CONSULTANTS

Using Program Design Logic to manage the risk of program failure

Andrew Hawkins

The Pitch

A program can be represented simply as proposition that a certain course of action will lead to a certain set of outcomes

An evidence-based program will provide good reasons to think it will be effective

A sound evidence-based program will make sense ‘on paper’ and ‘in reality’

We can manage risks of program failure using a Design, Monitor, Test, Learn, Adapt process

- **Design Risks**
- **Operational Risks**

DEPT.
OF
LOGIC
A
NOT B
IF NOT A
THEN B
B
IF A THEN B
IF NOT A
THEN NOT B
NOT A
IF B THEN A
IF NOT B
THEN NOT A

What is Program Design logic?

A program can be represented as a proposition that a certain course of action will lead to a certain set of outcomes

Program Design Logic sets out this proposition in the form of necessary and sufficient conditions

A program is not the only way to achieve something but it should be sufficient

An evidence-based program should make sense ‘on paper’ & ‘in reality’

A rational program has components that we think are necessary and when all achieved are sufficient for bringing about some outcome

A program will rely on assumptions and be impacted by external factors

PDL renders programs as ‘casual packages’ not as ‘causal chains’

Key terms

Conditions – not so much outputs and outcomes although these can be used. Written as

'who or what is in what condition, state etc'

'Caused' – the configuration of conditions was sufficient for a change to occur

Sufficient – it was enough

Necessary – wouldn't happen without it

Contributory – affected in someway

Condition we ultimately want to see

External factors

Condition for which the intervention is expected to be sufficient

Assumptions

Necessary condition for our intervention to be effective

Necessary condition for our intervention to be effective

Necessary condition for our intervention to be effective

Actions

Actions

Actions

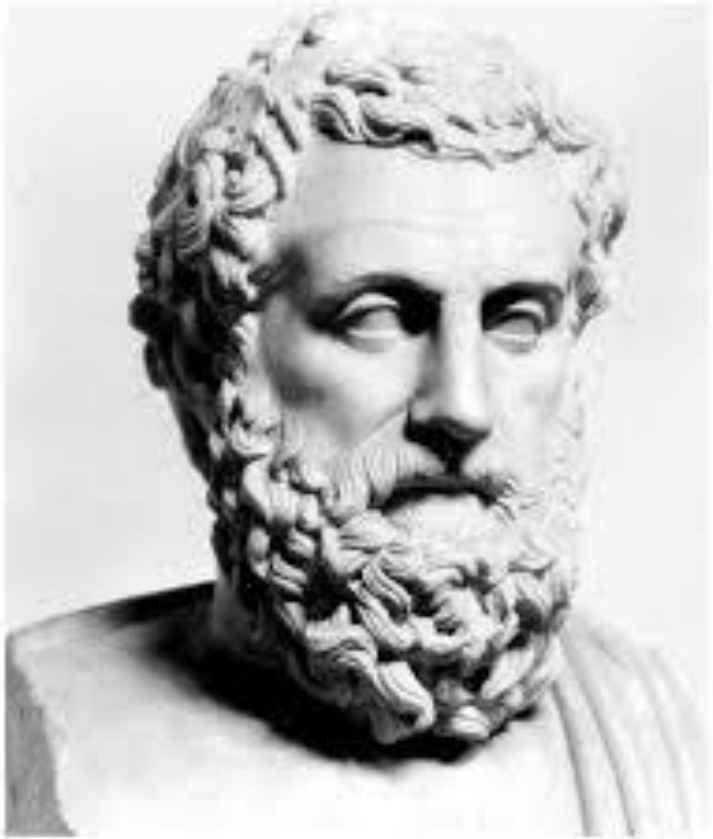
Actions

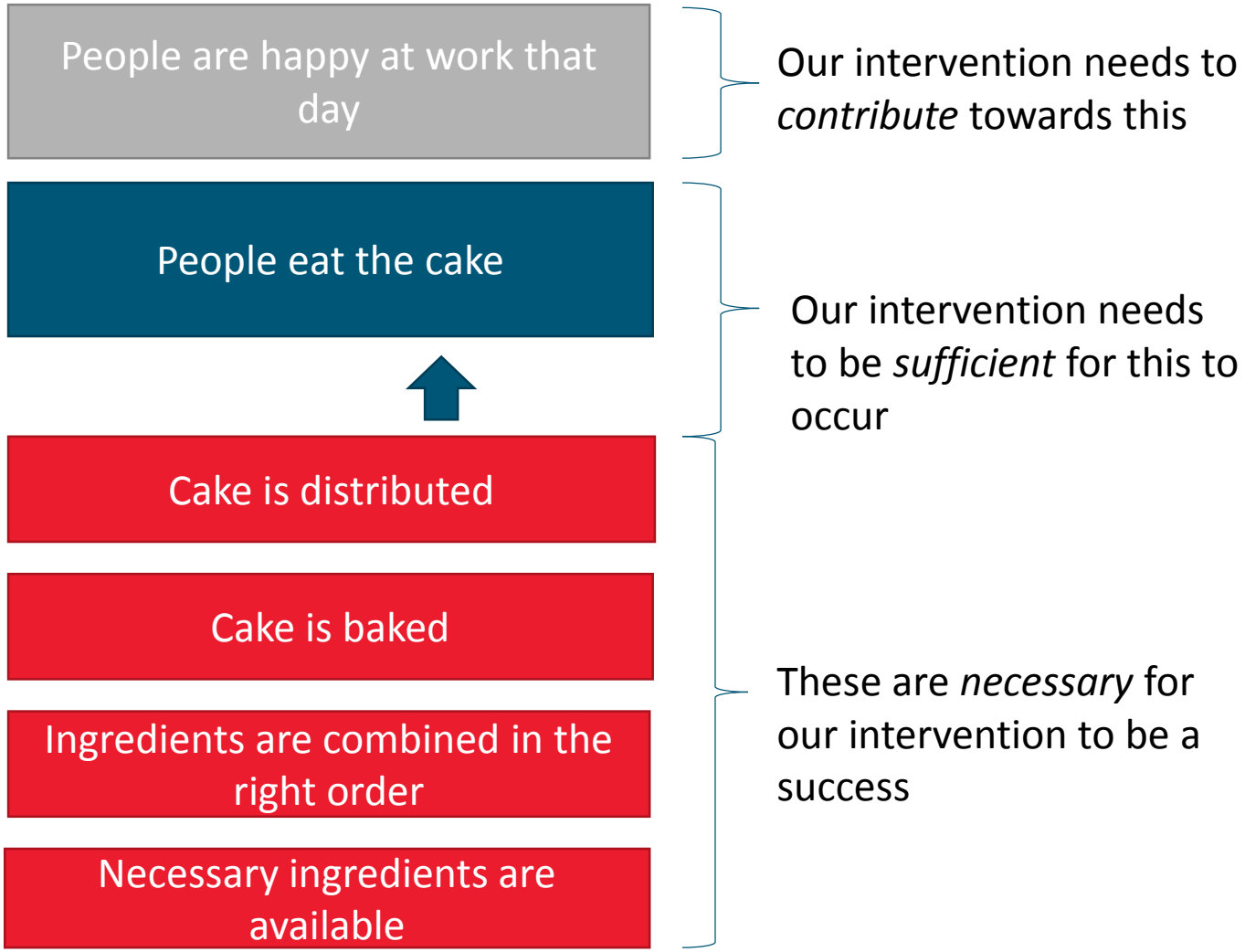
enthymeme

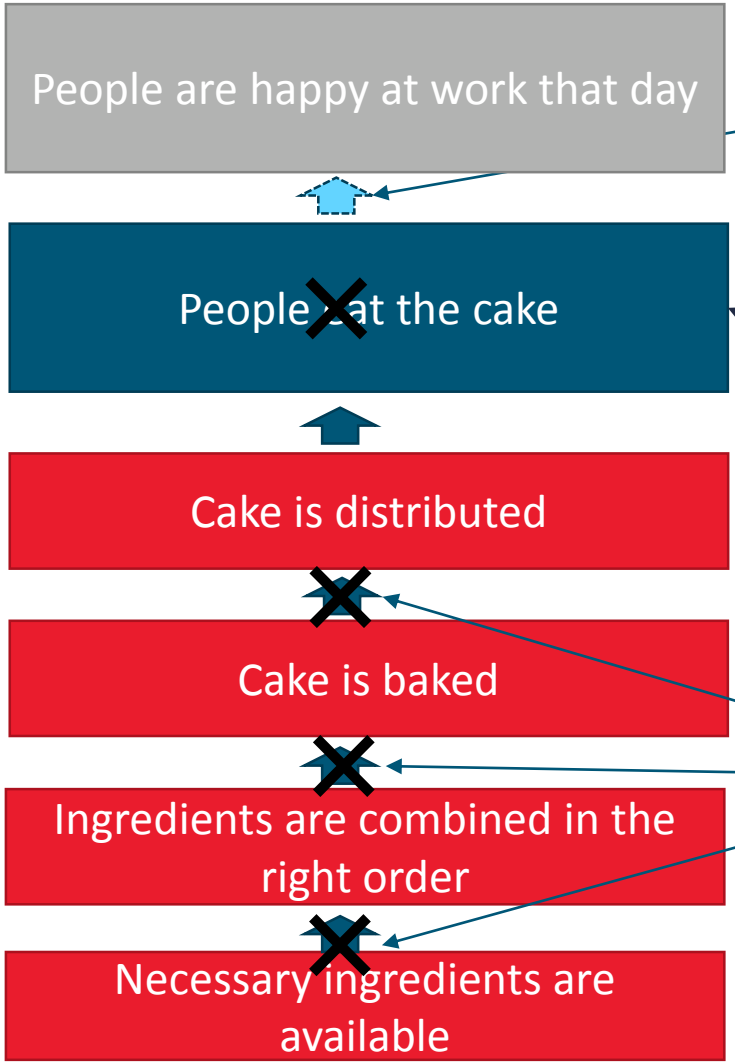
/ˈɛnθɪmiːm/

- Premises or conditions must be discovered (some are not stated – they are implicit assumptions)
- The conditions and conclusions are probable but not certain
- The subject matter is contingent

Otherwise it is like a logical syllogism used for practical reasoning




People are happy at work that day
People eat the cake
Cake is distributed
Cake is baked
Ingredients are combined in the right order
Necessary ingredients are available
Our intervention needs to *contribute* towards this
Our intervention needs to be *sufficient* for this to occur
These are *necessary* for our intervention to be a success



This is only partially achieved by our cake, what about everything else going on?

External Factors

Sometimes we combine ingredients and bake a cake but the cake may not be eaten.

What if people aren't hungry?

What if they don't like any form of cake?

Assumptions

These do not lead to the next step – but are *necessary* preconditions for the cake to be eaten.

They are not the only way to ensure a cake is eaten at work – but they are needed for our course of action to work.

People are happy at work that day

People eat the cake

People in the office like cake

Cake is distributed

Cake is baked

Ingredients are combined in the right order

Necessary ingredients are available

People in the office like cake

If we assume people in the office like cake and are hungry/ polite enough to eat some at morning tea then it is an assumption and we don't do anything about it.

Assumption or pre-**condition**?

People in the office like cake

It may be an early condition or a later condition, or it may not really matter. If we need to stimulate demand then its an early step. If we can take the cake somewhere it is liked then it is a late step.

If we think we will need to stimulate demand then we will need an action that results in the condition that people in the office like cake. Maybe some propaganda that 'eating cake makes you happy?'

XX government is more responsive

XX communities are safer

External factors
The results of the Pilot are accepted by the broader community as fair and just

CONTRIBUTORY

Justice is delivered efficiently and appropriately

SUFFICENT

Disposition of matters through the criminal justice system is more efficient with no degradation in the quality of outcomes

Assumptions
Magistrates consider that due processes have been followed and are willing to sentence Pilot participants

Assumptions
Focus on early resolution does not ***slow down the rest of the*** for the criminal justice system

Assumptions
Defence have an incentive to adhere to Early Resolution Pilot timelines and enter into early guilty pleas

Assumptions
Police have an incentive and ability to adhere to Pilot timelines including the collection of necessary and sufficient materials & ***do not downgrade charges*** in order to meet Pilot timeframes

Appropriate early guilty pleas are entered into prior to a matter being transferred to Court

Defence and prosecution obtain and use the necessary and sufficient materials 'early'

Defence and prosecution counsel with sufficient knowledge and authority to make decisions are involved with the case 'early'

NECESSARY

Program stakeholders (clients, members of judiciary, magistracy, court registries, QPS, Legal Aid) understand the rationale for the pilot and engage with it

Where is the theory of change?

‘Theory of change’ and ‘theory of action’ are common terms in evaluation

This particular program does not need reasons or warrants to think that if we do something quicker and avoid unintended consequences things will be better

Other programs may need detailed reasons, and theories as to why the conditions will be brought about

Theory plays an important role in providing reasons why a program or component is thought to be effective

BUT a program is not itself a theory.

Why is this approach important?

Evaluation should support an honest conversation about the likely value of what we are willing to fund.

A logical rather than theoretical approach will support conversations about what a program is actually sufficient for (and if that is ok?) without confusion about ‘theory of change’ or ‘theory of action’

Problems in program logic stem from an implicit assumption about causality and the desire to present a ‘causal chain’ rather than ‘causal package’

Often this approach does not put a brake on overly optimistic ideas about what a program is actually designed to be sufficient for and what it may only contribute towards

1. A program can be evaluated while its on paper – is the argument sound?

2. If our assumptions hold and if each step on the way to our intended outcome were achieved, would our intended outcome follow logically?

3. It can then be evaluated once its in the field – is each proposition well grounded? i.e. to what extent did each condition actually occur, together were they sufficient and was each action actually necessary?

What do we mean by caused?

- The presence of something is invariably followed by the presence of something else (**successionist**)
- The configuration of certain somethings *immediately* brings about a new something (**configurationalist**)
- The presence of something with certain latent powers in contact with the latent powers of something else creates a new something (**generative**)

How is this approach limited?

Reliance on *what we think we know* about the world and our interventions – but this is necessary for rational policy making, it is also necessary for knowledge about what to do in the future.

Logic is rarely complete at the outset – there are many fallacies, it must be updated with new knowledge about whether each condition is necessary, whether they are sufficient, what assumptions may or may not hold and what external factors matter.

Allied Signal
FLIGHT RECORDER
DO NOT OPEN

Designing an appropriate approach to monitoring and evaluation is about managing risk

- Operational risk
  - **Performance risk** – actions are not implemented
  - **External factor risk** – the operating context overwhelms the program effect
- Design risk
  - **Assumption risk** – assumptions we made about the operating context don't hold
  - **Theoretical risk** – theories about why certain actions would lead to outputs don't hold
  - **Logical risk** – theories about why the outputs would collectively lead to outcomes don't hold

Designing an appropriate approach to monitoring and evaluation is about managing risk

- It doesn't make sense on paper – **logical risk**
- It makes sense on paper, but *assumptions don't hold*, so it doesn't work – **assumption risk**
- It makes sense on paper, but we *didn't do what we said we would do*, so it doesn't work – **performance risk**
- It makes sense on paper, assumptions hold, we do what we said we would do, *but outputs don't materialise*, so it doesn't work – **theoretical risk**
- It makes sense on paper, assumptions hold, we do what we said we would do, outputs materialise, but *intended outcomes don't follow*, so the array of outputs was not actually sufficient to bring about a desired future state, so it doesn't work– **logical risk**
- It makes sense on paper, assumptions hold, we do what we said we would do, outputs materialise, intended outcomes follow, but *longer term outcomes don't materialise*–**external factor risk**

XX government is more responsive

XX communities are safer

External factors
The results of the Pilot are accepted by the broader community as fair and just

External factor risk

CONTRIBUTORY

Justice is delivered efficiently and appropriately

SUFFICENT

Disposition of matters through the criminal justice system is more efficient with no degradation in the quality of outcomes

Logical risk

NECESSARY

Assumption risk

Assumptions
Magistrates consider that due processes have been followed and are willing to sentence Pilot participants

Assumptions
Defence have an incentive to adhere to Early Resolution Pilot timelines and enter into early guilty pleas

Assumptions
Focus on early resolution does not ***slow down the rest of the*** for the criminal justice system

Assumptions
Police have an incentive and ability to adhere to Pilot timelines including the collection of necessary and sufficient materials & ***do not downgrade charges*** in order to meet Pilot timeframes

Appropriate early guilty pleas are entered into prior to a matter being transferred to Court

Defence and prosecution obtain and use the necessary and sufficient materials 'early'

Defence and prosecution counsel with sufficient knowledge and authority to make decisions are involved with the case 'early'

Performance/ Theoretical risk

Program stakeholders (clients, members of judiciary, magistracy, court registries, QPS, Legal Aid) understand the rationale for the pilot and engage with it

The Pitch

A program can be represented simply as proposition that a certain course of action will lead to a certain set of outcomes

An evidence-based program will provide good reasons to think it will be effective

A sound evidence-based program will make sense ‘on paper’ and ‘in reality’

We can manage risks of program failure using a Design, Monitor, Test, Learn, Adapt process

- **Design Risks**
- **Operational Risks**

CONSULTANTS

SYDNEY OFFICE

L4 352 Kent Street Sydney

MELBOURNE OFFICE

L9 401 Collins Street
Melbourne

BRISBANE OFFICE

240 Queen Street Brisbane

XX government is more responsive

XX communities are safer

Justice is delivered efficiently and appropriately

- Matters progress faster through the criminal justice system with no degradation in quality of outcomes
- Backlog of material before court is reduced
- Victim suffering is reduced

Disposition of matters through the criminal justice system is more efficient with no degradation in the quality of outcomes

- Reduction in time from receipt of matters to disposition
- Increase in the portion of initial charges that become pleas before a Magistrate
- No evidence of downgrading of charges in return for a speedier resolution
- No increase in mistrials attributable to the pilot

Assumptions
Magistrates consider that due processes have been followed and are willing to sentence Pilot participants

Assumptions
DPP focus on early resolution does not create unintended negative consequences for the criminal justice system

Assumptions
Legal Aid Queensland processes sufficient grants to support defendants

Assumptions
Defence have an incentive to adhere to Early Resolution Pilot timelines and enter into early guilty pleas

Assumptions
Police have an incentive and ability to adhere to Pilot timelines including the collection of necessary and sufficient materials & do not downgrade charges in order to meet Pilot timeframes

Appropriate early guilty pleas are entered into prior to a matter being transferred to Court

Defence and prosecution obtain and use the necessary and sufficient materials 'early'

Defence and prosecution counsel know what materials are necessary and sufficient to make a decision for an 'early' plea

External factors
Government priorities and interagency initiatives reinforce the Early Resolution Pilot approach

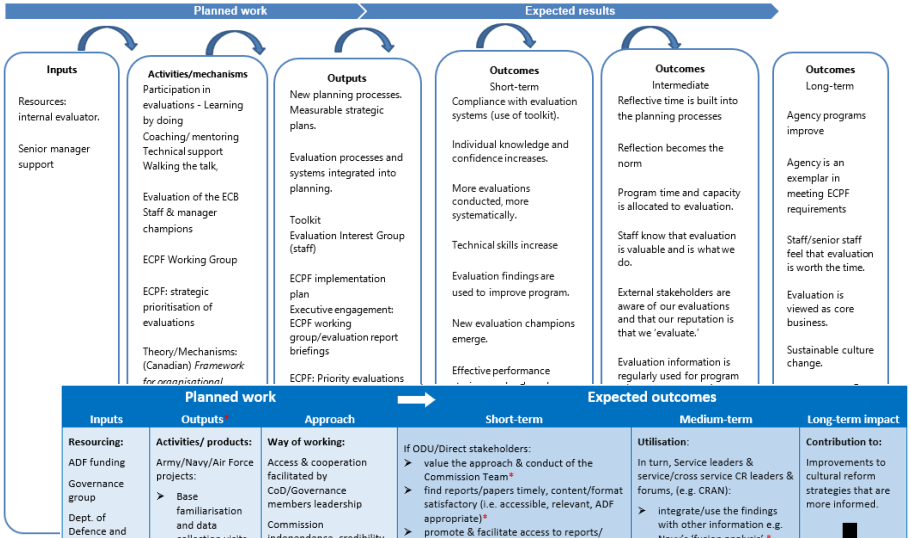
The results of the Pilot are accepted by the broader community as fair and just

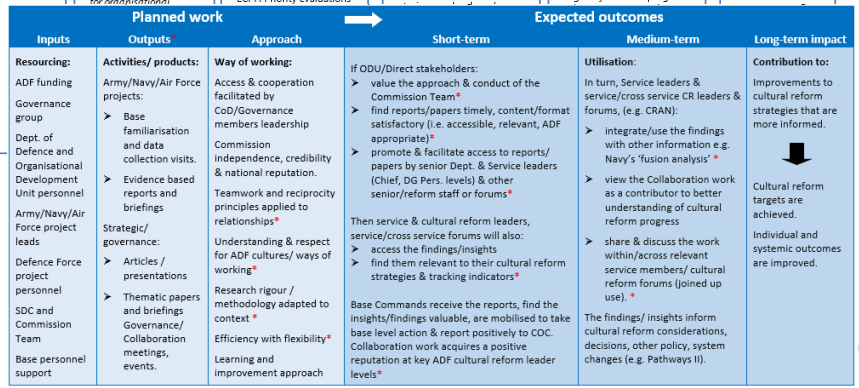
Feedback loop: As the pilot progresses, the sector is more supportive of and confident to deliver pilot approach

What is different about Program Design Logic?

Logic model: building evaluation capability in a Govt micro agency to meet demands of the Enhanced Commonwealth Performance Framework (ECPF)

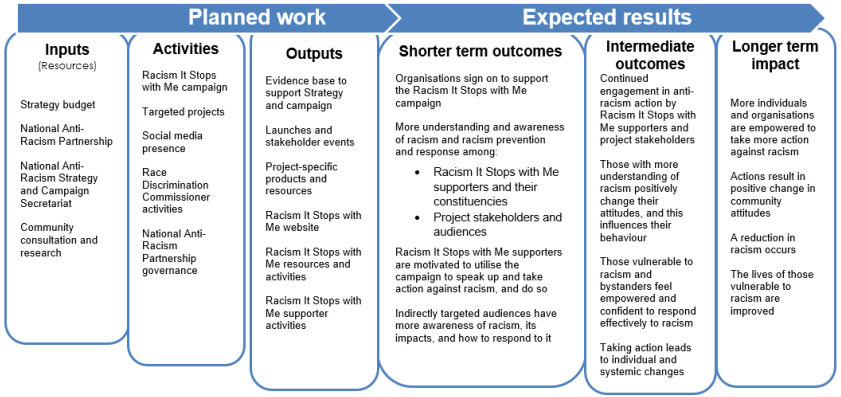
The underlying theory of change is: *if the agency invests in ECB, its programs and ability to demonstrate their outcomes will improve. Accordingly, APS entities with evaluation capacity will be better positioned to report against their purpose and meet the ECPF requirements.*





ch hope

Anti-Racism Strategy logic model



Too much hope?

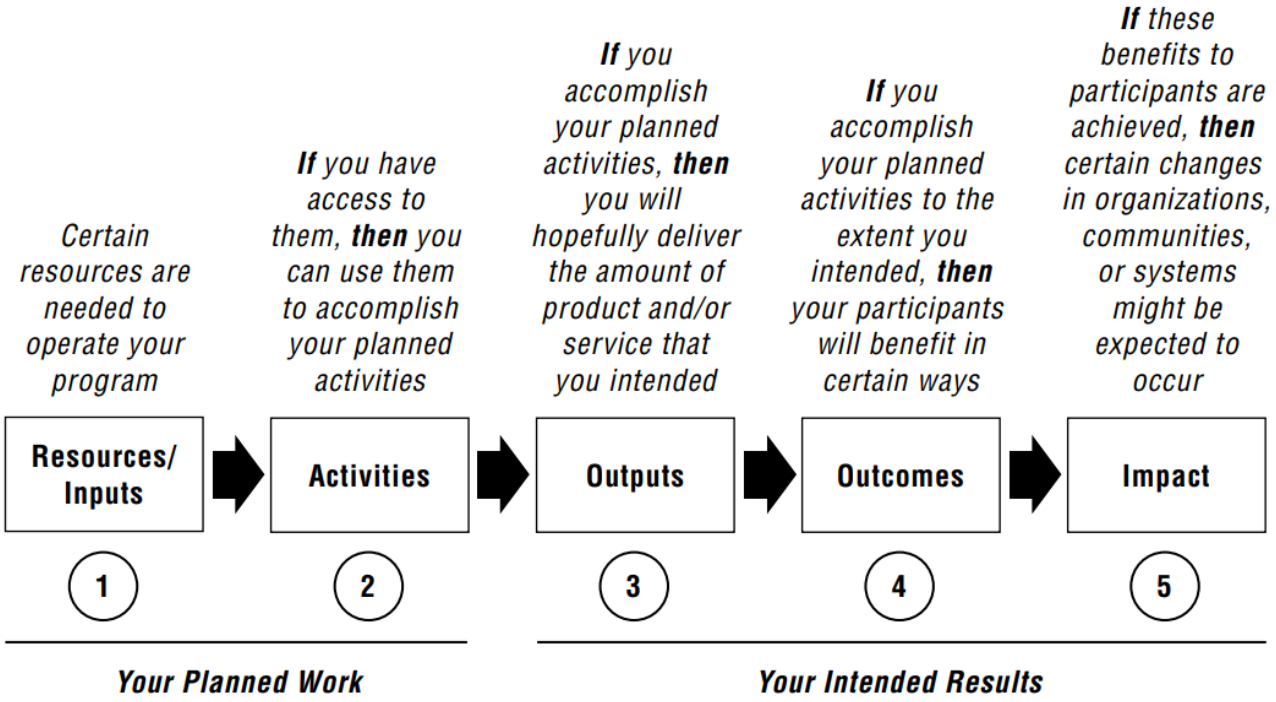
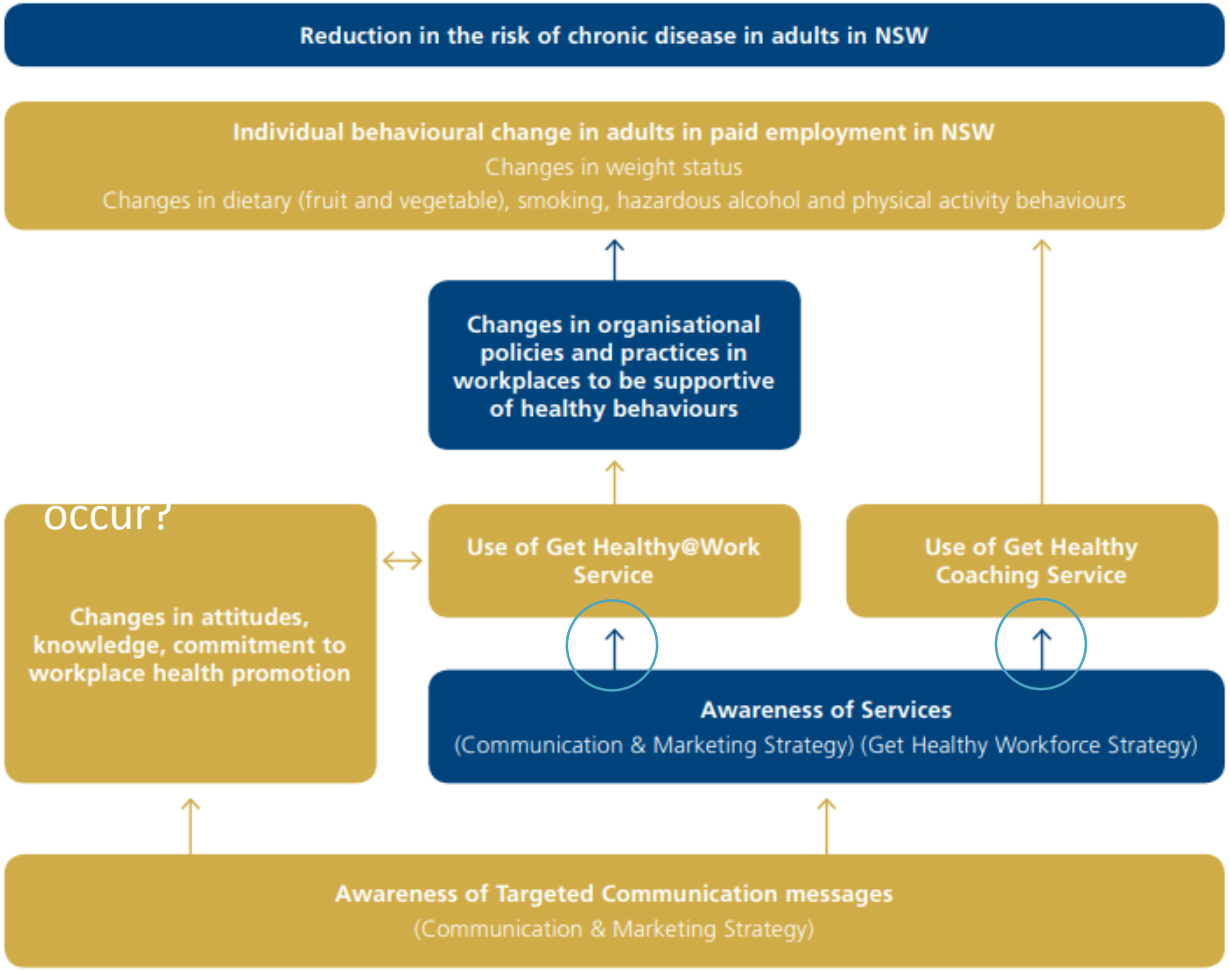
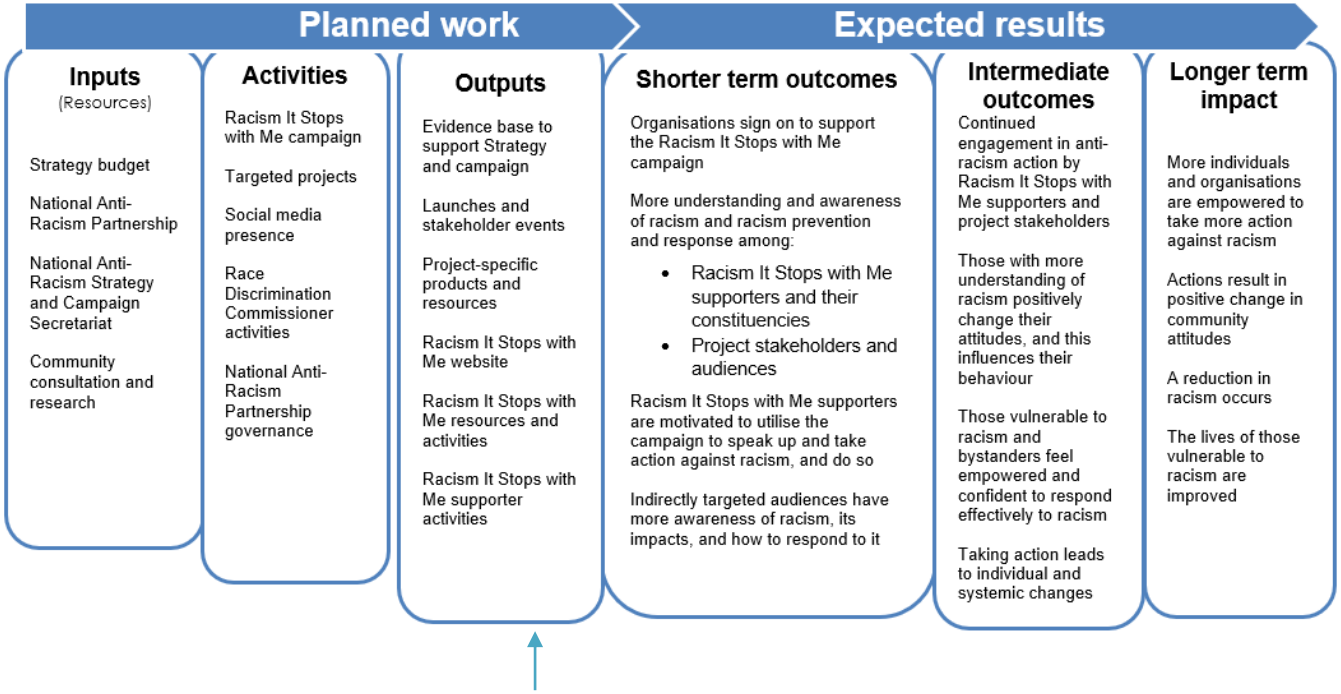


Figure 1. Example of an outcomes hierarchy for the NSW Implementation of the Healthy Workers Initiative



Anti-Racism Strategy logic model



Is this collection of outputs enough to ensure the outcomes occur, – what's the connection between these and outcomes, is it causal, logical, hopeful?