

# Problem structuring

# Objective

**To understand all of the causes and effects of a problem, helping to reveal its complexity. Then applying the same principles to develop a solution.**

Problem trees and Driver diagrams can help in the planning of a project as well as providing a guide to the complexity of a problem.

They can support the identification of particular types of intervention and the effects that the intervention will influence.

You may not be able to overcome all of the causes to your problem, so it will help you to identify which areas to target.

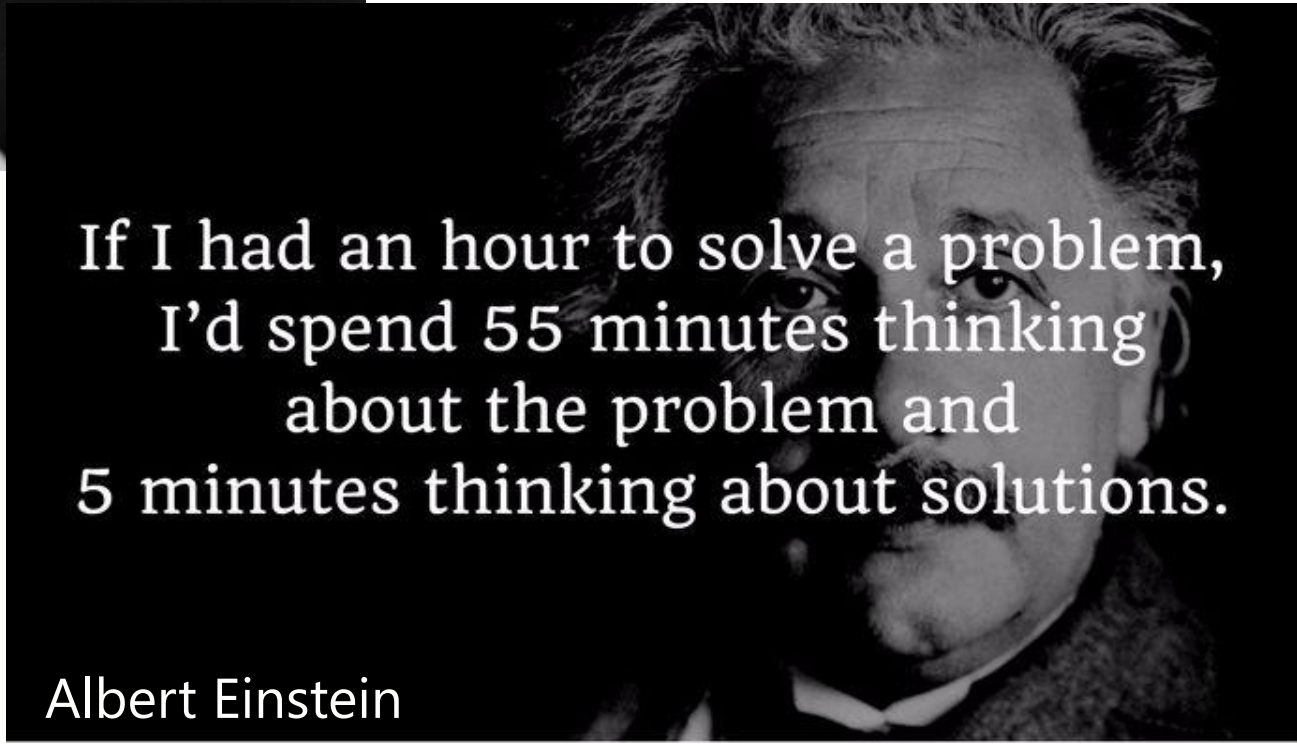
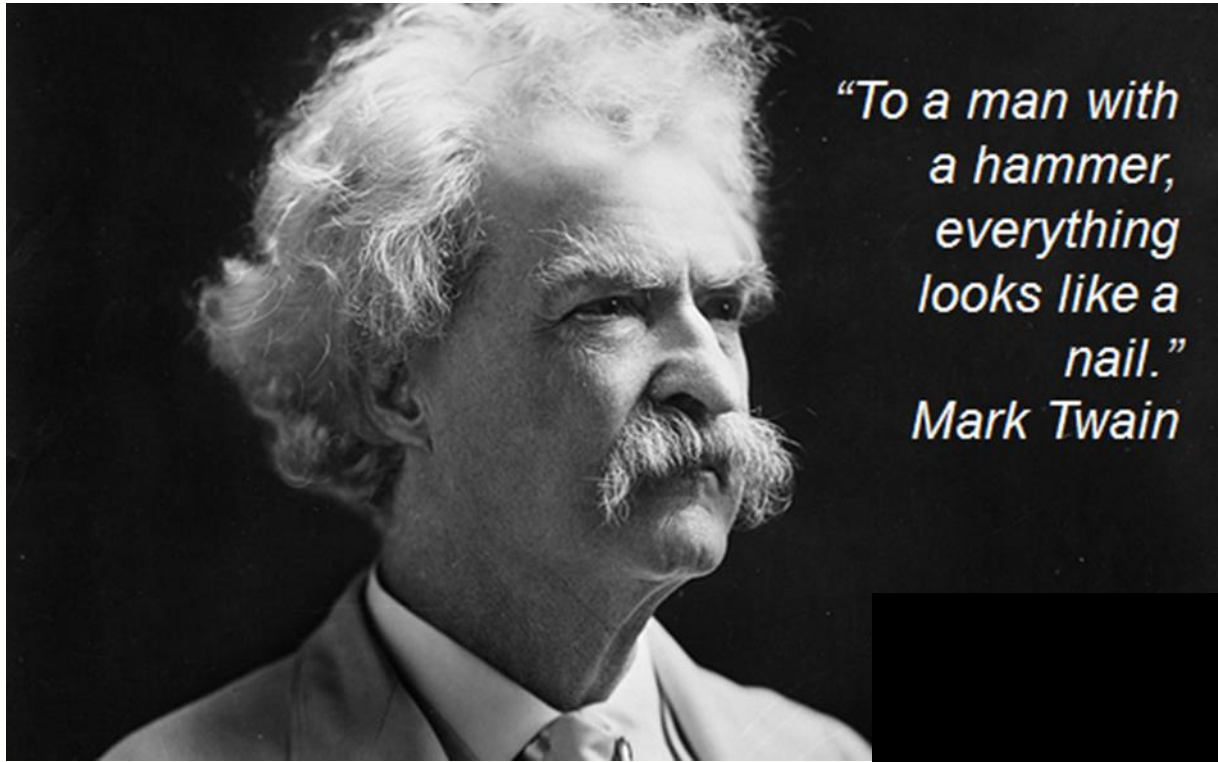
# **Problem trees**

# Method

- 1) **Define your core problem** – place at the centre of the tree.
- 2) **Consider direct causes to the problem** – place below the core problem.
- 3) **Consider direct effects of the problem** – place these above the core problem.
- 4) **You will also need to consider the causes of the direct causes, these are called secondary causes** – continue in this way expanding your tree until all causes and effects are covered.
- 5) A solution tree follows the same principles, but with solutions to the problem.
- 6) Finally select which interventions to work up in more detail.

This process is best conducted as a group. The facilitator can guide people through an example and then should get people to work in teams to work through their problems / solutions.

# Don't focus on solutions!

A black and white portrait of Albert Einstein, showing him from the chest up, looking directly at the camera. He has dark, wavy hair and a mustache. He is wearing a dark suit jacket over a light-colored shirt and a dark tie.

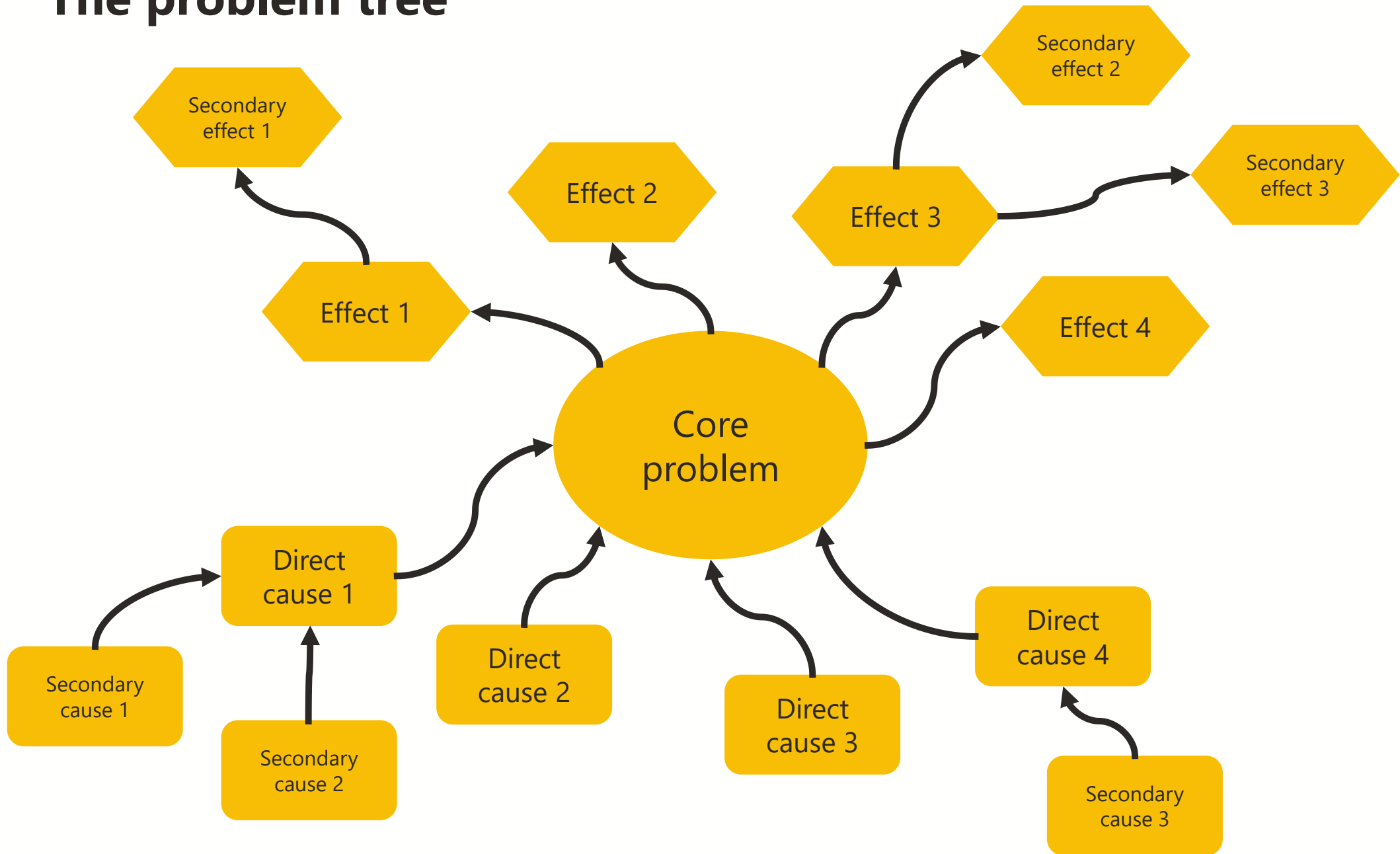
If I had an hour to solve a problem,  
I'd spend 55 minutes thinking  
about the problem and  
5 minutes thinking about solutions.

Albert Einstein

# Questions to consider

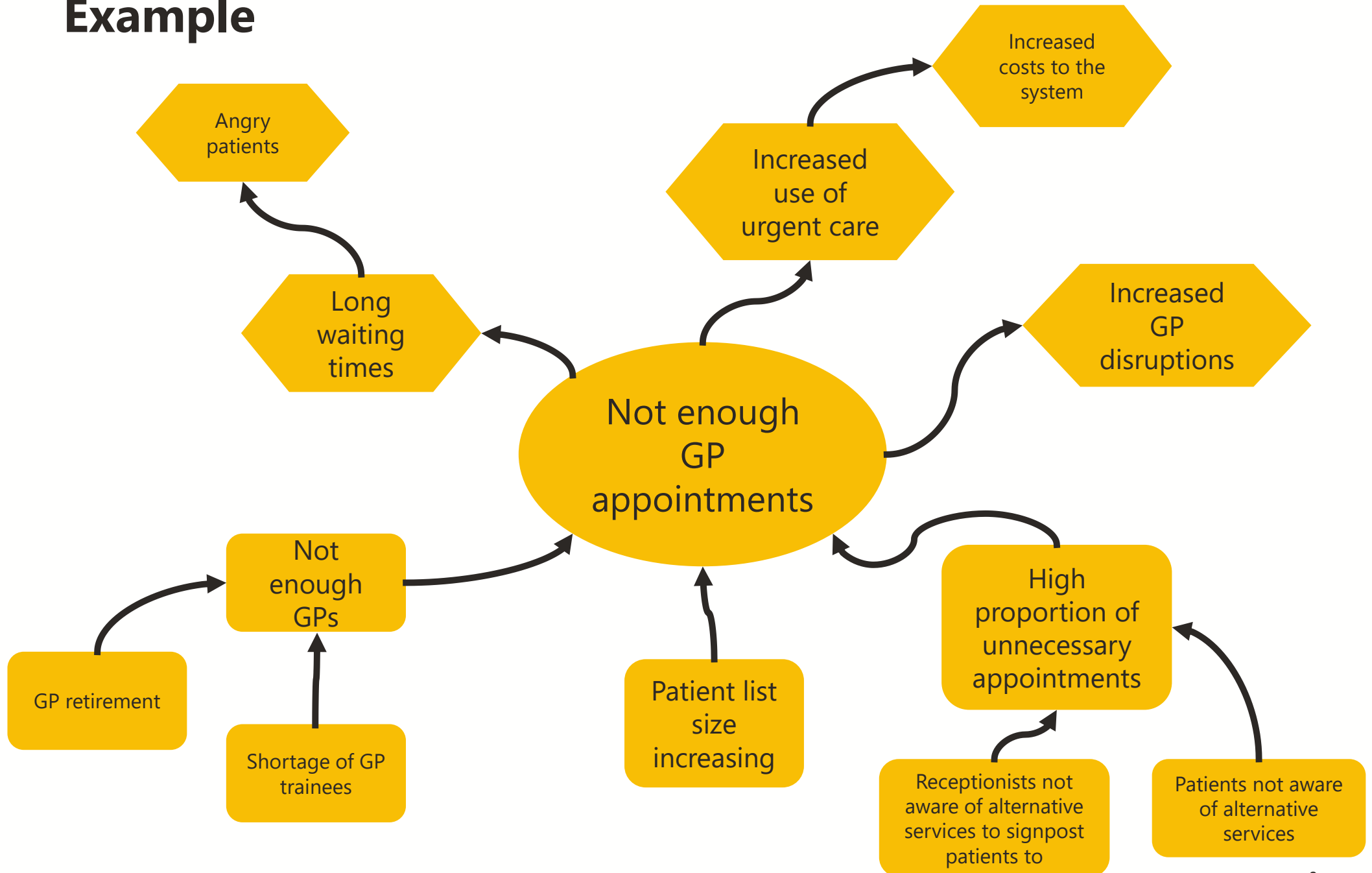
- **Nature:** what is the essence of this problem? You might think about the harm(s) caused, who / which groups suffer.
- **Scale:** how many (e.g. people) does this affect?
- **Dynamics:** is the problem getting bigger / smaller / staying the same? If you did nothing, what is likely to happen?
- **Causes:** this is closely related to the nature, but what seems to lead to the problem that you are defining? If you're struggling with this, keep asking why?

# The problem tree



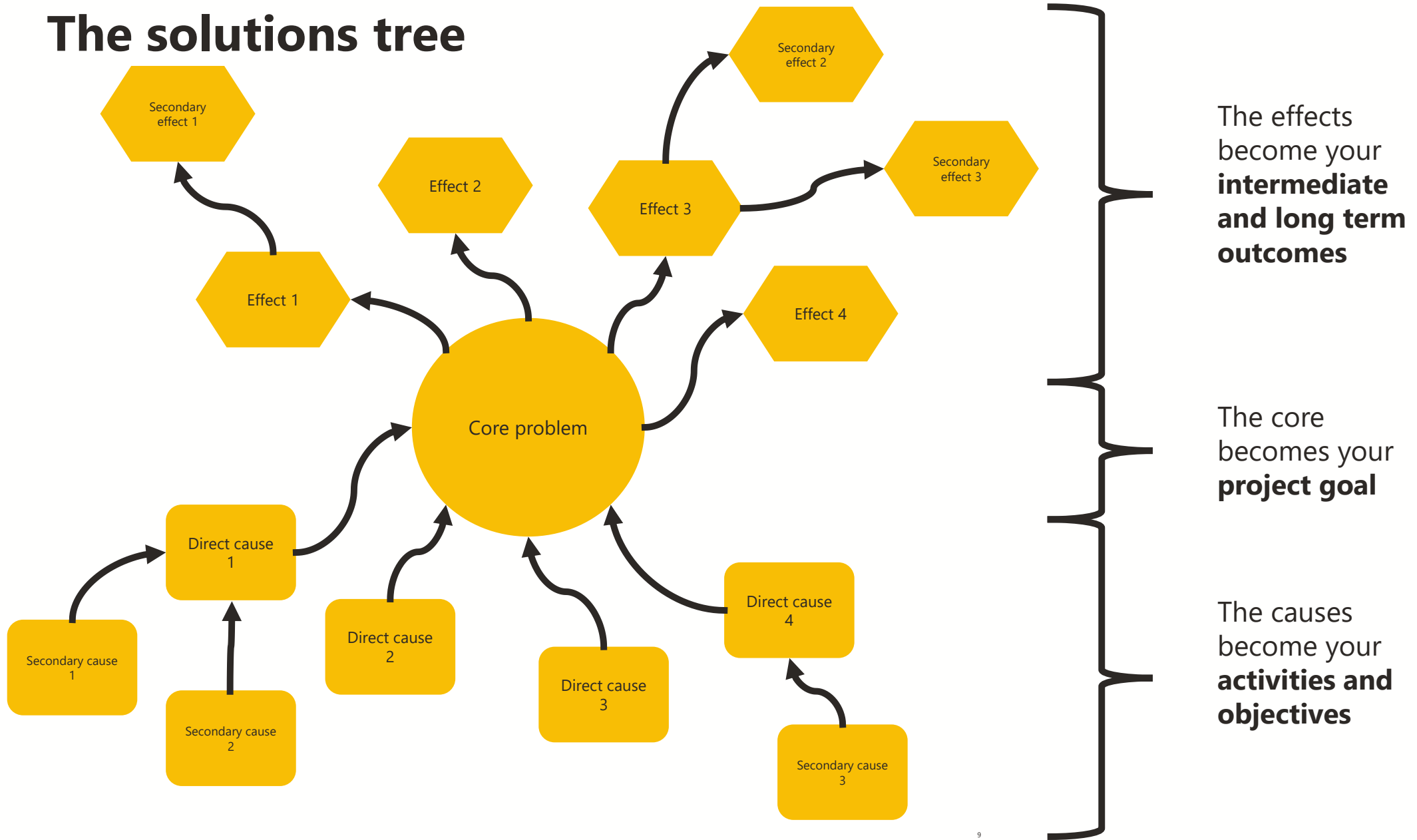


# Example

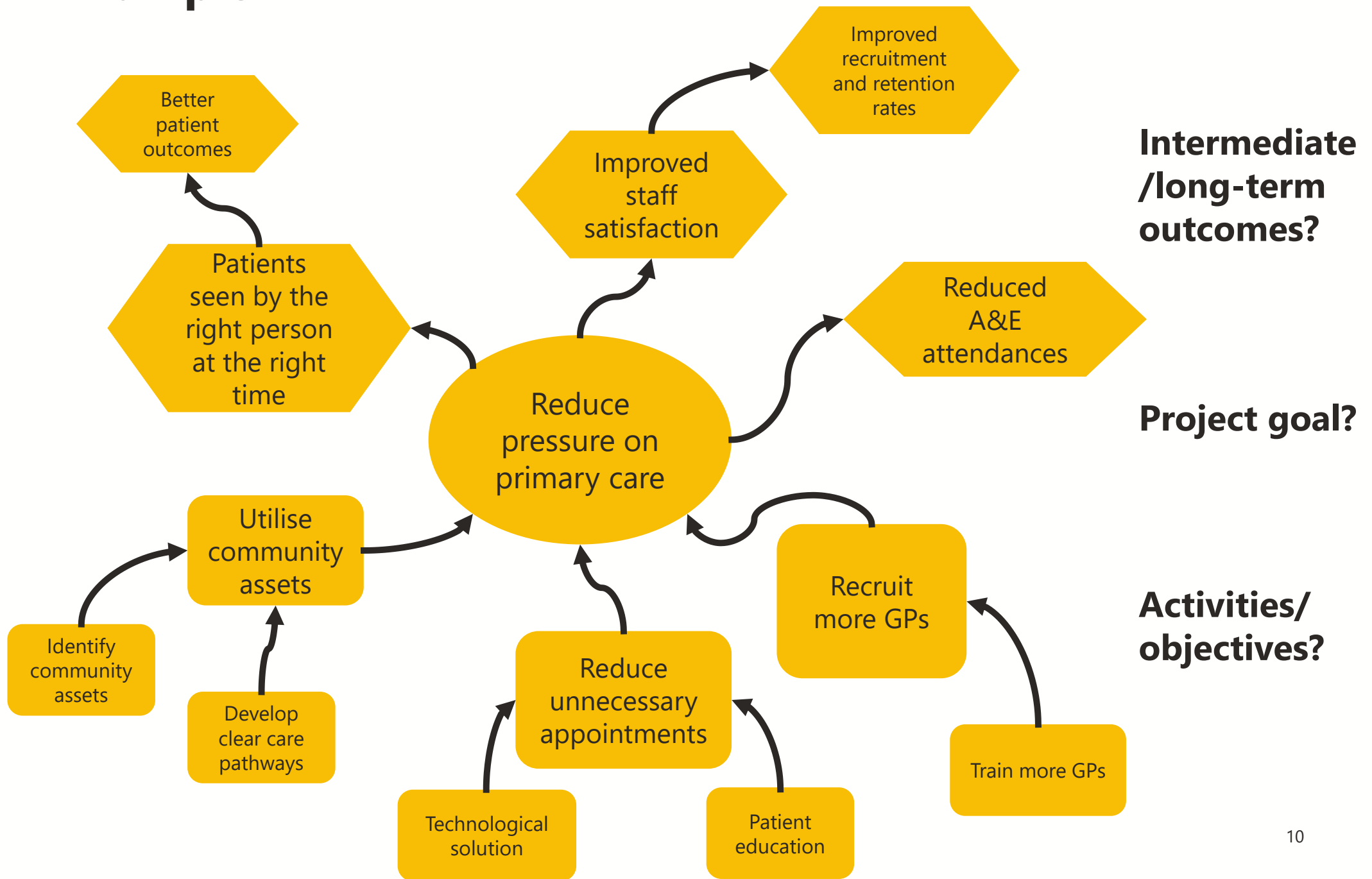




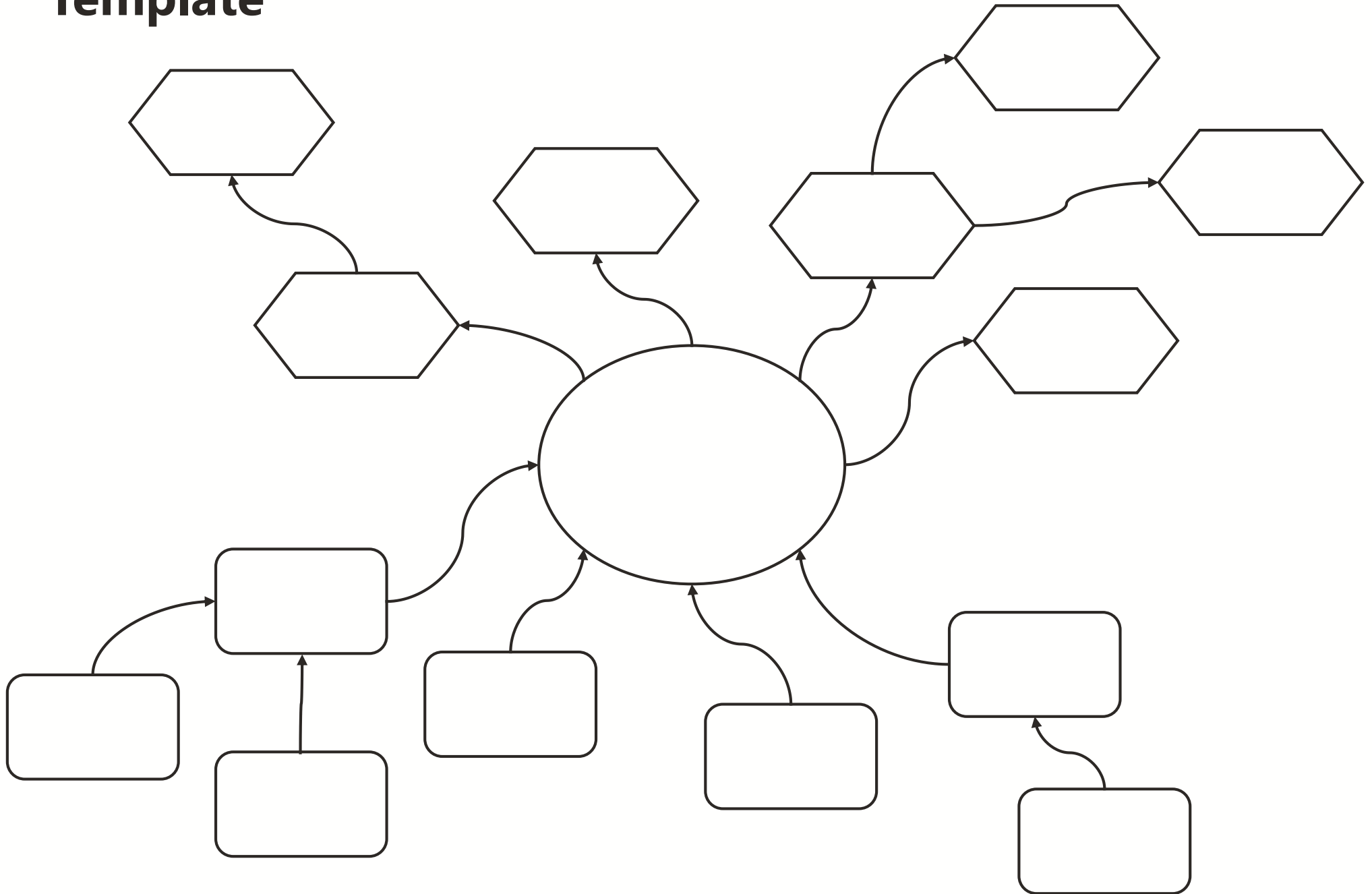
# The solutions tree



# Example



# Template



# **Driver diagrams**

# Method

Another way of structuring a solution tree is by using a driver diagram.

**Driver diagrams can be helpful in the planning stages of your change programme as they help to articulate your theory of change and the cause and effect relationships in your system**

To construct a driver diagram:

**1) Articulate your goal / aim**

What is the problem you are addressing? What are you trying to achieve?

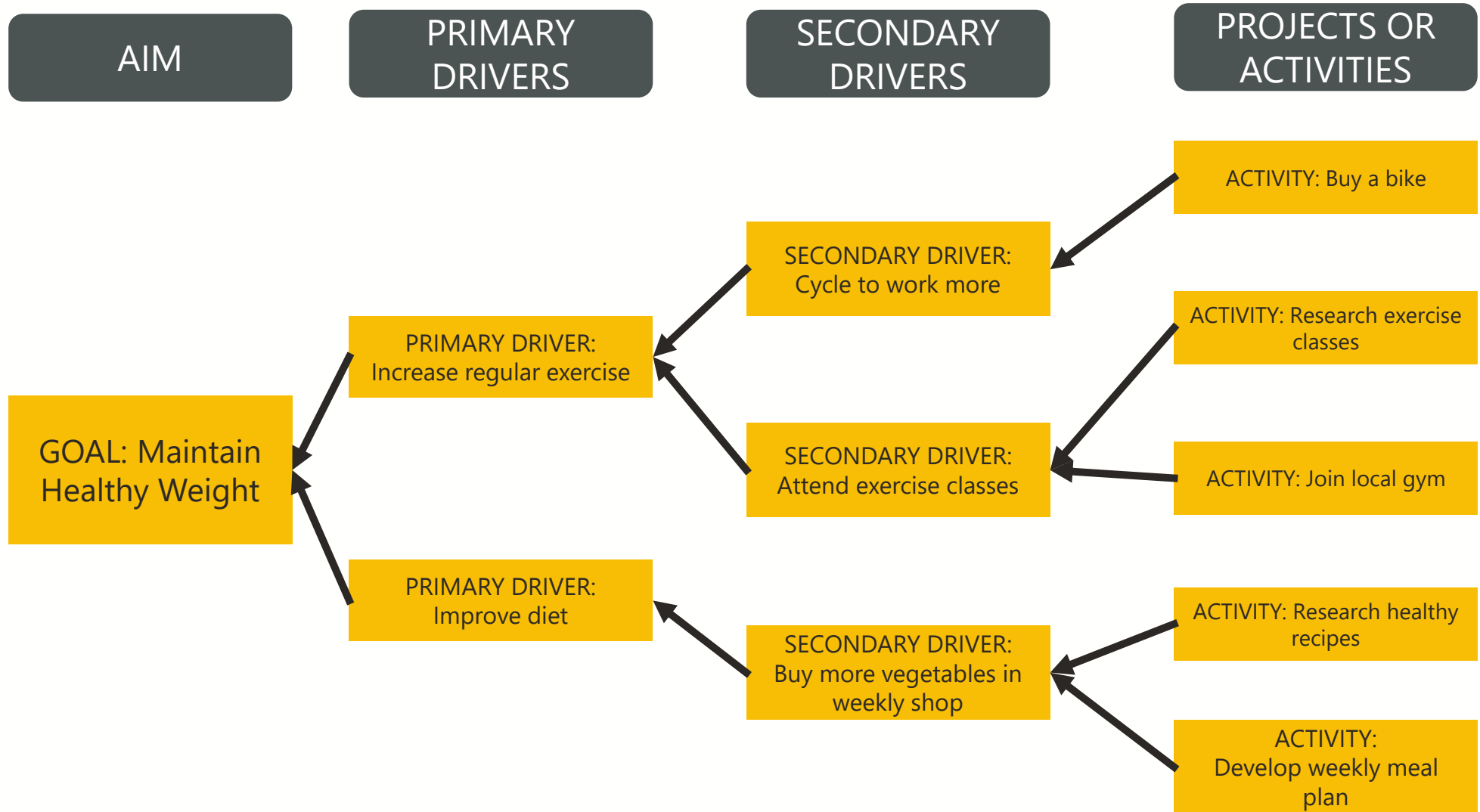
**2) Define the drivers that will help you achieve the goal**

What causes are you trying to address? What are you trying to achieve?

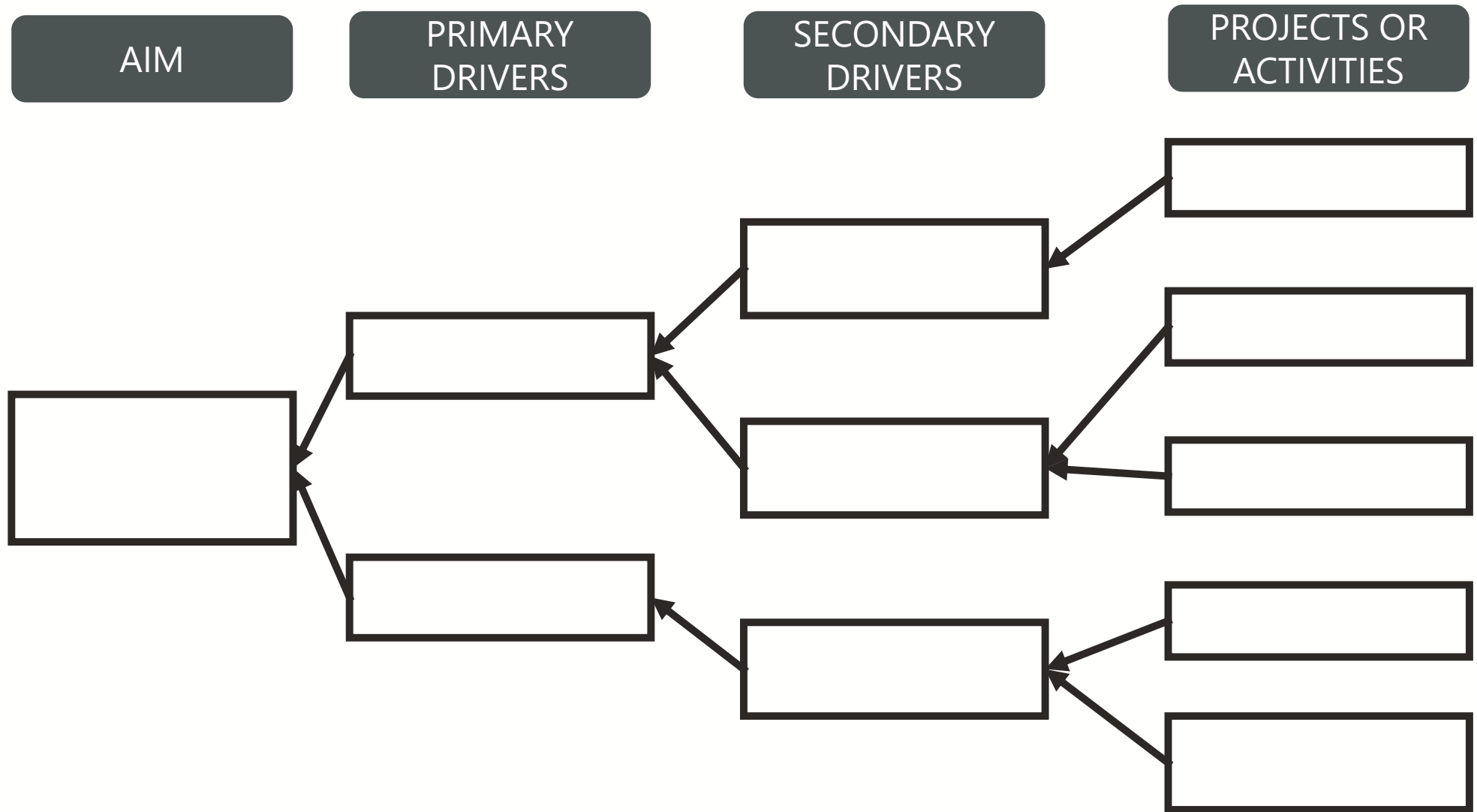
**3) What projects or activities** will you undertake in order to achieve your goals?

It is useful to brainstorm as a group, start broad and then narrow down key projects or actions that you think will deliver the best outcomes.

# Example



# Template





# References

NHS Improvement (2018), Driver diagrams (tree diagrams),  
<https://improvement.nhs.uk/resources/driver-diagrams-tree-diagrams/>

The Evaluation Toolbox (2010), Problem tree / Solution tree analysis,  
[https://evaluationtoolbox.net.au/index.php?option=com\\_content&view=article&id=28&Itemid=134](https://evaluationtoolbox.net.au/index.php?option=com_content&view=article&id=28&Itemid=134)