HEALTH QUALITY & SAFETY
COMMISSION NEW ZEALAND
Kupu Taurangi Hauora o Aotearoa

Learning from adverse events

Measurement for quality improvement

Agenda

- How we think about measurement
- Measurement frameworks
- From driver diagrams to measurement frameworks

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Measurement for quality improvement

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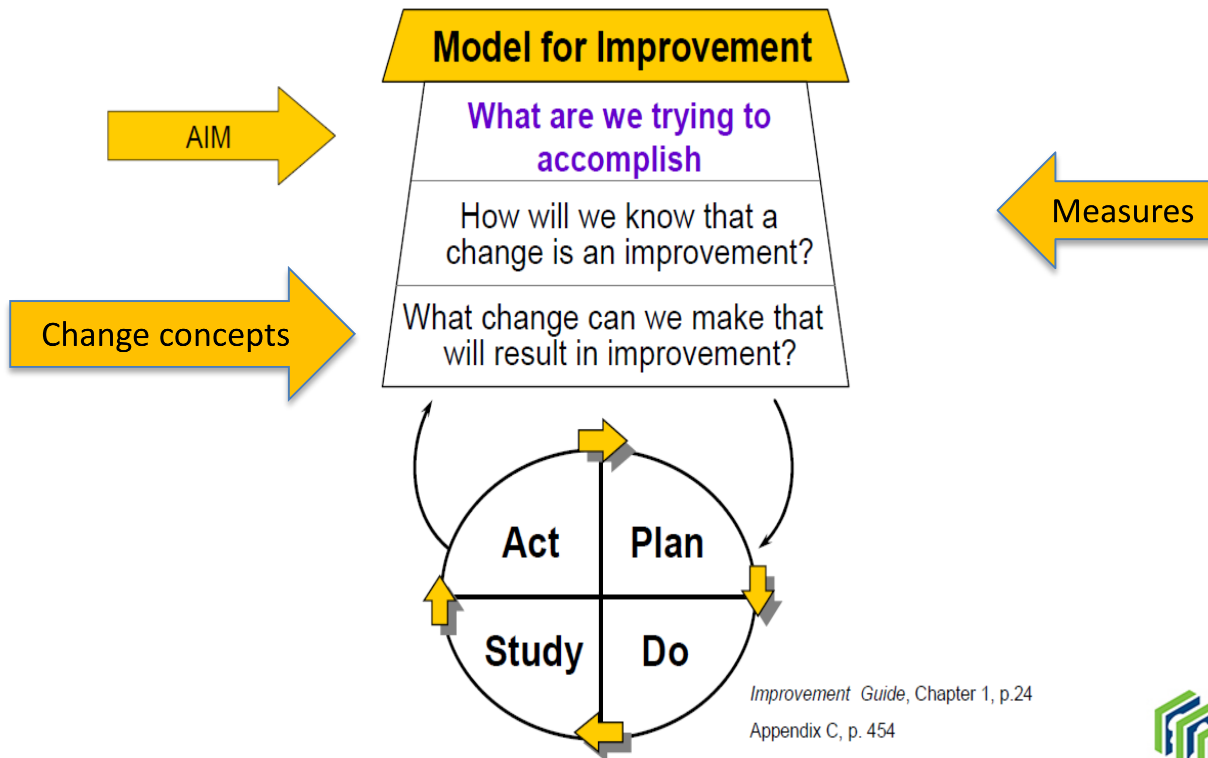

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Measurement for improvement: a mindset

- The purpose of data in quality improvement is for learning not judgement:
  - Driven not by external reporting requirements, but wanting to understand a process and understand why the process fails.
  - Requires openness about data as a pre-requisite.
  - Data not being used as a mechanism for control, but for learning.

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Measuring for improvement: a mindset

Aspect	Improvement	Accountability	Research
AIM	Improvement of care	Comparison, choice, reassurance, spur for change	New knowledge
Methods: Test Observability	Test observable	No test, evaluate current performance	Test blinded or controlled
Bias	Accept consistent bias	Measure and adjust to reduce bias	Design to eliminate bias
Sample Size	"Just enough" data, small sequential samples	Obtain 100% of available relevant data	"Just in case" data
Flexibility of Hypothesis	Hypothesis flexible, changes as learning takes place	No hypothesis	Fixed hypotheis
Testing strategy	Sequential tests	No tests	One large test
Determining if a change is an improvement	Run charts or Shewhart control charts	No change focus	Hypothesis, statistical tests, p-values
Confidentiality of the data	Data used only by those involved with improvement	Data available for public consumption and review	Research subjects identities protected

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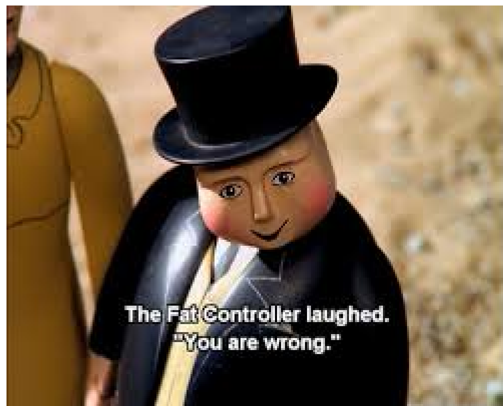

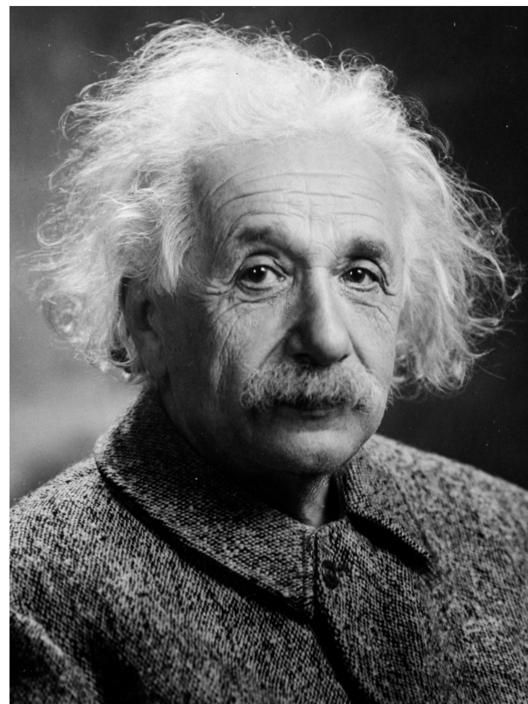

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A family of measures

- In quality improvement language, we refer to a family of measures, which includes:
  - outcome
  - process
  - balancing

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A family of measures

Outcome measures are what we are aiming to achieve – what is the system performance?

Process measures assess steps in a process that lead to the outcome – are we on track to improve the system?

Balancing measures monitor unintended consequences – are changes to improve one part of the system affecting other parts of the system?

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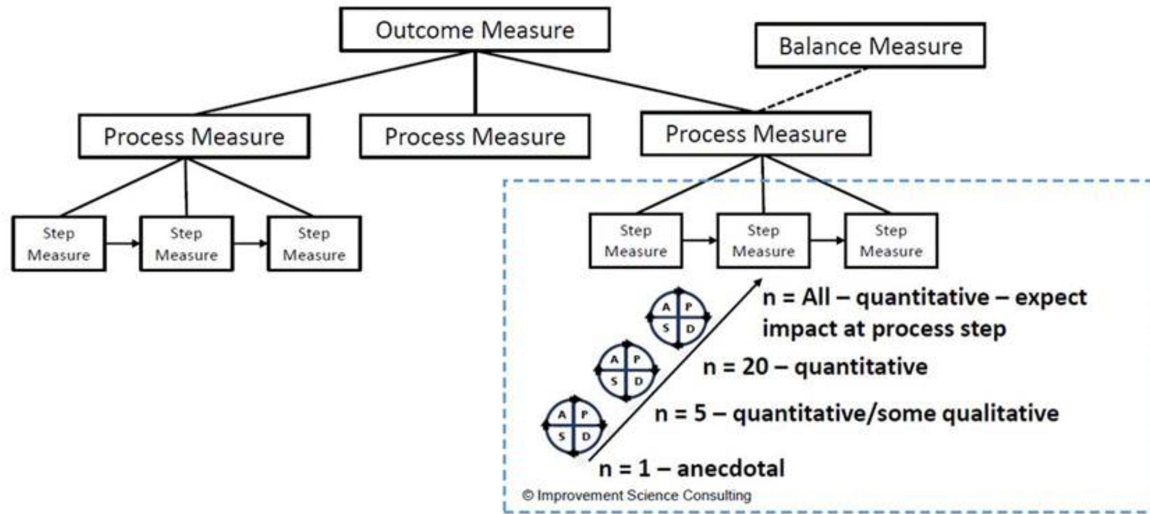
Frameworks



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How outcome contextualises process

		Outcome +	Outcome -
Process	+	Looks to be working (but keep watch out for confounders!)	?Hitting the target and missing the point ?Is there a new problem
Process	-	?What else is happening ?Regression to the Mean	Get on with it!

MHA QIP: Learning from adverse events and consumer, family and whānau experience project driver diagram

Aim:

(1) To improve the ability of organisations and the wider MHA sector to learn from and reduce the occurrence of MHA adverse events

Proxy outcome measure:

- *Reduced reported inpatient suicides, standardised by inpatient population, and*
- *Ngā Poutama consumer, family and whānau survey data (harm question)*

(2) Improve the experience of consumer and whānau involved in MHA adverse event reviews

Proxy outcome measure:

- *Reduce the number of HDC complaints from xx to xx*
- *80% of MHA adverse event reviews have evidence of consumer and whānau involvement in the process*

Primary drivers

Learning system

Process and balancing measure:
- *How much:*
- *By when:*

Whānau-centred

Process and balancing measures:
- *How much:*
- *By when:*

Consistent processes

Process and balancing measure:
- *How much:*
- *By when:*

Psychological safety

Process and balancing measure:
- *How much:*
- *By when:*

Workforce development

Process and balancing measure:
- *How much:*
- *By when:*

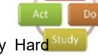
Secondary drivers

- Actively share learning from MHA adverse events within and across organisations
- Develop feedback loops to share learning with consumers, whānau and staff
- Explore different approaches to MHA adverse event management
- Involve consumer, family, whānau in MHA adverse event process
- Health literacy
- Develop knowledge package for triaging, investigating and reporting MHA adverse events
- Ensure the adverse event process is timely
- Produce measurable recommendations
- Promote a safety culture for adverse event management
- Support and encourage staff to be open and honest about reporting adverse events
- Build capability in MHA adverse event reviews
- Ensure training programmes are in place to support staff

Change ideas / Priority change ideas

Change ideas	Priority change ideas
Triage of adverse event and type of review	Impact: High Low Implementation: Easy Hard
Time and space to work on improvement	Impact: High Low Implementation: Easy Hard
Visibility of data for learning	Impact: High Low Implementation: Easy Hard
Use known evidence based practice changes	Impact: High Low Implementation: Easy Hard
Relevant cultural support for whānau	Impact: High Low Implementation: Easy Hard
Admin support for practical arrangements of meetings with whānau	Impact: High Low Implementation: Easy Hard
Consumer/whānau involved in developing recommendations	Impact: High Low Implementation: Easy Hard
Restorative practice, morbidity and mortality reviews, learning reviews	Impact: High Low Implementation: Easy Hard
Pastoral support for staff involved in an adverse event	Impact: High Low Implementation: Easy Hard
Checklist for staff	Impact: High Low Implementation: Easy Hard
Clear roles and responsibilities for staff involved	Impact: High Low Implementation: Easy Hard
Staff involved in a/e reviews in other DHB	Impact: High Low Implementation: Easy Hard
Training and orientation for staff doing adverse event reviews	Impact: High Low Implementation: Easy Hard

Additional Impact/Implementation rating rows printed: Impact: High Low / Implementation: Easy Hard (×2)



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On judging outcome measures

- How closely does the measure approximate to the aim
- Coverage (how well does this cover the concept of the aim – is there another important aspect not covered?)
- Measurable (timely, reliably)
- Amenable (to change)

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On moving outcomes

- High-level vs Proximal
- Speed
- Attribution
- High level outcomes are
  - ultimate validators and aim
  - not principal focus of monitoring.

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How to build a measure framework

Aim:

2) Improve the experience of consumer and whānau involved in MHA adverse event reviews

Primary drivers

Family and Whānau-centred

Note this is an **outcome** measurable by asking people

Secondary drivers

Involve consumer, family, whānau in MHA adverse event process

Objectively measurable **process** – types of involvement

Change ideas

Relevant cultural support for whānau

Admin support for practical arrangements of meetings with whānau

Structures – what is in place to support involvement

Consumer/whānau involved in developing recommendations

Objectively measurable **process**

Balancing measure – recommendations implemented

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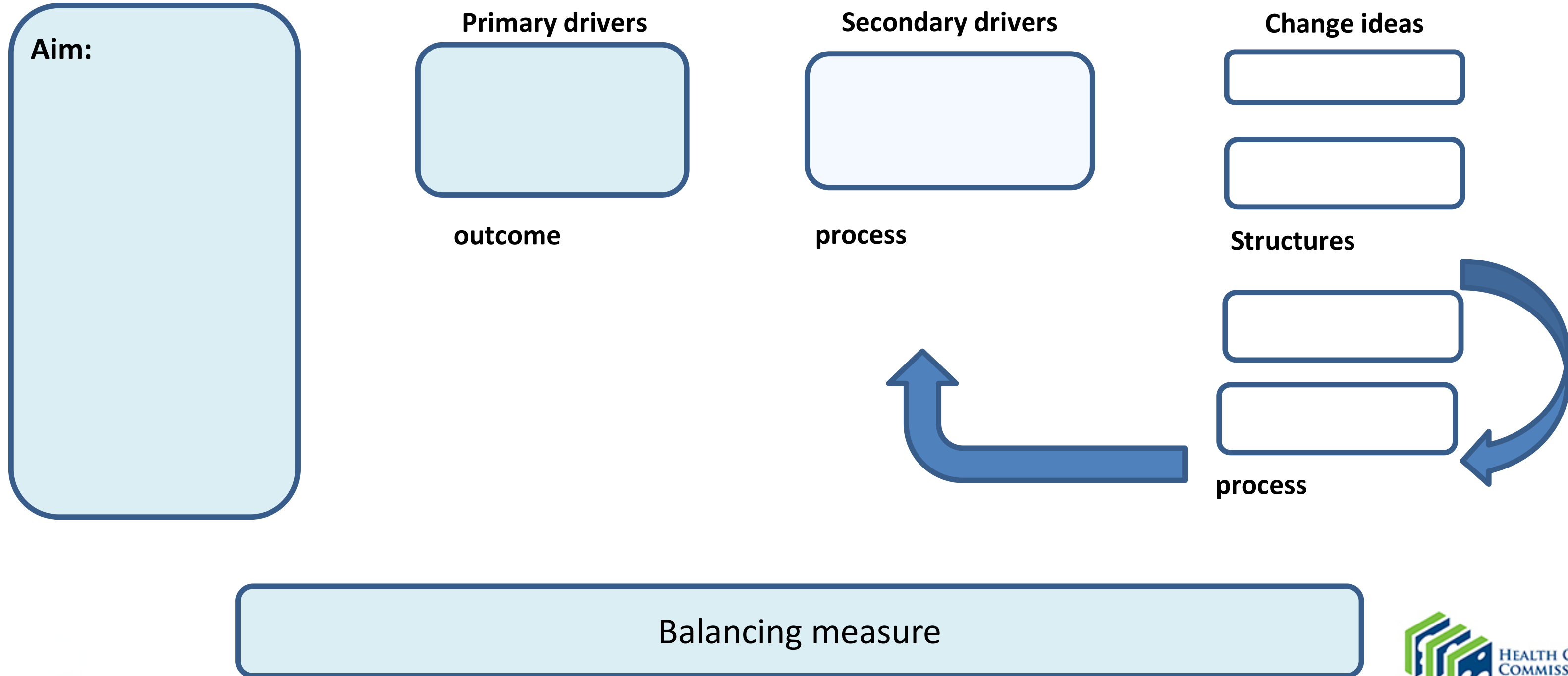
Let's build one



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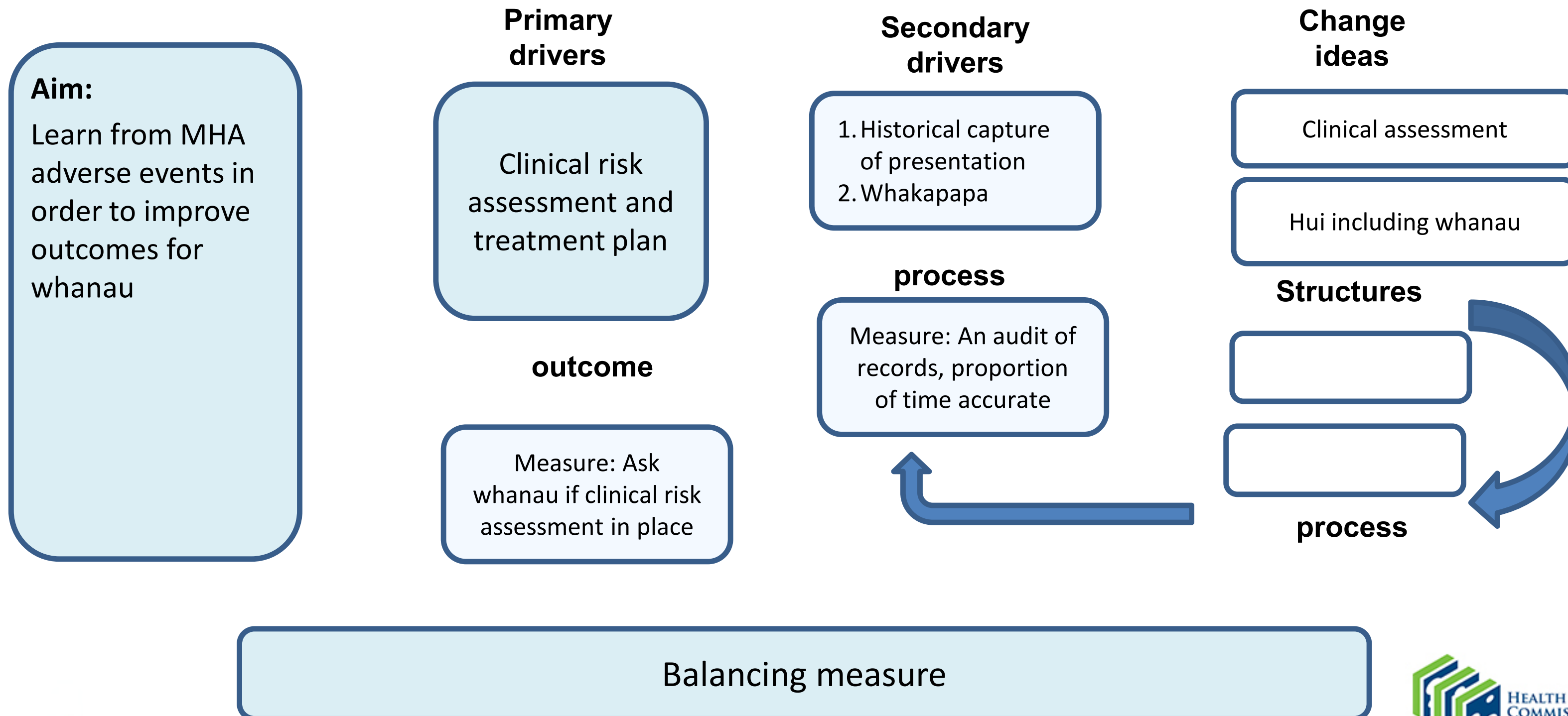
Let’s build one, example



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