Driver Diagram Primer

A driver diagram:

- is an immensely powerful tool that helps translate a high level improvement goal into a logical set of underpinning goals and projects[1]
- breaks down an overall goal into underpinning goals (i.e. 'drivers') to the point where actions can be easily defined[1]
- is a visual strategy for tackling a complex problem[3]
- represents a change strategy at a point in time on a single page in a simple, visual way[4]
- helps to ensure that everyone understands the goal and how they can contribute to achieving it[4]
- is a 'live' document that maintains an overview of the big picture[4]
- shows the relationship between the overall aim, the primary drivers that contribute directly to achieving the aim, the secondary drivers that are components of the primary driver and specific change ideas,[5] actions or interventions
- can answer the question "how" if read from left to right and answer the question "why" if read from right to left

Goal/Aim/Outcome

- The aim or outcome of a driver diagrams starts with a clearly defined and measureable goal.[2]
- It should be meaningful to patients / service users / families / customers.[3]
- A well-written aim helps to identify the outcome measure.[3]

Drivers

- Goals/aims/outcomes are broken down to primary drivers and "can continue to lower levels to create secondary or tertiary drivers (and even further if required)"[4]. There is no prescribed number of primary and secondary drivers or actions that should be included.[4] This also pertains to tertiary drivers.
- The number of levels (drivers) can be expanded so that each primary driver has its own set of underpinning factors in driver diagrams relates to more complex goals.[4]
- The difference between levels of drivers is one of importance.[3]
- All key areas of the system that will need to be influenced, should be captured within the drivers.[3]

Primary Drivers

- The overall aim is linked to those factors that are believed to have a direct impact.[2] These are referred to as primary drivers because they drive the achievement of the main outcome.[2]
- Primary drivers are the most important influencers on the aim and there should only be a few (recommend 2 to 5).[5]
- These drivers may act independently or in combination to achieve the overall goal/aim.[4]
- Well-written primary drivers help to identify process measures.[3]

Secondary/Lower Level Drivers

- Secondary drivers are influencers on (or natural subsections of) the primary drivers, and there may be many.[5]
- Well-written secondary drivers help to identify relevant change ideas[3], and also actions and interventions.
- The process of breaking down a goal can continue to lower levels to create secondary or tertiary drivers.[1]

Change Ideas

- All change ideas should have an effect on at least one secondary driver.[3] By association, all change ideas are expected to help achieve the aim.[3] If change ideas must be prioritized, one method is to ask stakeholders: *first* "Which of these would have the biggest impact on the Aim?" *then*, "Which of these is the easiest to do?" (rank by impact & effort).[3]
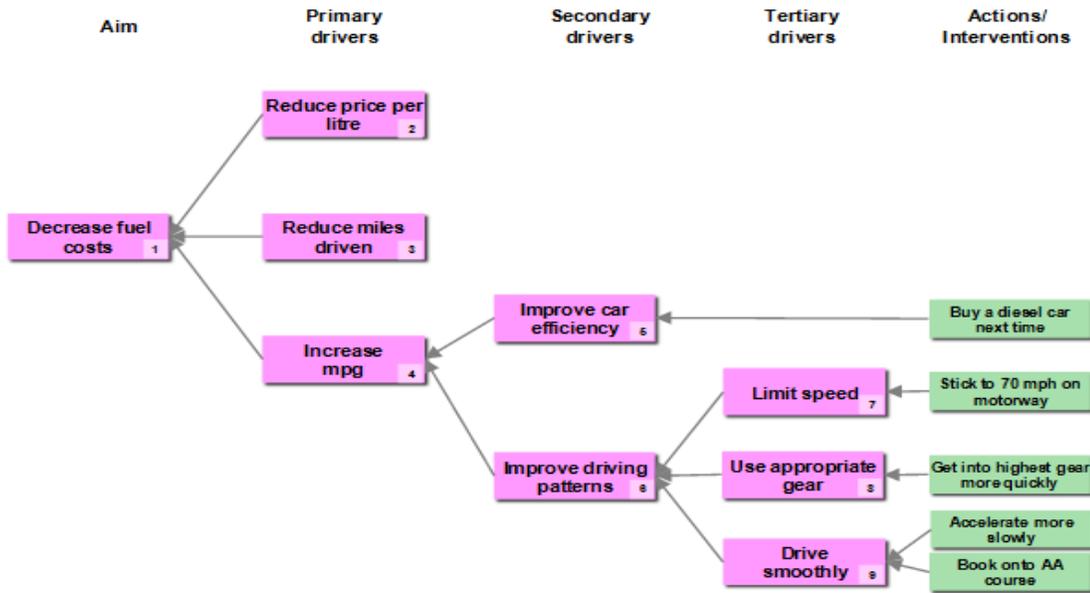
Actions/Interventions

- The ultimate aim of a driver diagram is to define the range of actions or interventions to be undertaken.[1] These can appear anywhere in the hierarchy of the driver diagram but are usually shown on the right hand side.[1]

Create a driver diagram (1-8 below[4])

1. Gather relevant stakeholders who have knowledge and different perspectives of the system
2. Start with the aim/goal – make sure it is clearly defined and measurable
3. Brainstorm potential drivers – "To achieve the goal, the things that are needed to improve are..." Concentrate on generating ideas at this stage, don't try to allocate the label of primary or secondary driver at this stage
4. Once brainstorming is completed, cluster ideas to see if there are groups that represent a common driver. Make sure to use language like 'improve' or 'decrease' and that each driver is clearly defined (and is potentially measurable).
5. Consider expanding the groups as new ideas may come to mind during the clustering stage
6. Identify the links between the drivers and create the driver diagram format
7. Add actions/interventions for the drivers
8. Finally decide which drivers and projects/actions to prioritise and which to measure.
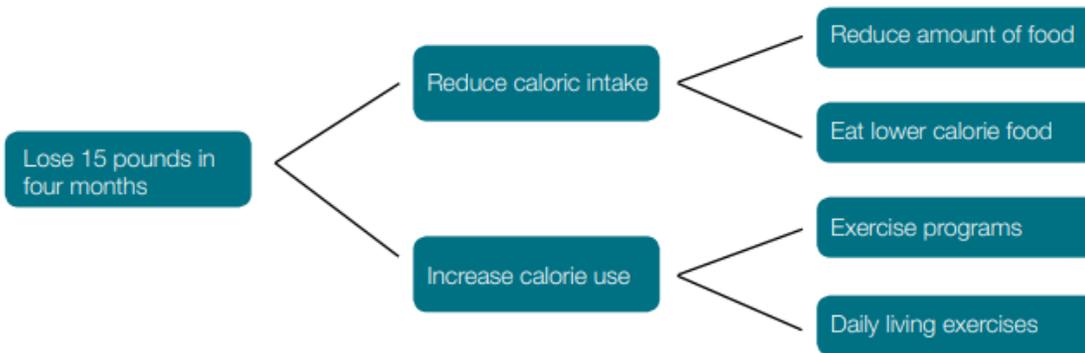
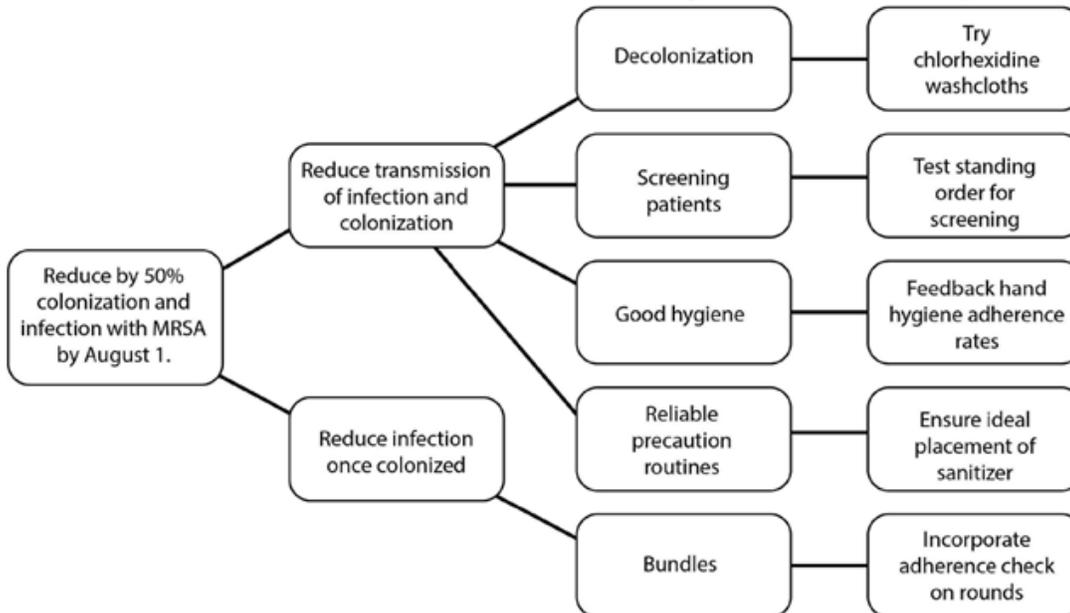# Examples of Driver Diagrams

Aim	Primary drivers	Secondary drivers	Tertiary drivers	Actions/ Interventions

Decrease fuel costs 1
- Reduce price per litre 2
- Reduce miles driven 3
- Increase mpg 4
  - Improve car efficiency 5 ← Buy a diesel car next time
  - Improve driving patterns 6
    - Limit speed 7 ← Stick to 70 mph on motorway
    - Use appropriate gear 8 ← Get into highest gear more quickly
    - Drive smoothly 9 ← Accelerate more slowly / Book onto AA course

https://www2.gov.scot/resource/0042/00426863.pdf

Aim or Outcome — Primary Driver — Secondary Driver

Lose 15 pounds in four months
- Reduce caloric intake
  - Reduce amount of food
  - Eat lower calorie food
- Increase calorie use
  - Exercise programs
  - Daily living exercises

http://www.ihi.org/resources/Pages/Tools/Driver-Diagram.aspx

Aim — Primary Drivers — Secondary Drivers — Change Ideas

Reduce by 50% colonization and infection with MRSA by August 1.
- Reduce transmission of infection and colonization
  - Decolonization → Try chlorhexidine washcloths
  - Screening patients → Test standing order for screening
  - Good hygiene → Feedback hand hygiene adherence rates
- Reduce infection once colonized
  - Reliable precaution routines → Ensure ideal placement of sanitizer
  - Bundles → Incorporate adherence check on rounds

http://www.hqontario.ca/Portals/0/Documents/qi/qi-driver-diagram-instruction-sheet-en.pdf

1 https://www2.gov.scot/resource/0042/00426863.pdf
2 http://www.hqontario.ca/Portals/0/Documents/qi/qi-driver-diagram-instruction-sheet-en.pdf
3 https://qi.elft.nhs.uk/resource/driver-diagrams/
4 https://improvement.nhs.uk/documents/2109/driver-diagrams.pdf
5 http://www.ihi.org/resources/Pages/Tools/Driver-Diagram.aspx