

ED PIP: Diagnostic Phase

Tools: Detailed Process Mapping

Detailed Process Mapping: Overview

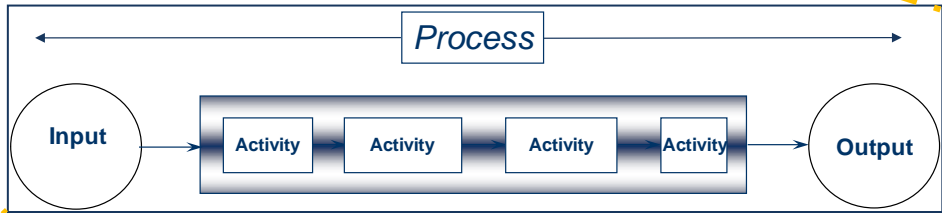
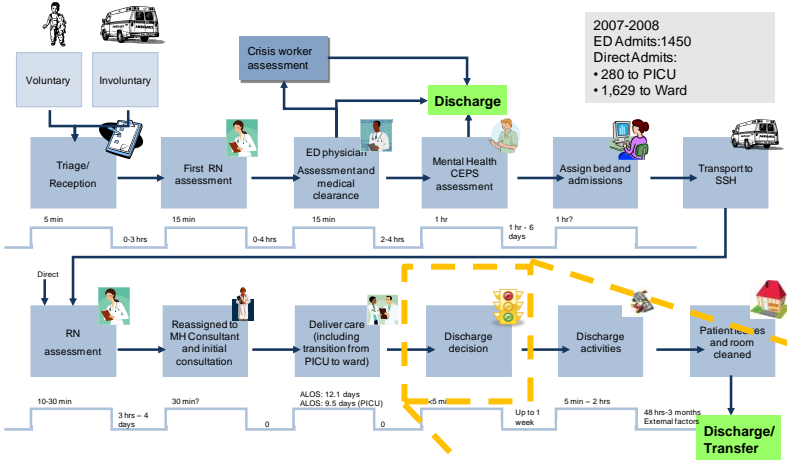
Outcome	<ul style="list-style-type: none"> ▪ All key flows (of work, information, materials) and many potential root causes are known
Definition: 'What is it?'	<ul style="list-style-type: none"> ▪ Detailed process mapping presents a pictorial representation of the sequence of steps, tasks or activities that transform an input and produces an output in small bundles of information
Objectives: 'What is it used for?'	<ul style="list-style-type: none"> ▪ Detailed process mapping <ul style="list-style-type: none"> – Improves the knowledge of the team regarding the key processes around the objective of the project by providing a visual representation of the process. – Identifies areas of opportunity / potential root causes as the team decides where to “drill down” for more detail – Helps identify inputs that could potentially be measured – Helps identify any key stakeholders that may have been missed – Helps communicate the process to the stakeholders by “breaking it down” into bite-size / easily understood amounts of information – Validates the scope of the project
Benefits:	<ul style="list-style-type: none"> ▪ It is an excellent team building exercise and is therefore a very effective tool near the beginning of the project
When to use	<ul style="list-style-type: none"> ▪ Detailed process mapping should be used to align the team on the overall process and the areas of opportunity / potential root causes

Tip for integrating Lean principles into healthcare:

- *Part of successfully implementing Lean in healthcare is adopting common language that may have originated in manufacturing and internalizing how it is used in a healthcare environment.*
- *For Process mapping, think of the definition simply as documenting the things that happen (steps, tasks, activities) between starting something to achieving a result or output*

A process may be articulated at a high level (such as a value stream (outlined within this toolkit), or you may want to do more detailed documentation of a specific process...

Patient flow through the ED – Mental Health process

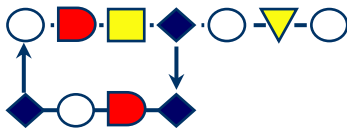


A process is a sequence of steps, tasks or activities that transforms an input and produces an output

Process Mapping usually leads to one of three possible outcomes:

You map a process that is:

1. What you **think** it is



The impact is that:

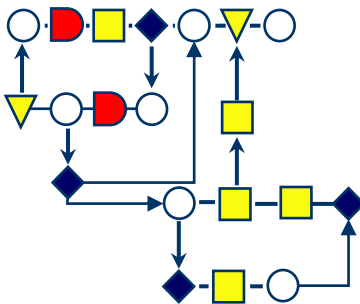
“What you think it is” is dangerous because you will be relying on assumptions that may not be accurate

2. What it **should** be



“What it should be” is also dangerous because the team is jumping to a solution without having completed the appropriate data collection / analysis

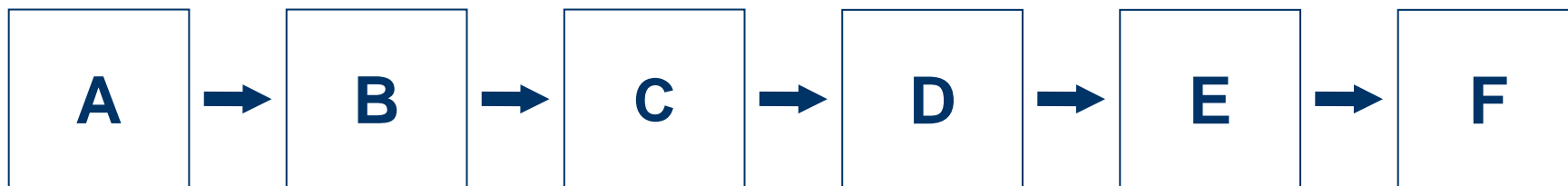
3. What it **actually** is



“What it actually is” is the most insightful because it eliminates assumptions and replaces them with facts that can lead to the correct focus of effort by the team

Process to create a Detailed Process Map (1 of 5)

Level 1: *Start by identifying the big picture of a process, step, or activity*



Create the high level (level 1) process:

Step 1: Begin with the end-customer and think about where the process should begin and where it should end – these would make up the two extreme boxes (A and F from above)

Step 2: Complete the high level boxes in between (B to E from above)

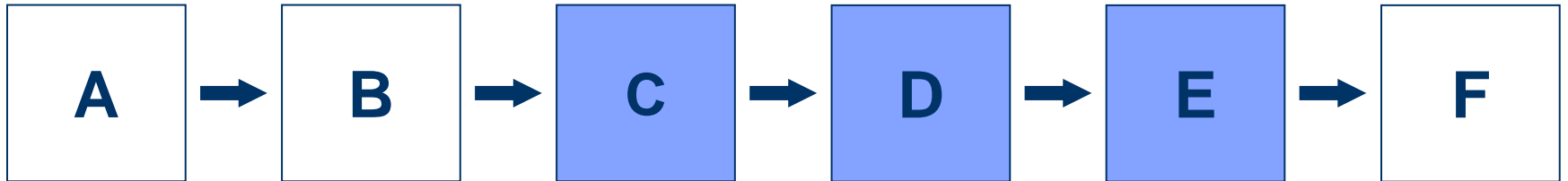
Step 3: Acquire team consensus for the process

Notes:

- Write one activity or step in each box in a “headline” form
- The boxes should flow in a logical manner from left to right
- Once “completed”, “walk” through the process to validate common understanding and identify / correct any errors
- When creating the high level process, keep it as high as possible, frequently combining several steps if it involves the same individual / set of individuals
- There is no set number of boxes, but it would likely be greater than 2, and less than 12, but this is merely a rule of thumb
- This is a team exercise and should not be done as an individual

Process to create a Detailed Process Map (2 of 5)

Level 1: *Highlight areas for potential root causes*



Highlight the boxes that have potential for a root cause:

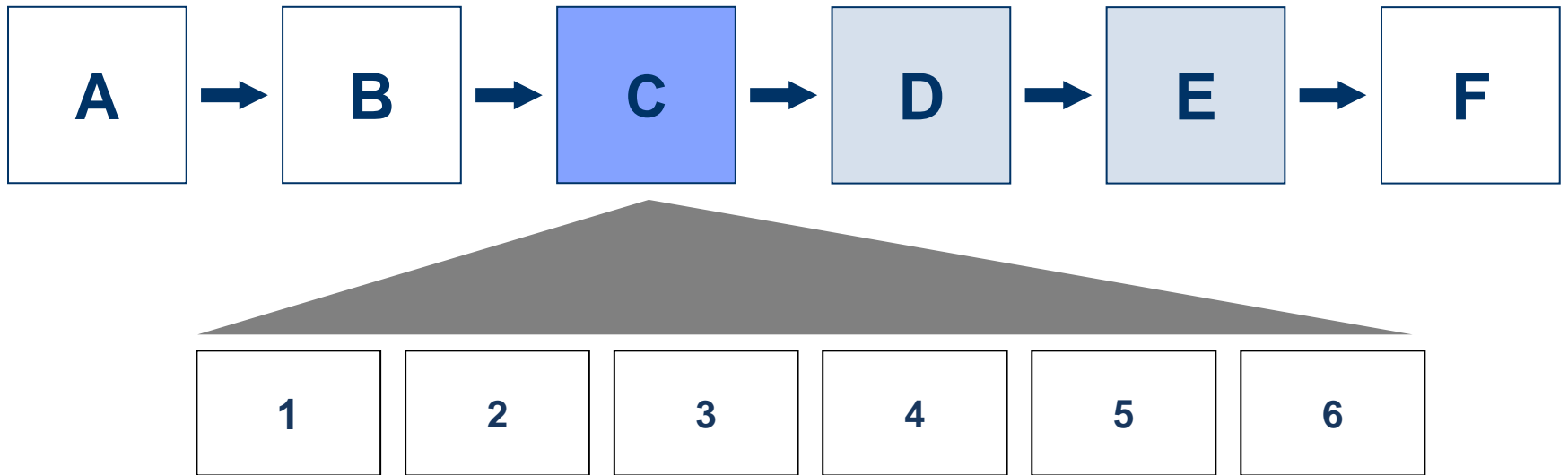
Step 4: Highlight the boxes that have a possibility of having a potential root cause for the problem that the project is addressing (C to E from above)

Notes:

- *Highlighting the boxes for potential root causes is not a vote – a box is deemed to have potential for a root cause if any team member believes that a root cause is possible*
- *One box could be highlighted or all the boxes could be highlighted – there is no rule of thumb for this*
- *If the team does not highlight any boxes, review all of the boxes again and if there is still no highlighted boxes, the team has likely selected the wrong process relative to the problem that they are trying to solve (e.g. the scope of the project is incorrect)*

Process to create a Detailed Process Map (3 of 5)

Level 1



Level 2: Zoom in on the potential root causes

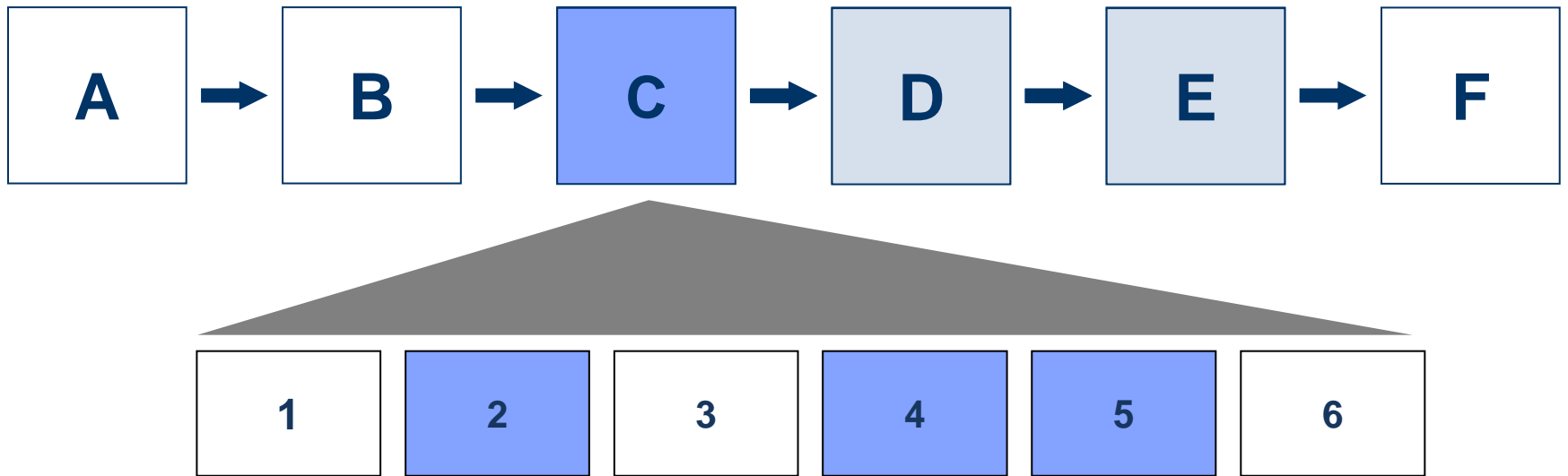
Step 5: Breakdown the highlighted boxes to the next level (e.g. Box C is broken down to boxes 1 to 6). The result (Boxes 1 to 6) are a more detailed equivalent to box C.

Notes:

- For the above example, boxes D and E would also be broken down to the next level, but they are not shown for ease of illustration
- When creating each subsequent level, try to keep them as high as possible resulting in between 2 and 8 boxes. If you find that you are starting to exceed 8, try combining boxes to maintain the “simplicity” of each level. Again, this is a rule of thumb, but one of the benefits of Detailed Process Mapping is that it breaks down a complex process into “bite-size” / easily understood amounts of information (e.g. 2 to 8 boxes)

Process to create a Detailed Process Map (4 of 5)

Level 1



Level 2: Further Highlight areas for potential root causes

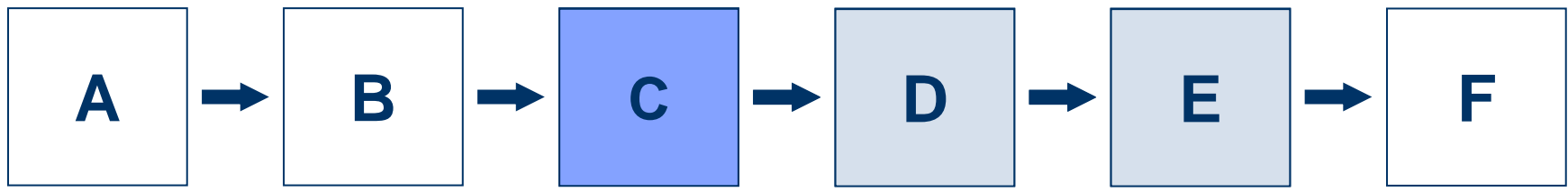
Step 6: Highlight the boxes that have a possibility of having a potential root cause for the problem that the project is addressing (boxes 2, 4 and 5 from above)

Notes:

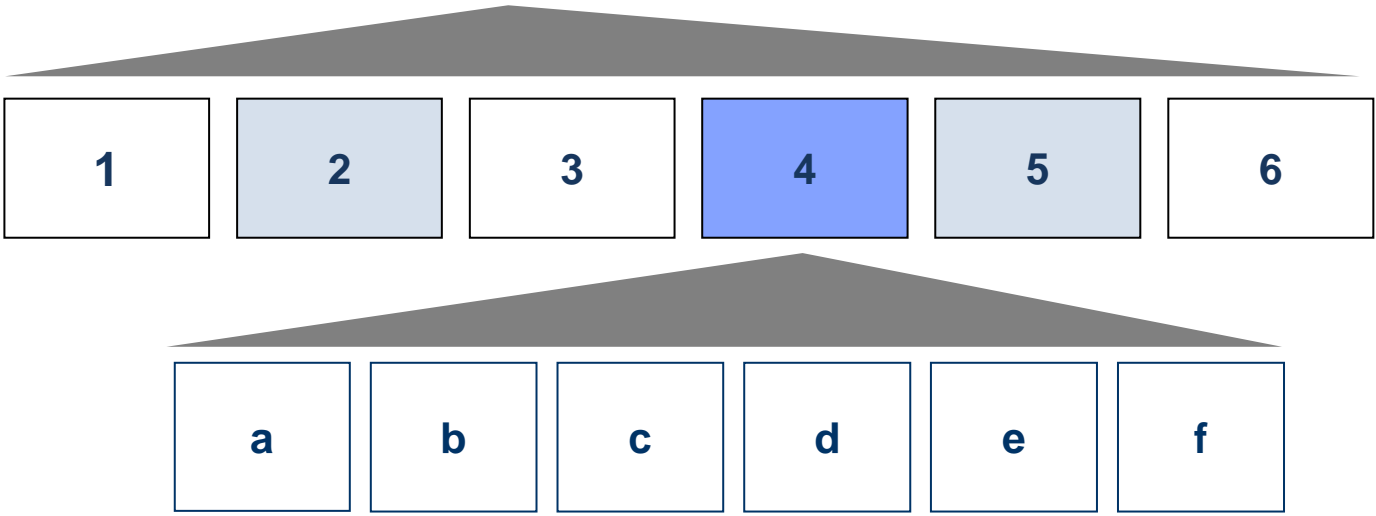
- As per Step 4, highlighting the boxes for potential root causes is not a vote – a box is deemed to have potential for a root cause if any team member believes that a root cause is possible
- If the team does not highlight any boxes, review all of the boxes again and if there is still no highlighted boxes, the team can conclude that there are no potential root causes in this path of the process – do not “toss out” this information as it can be valuable later if a stakeholders asks why a certain area is not being addressed in the project

Process to create a Detailed Process Map (5 of 5)

Level 1



Level 2



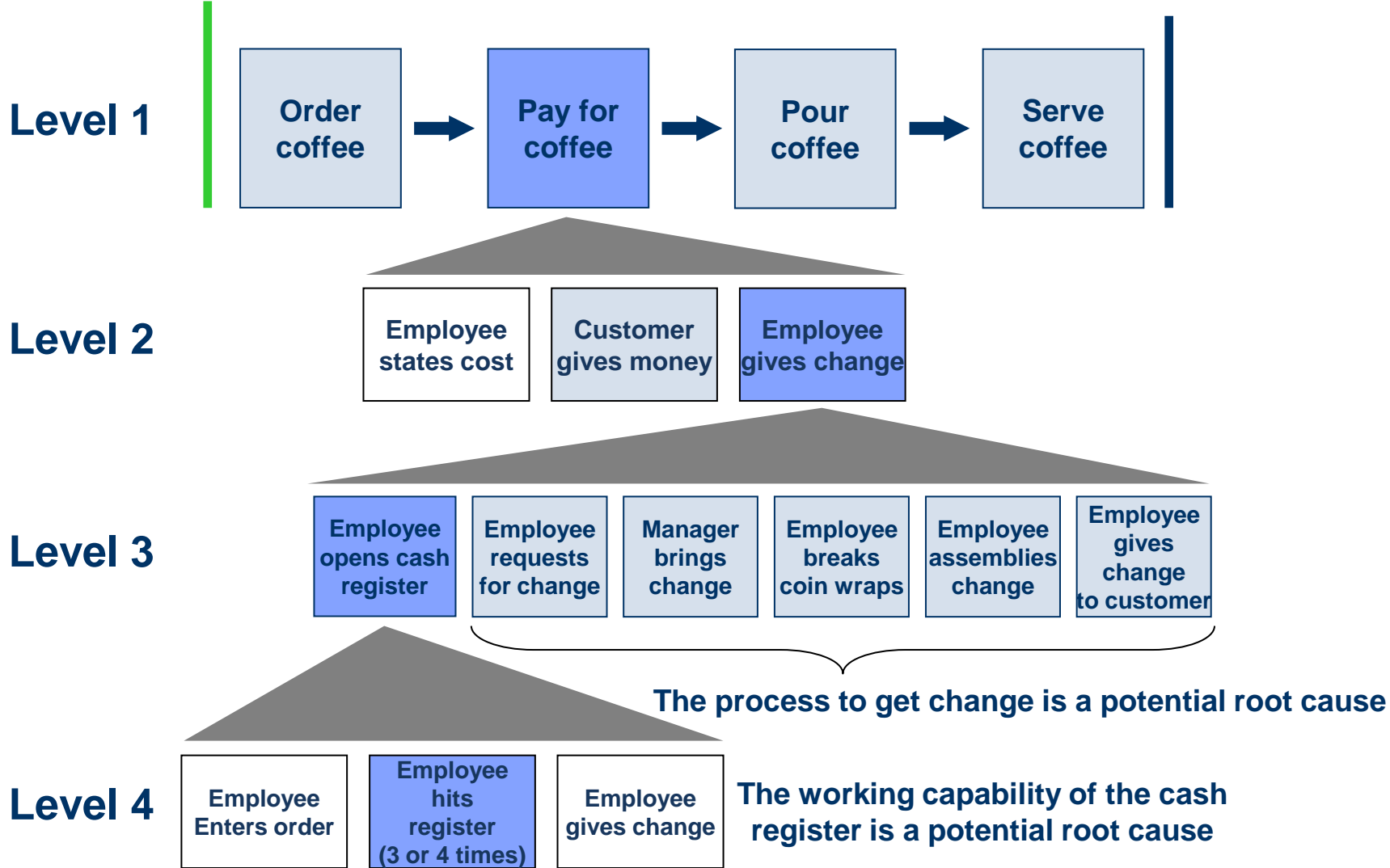
Level 3: *Further zoom in on the potential root causes*

Step 7: Breakdown the highlighted boxes to the next level (e.g. Box 4 is broken down to boxes a to f)

Notes:

- *When do you stop? You stop when you either cannot identify any boxes to highlight (you learn that this was not an area of opportunity) or when the potential root cause(s) can be stated (see “5 Whys” for more detail)*

Example Detailed Process Map: Buying a coffee takes too long



Tips and tricks for generating a detailed process map

- Great team time management – the team decides what areas need more detail and what areas do not need to be broken down at all
- Think in terms of the process – not departments, professions or individuals
- Include ‘informal’ information flows (e.g. phone calls, hallway conversations, hand written notes)
- Focus on getting a good snapshot of the actual process – if there are inconsistencies between stakeholders, document both approaches in parallel
- Use a pencil and sticky notes – a process map is a working document and using a pencil or sticky notes enables easy and neat edits
- Ensure you have the right Resources:
 - Cross functional team inclusive of all stakeholders, (consider including the patient or family)
 - Supplies: large roll of brown paper, sticky notes (3-4 colours), green and red sticky dots, masking tape, flip chart with paper, writing tools
 - Time: process mapping should likely be completed in 4 – 6 hours, but this is only a guideline as it is highly dependent on the complexity of the process and on the number of boxes that are broken down to the subsequent level(s)



Do not jump to developing corrective actions for potential root causes that are identified – the team is identifying potential root causes; once they are validated by the team with data, they will become true root causes; once their impact to the project is estimated, they can then be prioritized and potential solutions can be investigated