Family of Measures

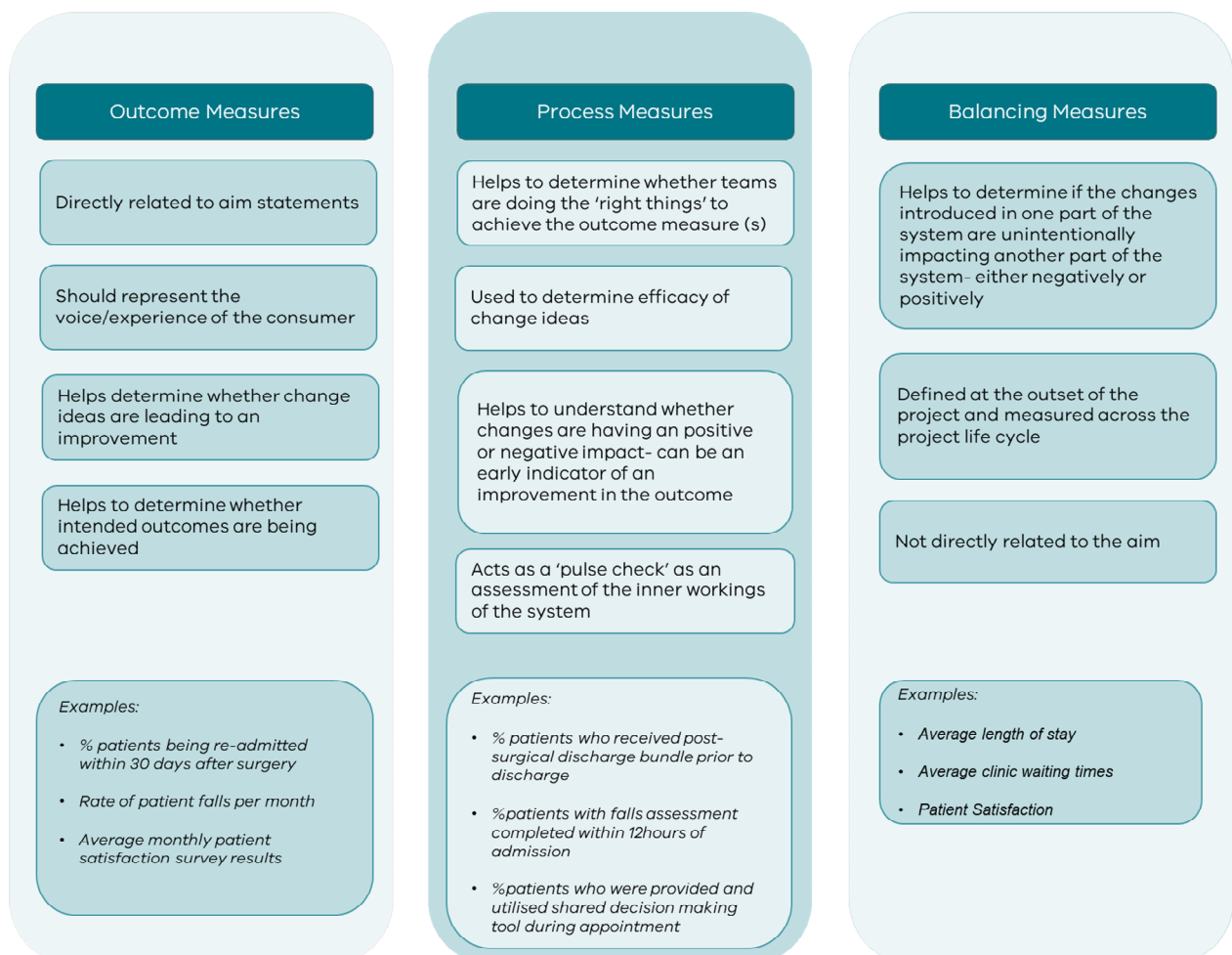## SCV Quality Improvement Toolkit

OFFICIAL

How will we know a change is an improvement?

Measurement is an essential part of testing and implementing changes in any quality improvement project. Measures help teams determine whether the changes they are making in the system lead to an improvement.

How to establish a family of measures

When you're trying to make a change in a complex system, it's not enough to use a single measure to determine whether you're driving improvement. You need to track a set of measures to really understand the impact of your changes on the many parts of the system.

Improvement teams typically use a *family of measures* that consist of three types of measurements: **Outcome, process and balancing measures**.

Outcome Measures

- Directly related to aim statements

- Should represent the voice/experience of the consumer

- Helps determine whether change ideas are leading to an improvement

- Helps to determine whether intended outcomes are being achieved

Examples:

- *% patients being re-admitted within 30 days after surgery*

- *Rate of patient falls per month*

- *Average monthly patient satisfaction survey results*

Process Measures

- Helps to determine whether teams are doing the 'right things' to achieve the outcome measure (s)

- Used to determine efficacy of change ideas

- Helps to understand whether changes are having an positive or negative impact- can be an early indicator of an improvement in the outcome

- Acts as a 'pulse check' as an assessment of the inner workings of the system

Examples:

- *% patients who received post-surgical discharge bundle prior to discharge*

- *%patients with falls assessment completed within 12hours of admission*

- *%patients who were provided and utilised shared decision making tool during appointment*

Balancing Measures

- Helps to determine if the changes introduced in one part of the system are unintentionally impacting another part of the system- either negatively or positively

- Defined at the outset of the project and measured across the project life cycle

- Not directly related to the aim

Examples:

- *Average length of stay*

- *Average clinic waiting times*

- *Patient Satisfaction*

Family of Measures

Safer Care Victoria

OFFICIAL

QI Project measures template

When you're trying to make a change in a complex system, you need to develop a family of measures to collect data throughout the duration of the project to understand the impact of your changes. Typically, you will track **1–2 outcome measures, 3–5 process measures, and** *sometimes* **1–2 balancing measures**.

Filling the below table with your measures can help ensure you've got the details you need to start.

Project measures template

Measure Name	Operational Definition	Data Collection Plan
Provide a logical name for your measure. • Most measures start with 'number of,' 'per cent of,' or '___ rate'.	Define the measure in clear, specific terms. • Indicate if you are using a count, a per cent, 'days between', etc. • If the measure is a percentage or rate, provide the numerator and the denominator.	Explain how the data will be collected. • Who is responsible for collecting the data? • How often will the data be collected (e.g. hourly, • daily, weekly)? • What is to be included or excluded (e.g. Include only • inpatients in this measure or include inpatients and outpatients)?
Outcome Measures		
Measure Name	**Operational Definition**	**Data Collection Plan**
e.g. Inpatient pressure injury rate	e.g. Total number of pressure injuries obtained during inpatient admission per 1000 occupied bed days.	e.g. Export from VHIMs Monthly Exclude all pre-existing P.I's
Process Measures		
e.g. percent of inpatients assessed for pressure injury	e.g. **Numerator**: Total number of inpatients **Denominator**: Total number assessed for pressure injury.	e.g. export assessment rates from EMR Monthly
Balancing Measures		
Additional time spent conducting P.I Assessment	e.g. Time spent conducting normal assessment vs comprehensive P.I assessment	e.g. nurses to time & record 10 normal & 10 comprehensive P.I Assessments over 1 week.

* Content adapted with permission The Clinical Excellence Commission (CEC) and is based on content created by The Institute of Healthcare Improvement (IHI).