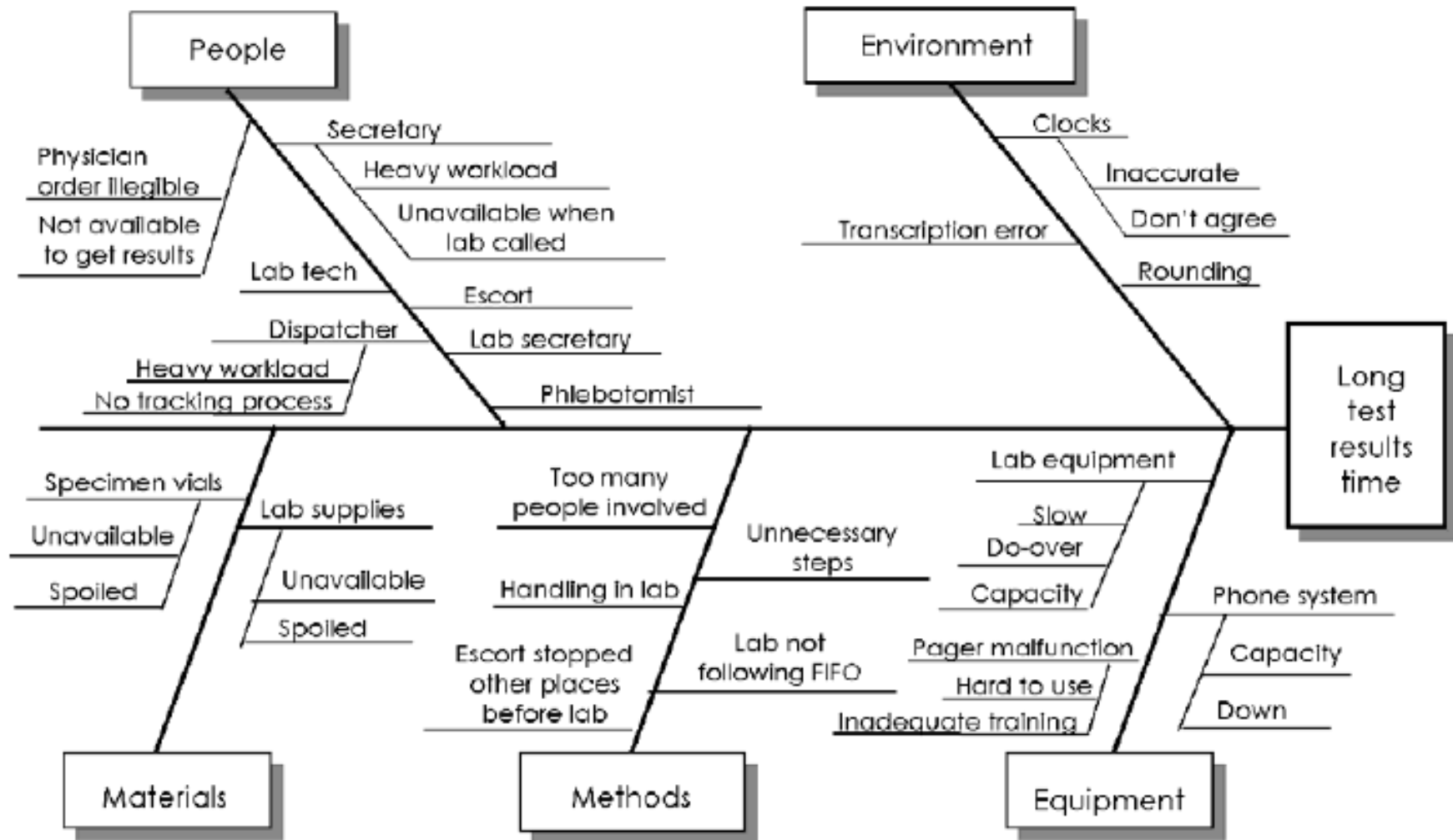


Root Cause Analysis

Ishikawa (Fishbone) Diagrams



Example Cause & Effect Diagram



Gathering Information

- Samples- choosing a representative group to count rather than everything
- Checklist III III II
- Linear scales- having a scale on which to mark a feeling
SAD-----HAPPY
- Picture scales
☺-----☹-----☹
- Lickert scale
1- excellent, 2- good, 3- fair, 4- poor
- Survey (of a few cases)

Define the Problem

Pareto Analysis --The 20/80 Rule

20% of Effort → **80% of Results**

An Example Of Pareto Analysis

I was often late starting work- I knew what the problem was- the shower was cold, my wife kept me talking, and she forgot to set the alarm. She said the problem was my late nights and reading the paper.

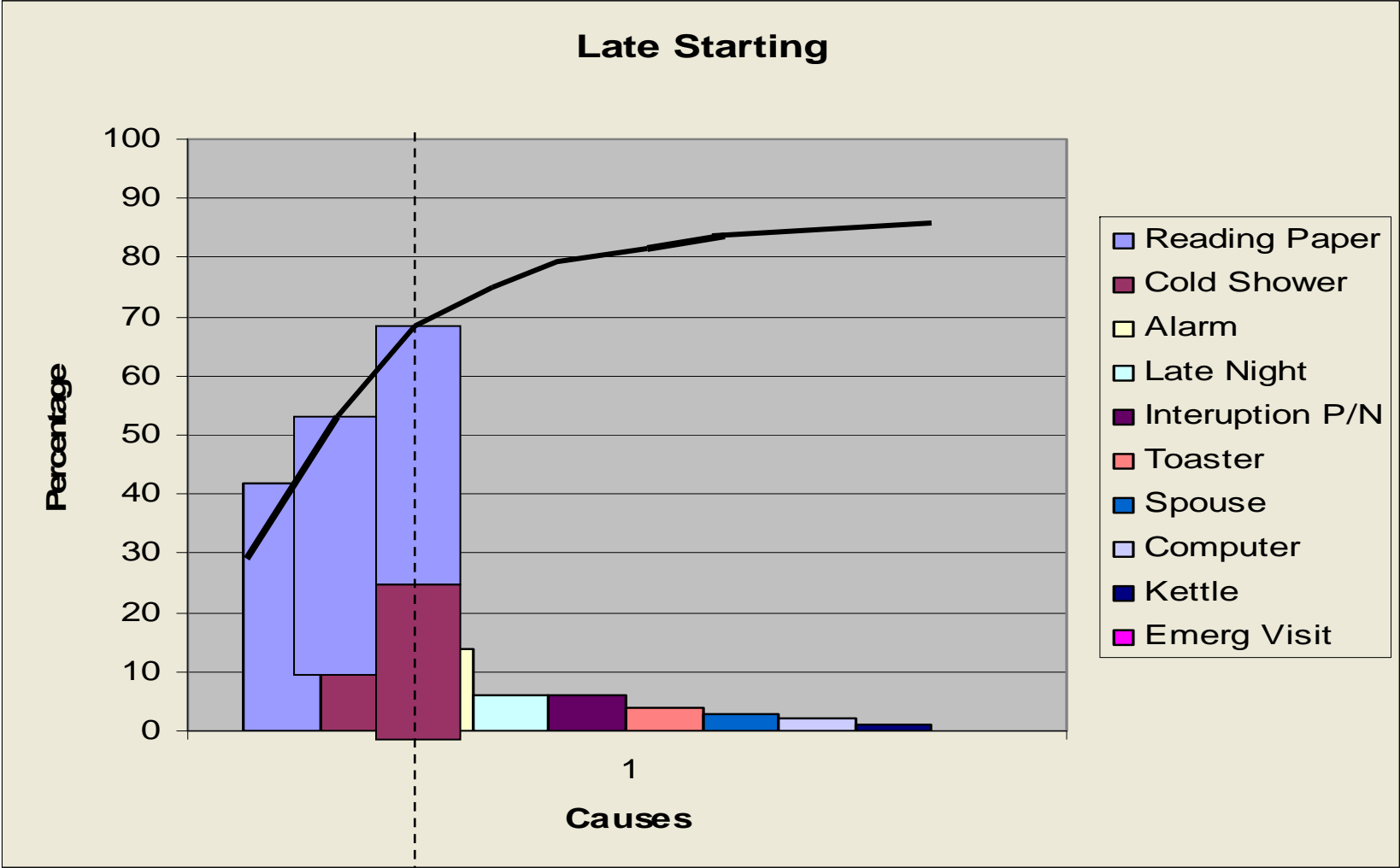
So I decided to gather some information to prove my point ...

Week	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>
Alarm	1	0	1	0	1	1	2	0	0	1	1	0	1	0	0	1	1	1	2	0
Toaster fuse	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Slow kettle	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reading paper	4	4	2	1	2	4	3	3	4	2	2	4	2	1	2	1	1	0	0	0
Talking to spouse	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Late night	2	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0
Computer Failed Login	2	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
Cold shower	2	3	2	1	0	0	2	2	1	1	3	1	2	0	0	2	1	0	0	1
Emergency Visit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interrupted by PN	0	1	0	2	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0

Rank Order the Causes

Reading Paper	42
Cold Shower	24
Alarm	14
Late Night	6
Interruption by P/N	6
Toaster Fuse	4
Talking to Spouse	3
Computer Failed Login	2
Slow Kettle	1
Emergency Visit	0

Pareto Chart: Causes Of Late Start

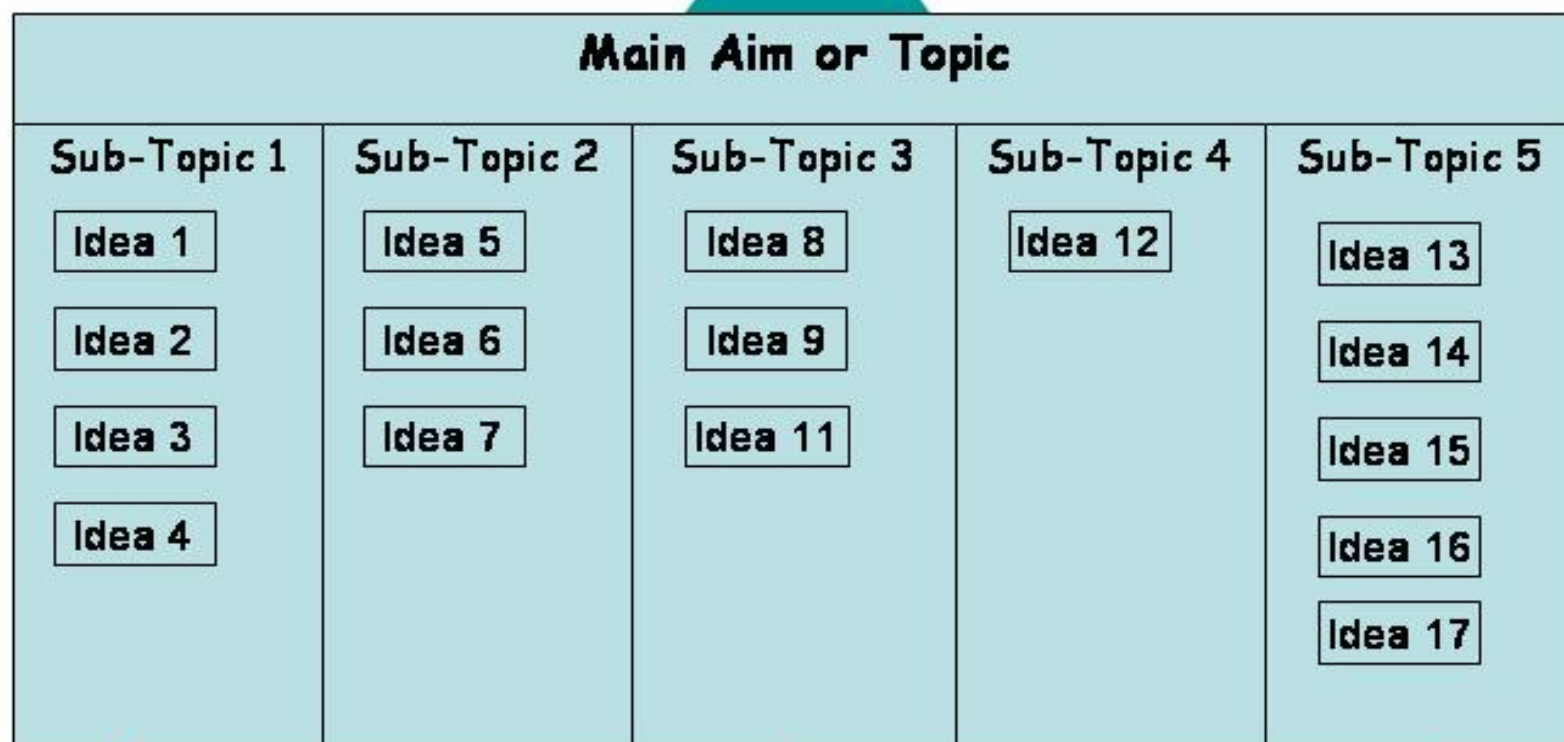


Brainstorming

- Preparation
- Ground Rules
- Processing the Results
 - Affinity Diagram
 - Multi - voting
 - Nominal Group Technique



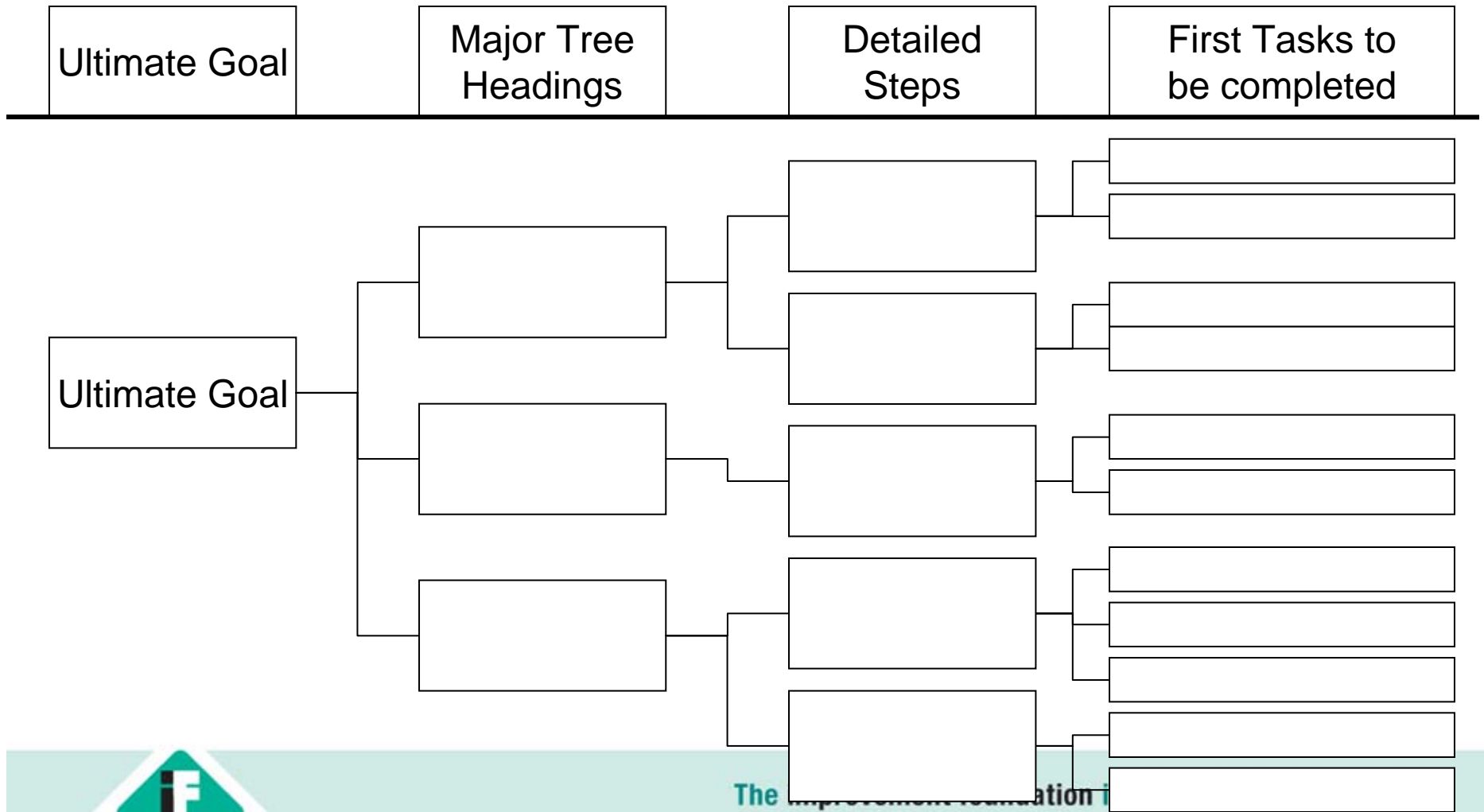
Affinity Diagram using Flip-Chart



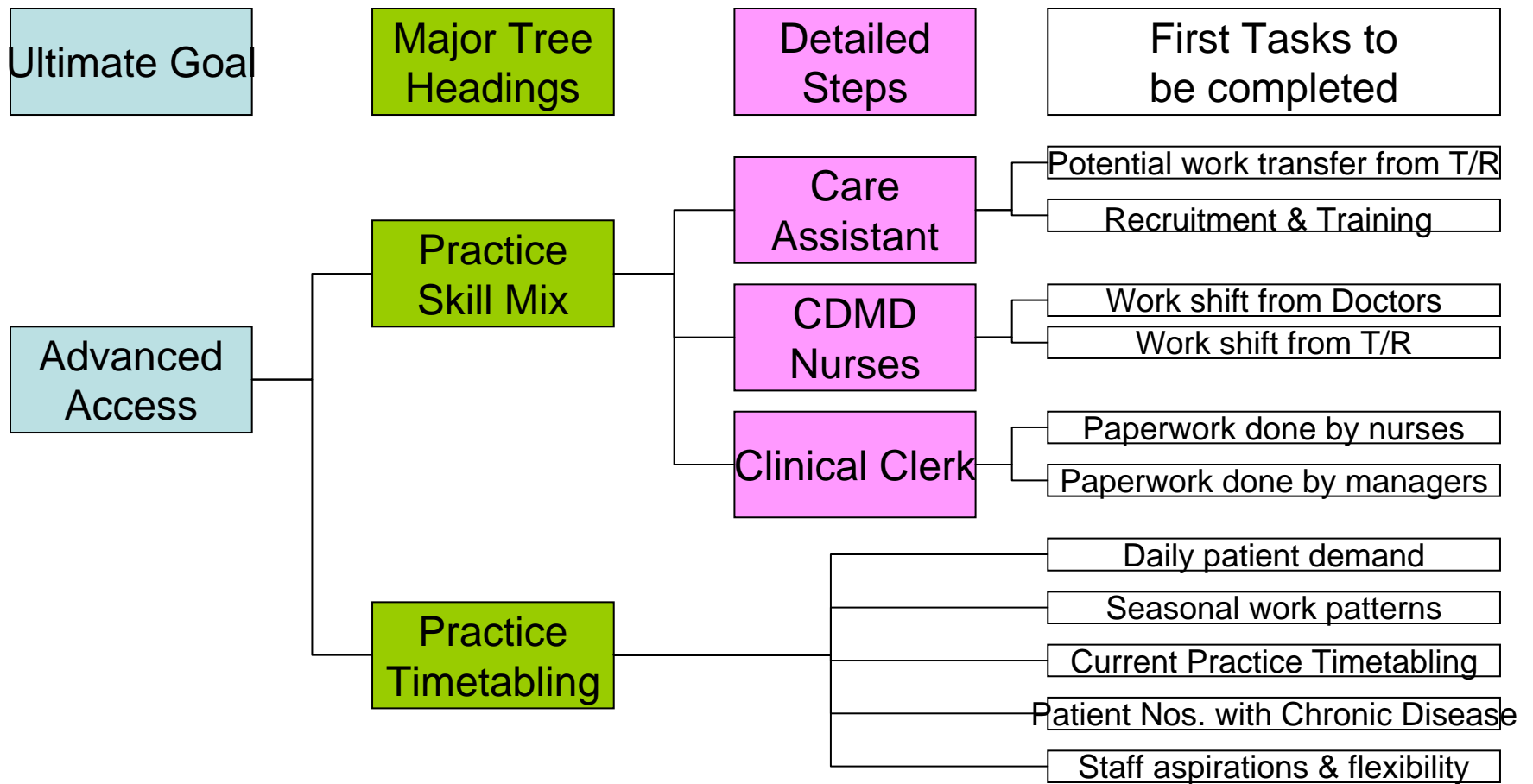
Generating Solutions

- Involve Patients and Staff
- List all recommendations for change and prioritise for effective implementation
- Draw up an Action Plan
- Keep It Simple

The Tree Diagram



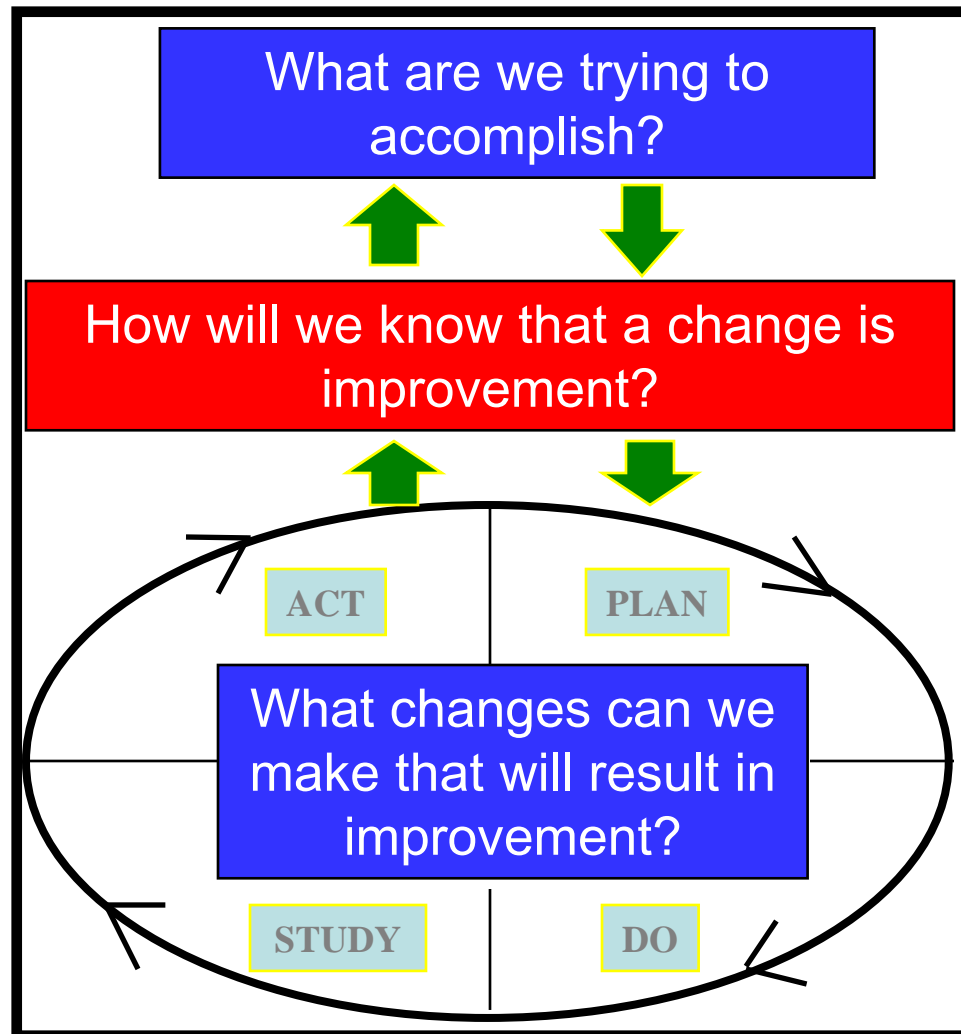
A Tree Diagram re Advanced Access



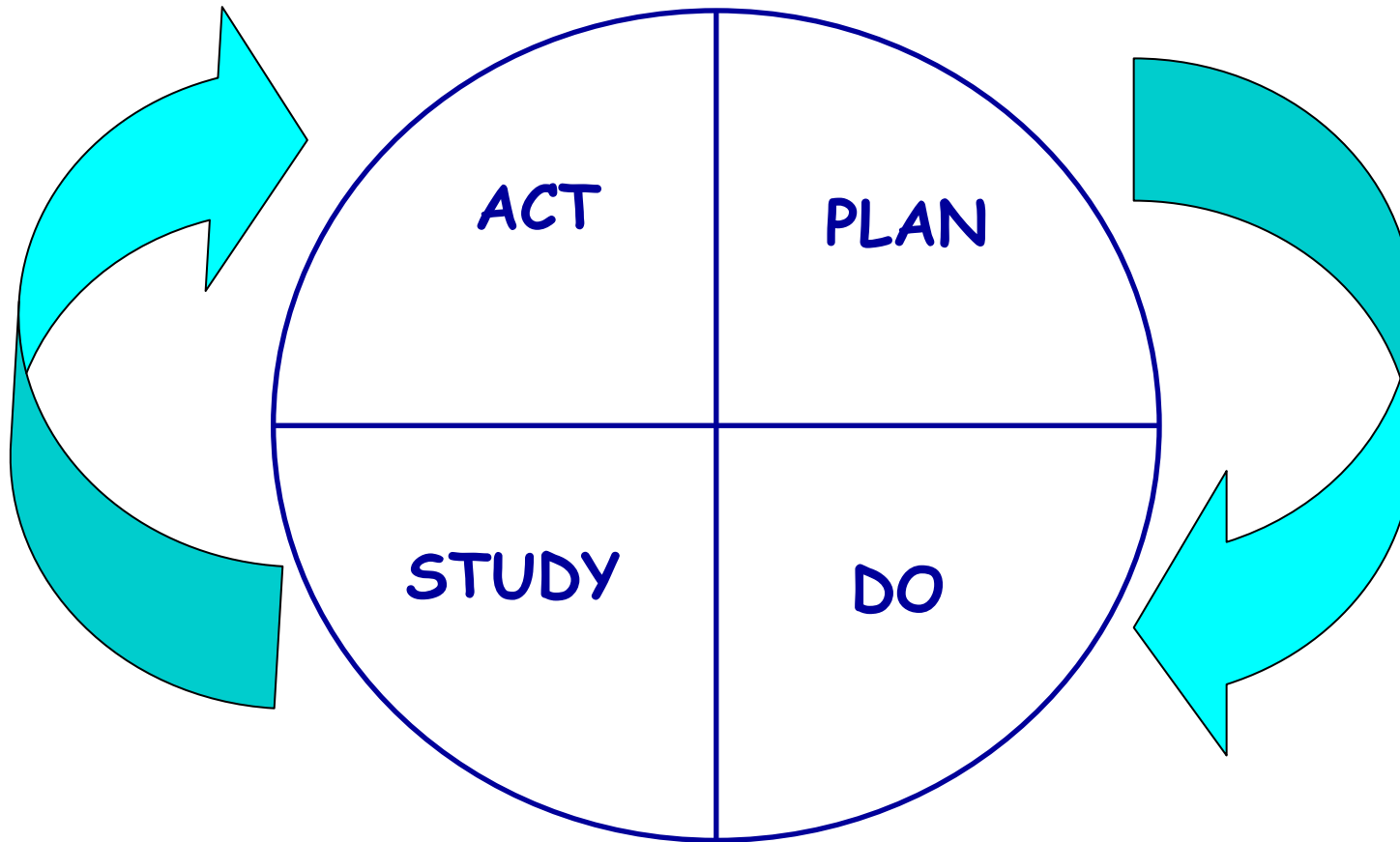
Change idea!







Model for Improvement



Benefits of PDSA approach

- **Minimize problems with getting started**
 - persuading the reluctant - bite sized chunks
- **Enables *testing* of ideas to:**
 - evaluate 'side-effects'
 - reduce risks
 - customise idea for to local conditions
 - identify blind-alleys quickly
- **Makes processes and learning explicit**
 - ... useful for team working
- **Builds momentum**
 - demonstrate results to sceptical colleagues
 - encouragement and enthusiasm



Step 1: Plan



What will you do? who, what, when, where, how)

What do you think will happen

How will you measure the change

How will you collect data

Step 2: Do



Carry out the plan

Document problems and unexpected observations

Collect data

Step 3: Study



Complete data analysis

What has happened?

What have you learnt

Step 4: Act



What changes can be made

How can you improve further

What will be the next cycle

B. “Plan” your first PDSA Team Time

- What do you think the problem is? (outcomes of your brainstorming session)
- Break the problem down - what small test could you put in place?
- How long would I need to test it for?
- Think about: what measurement you would put in place?

Remember asking me how I feel is a valid measurement!

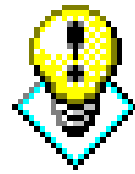



Hints and Tips - PDSA



- Keep it simple
- Keep it small and manageable
- Cycles should happen quickly – think in terms of a week not a month!
- There is no wrong answer, if you find something works – use it
- Write it down! It helps remind you of what you have already learnt as well as planning the next steps
- Copy and adapt other people’s ideas if you think they may be useful

Hints and tips



- ◆ Keep your tests as small scale as you can and rely on multiple cycles to achieve your aim
- ◆ PDSAs keep small in volume
- ◆ Remember to measure 
- ◆ One PDSA should lead to another
- ◆ Use PDSAs to build evidence
- ◆ Record your results
- ◆ Share your learning

PDSA example

PLAN

Invite 11 patients from COPD register and perform spirometry testing

DO

Letters and telephone calls to known patients

STUDY

100% attendance
2 patients discontinue therapy. 1 patient required meds changing, 3 patients no action taken. 1 patient, increase medication 3 patients, new treatment. 1 patient removed from register

ACT

Recall 20 patients and repeat process

PDSA example

PLAN

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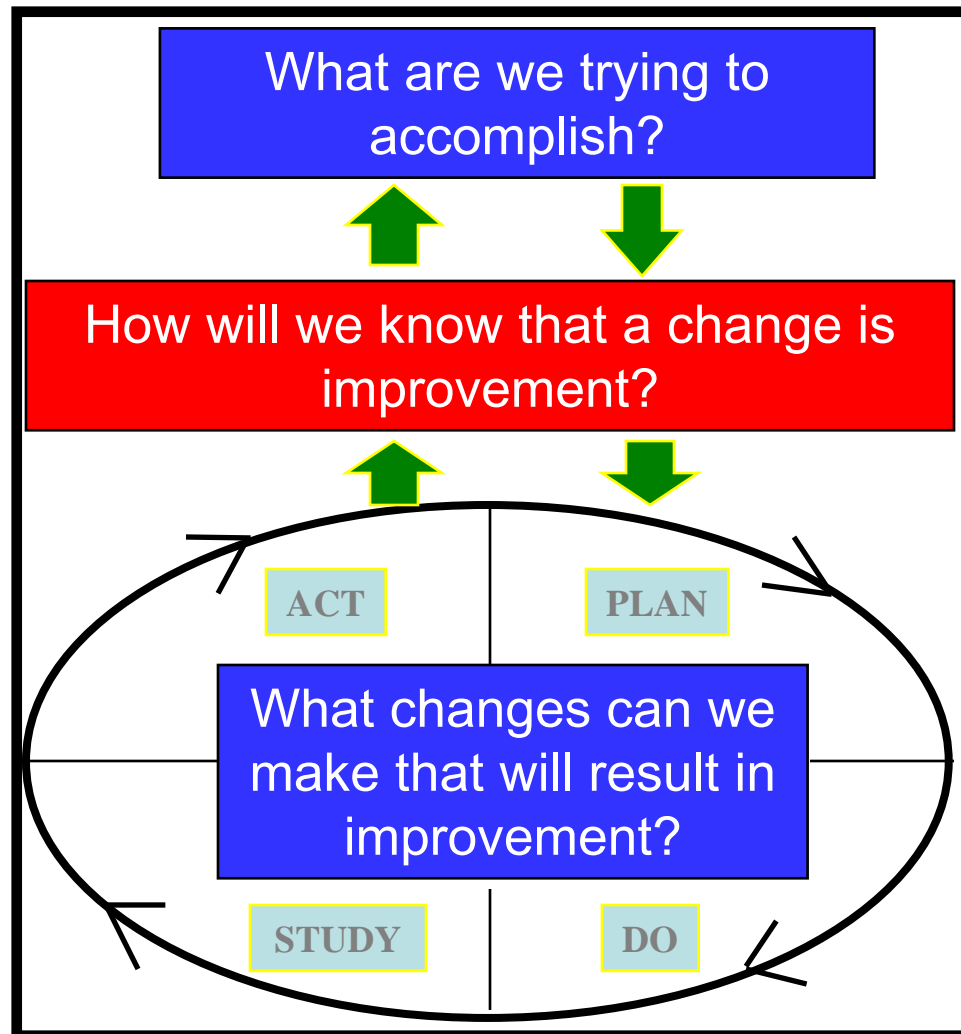
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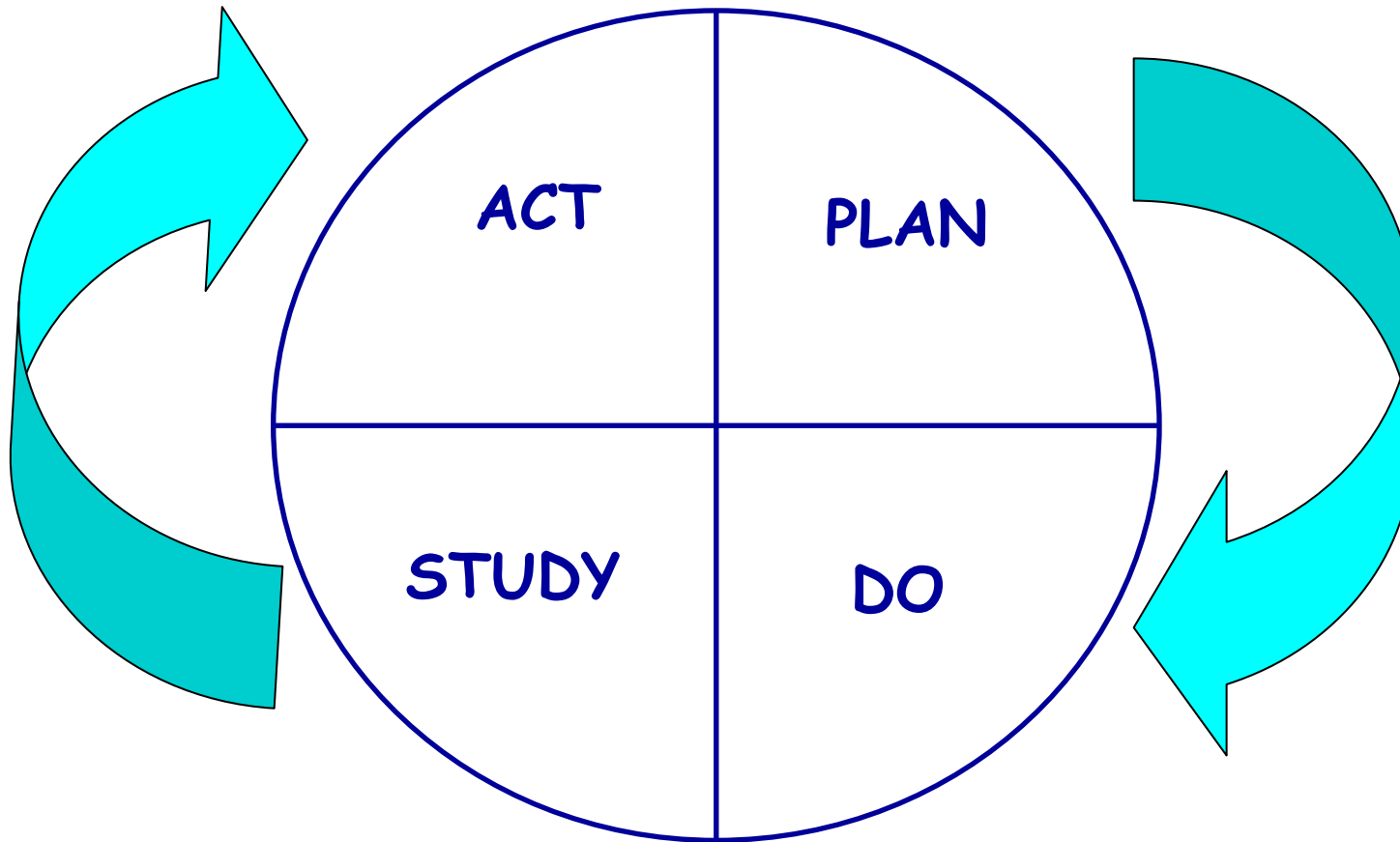
ACT

Recall 20 patients and repeat process





Model for Improvement



The success of a test lies in what is learned from it, no matter how it turns out



Team work will make a difference!



**Trying to achieve different results
with the same system is the route to
insanity.**

Einstein



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