An overview

Determining what to measure

Collecting the data

Reviewing the data

Presenting the data
Why measure the impact of change?

<table>
<thead>
<tr>
<th>Opinions vs facts</th>
<th>Challenges how we do things</th>
<th>Evidence for existing practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supports practice changes</td>
<td>Documentation of effectiveness of practice changes</td>
<td>Accountability of the service</td>
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</table>
Evaluation approach

The Question → Evaluation method → Setting → Existing measures

Reviewing the data → Collecting the data → Population and sample → Defining your measure

Results, impact & limitations → Presenting the results
Problem and purpose

Problem = the what
- Identified from NSAP self assessment, personal experiences, literature

Purpose = the why
- To better understand, explore, determine etc
Quantitative question

Asks a NARROW question

Has a population and variables

Descriptive or inferential

Are palliative care assessments completed within 48 hours of admission to the inpatient setting or a face-to-face visit?
Qualitative question

Asks the BROAD central question

Seeks to:
- Discover
- Seek to understand
- Explore
- Describe

Does NOT use a hypothesis

What is the patient perspective about their involvement in the assessment and planning of their care?
Method

What method should be used to conduct the evaluation?

The methods
- Quantitative
- Qualitative

Use the method correctly
Setting

Where will the PDSA improvement work be undertaken?

Palliative care services

Can you define the area of work?

Streams: inpatient, community, consultative

Exactly what are you reviewing?
Existing performance measures

- Have you looked at the literature for existing measures?
- Could you ask key bodies for their advice?
- Could you seek advice from other organizations?
- Have you asked your organization's CQI department for advice?
Defining the measures

Criteria for evaluating measurement tools

- Practicality
- Reliability
- Validity
**A quantitative performance measure: Are palliative care assessments holistic?**

<table>
<thead>
<tr>
<th><strong>Outcome measure</strong></th>
<th>% of patients with a holistic assessment</th>
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<tbody>
<tr>
<td><strong>Definition</strong></td>
<td>Patients with a holistic assessment as a percentage of all patients</td>
</tr>
<tr>
<td><strong>Numerator</strong></td>
<td>Number of patients with a holistic assessment</td>
</tr>
<tr>
<td><strong>Denominator</strong></td>
<td>The last 20 patients admitted to the service in the current month (if less than 20 patients are admitted within the month then a census is used)</td>
</tr>
<tr>
<td><strong>Goal</strong></td>
<td>80% of patients have a holistic assessment</td>
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</tbody>
</table>
| **Data source**     | Patient record audit to identify ALL the following determinants in the holistic assessment:  
  - Physical, Social, Emotional, Cultural, Spiritual |
Population and sample

Population:
- A complete set of persons or objects that possess some common characteristic (Medical records of patients admitted to the specialist palliative care services)

Sample:
- A subset of the population which is selected to represent the population (A convenience sample of the records from the last 20 patients admitted to the service)
Collecting the data

- Decide on what type of instrument is most appropriate
- Develop the instrument (This may be a simple tick box audit tool)
- Test the instrument
- Decide who will collect the data
Reviewing the data

Descriptive statistics
- Collecting
- Organizing
- Summarizing
- Presenting

Inferential statistics
- Making inferences
- Hypothesis testing
- Determining relationships
- Making predictions
Reviewing the data: Maybe a graphical display?

Use your preferred software: e.g. Excel, SPS

Plot the data; this can be done as it is collected (e.g. monthly/weekly)

Use a graphical display to view performance
Results of the data

It is about quality improvement

Don’t just look at the numbers

Ask a number of questions

• What were the barriers to adopting the changed process?
• Have there been any lessons learnt from implementing the strategy?
• Can further changes be made?

Present the overall picture
Understand the limitations

- Was the sample appropriate?
- Was the data reliable?
- Did the measure answer the question?
- Were the measures practical?
- Will you continue to use the measures?
Presenting the results

This is quality Improvement, not research

The results are in context with the improvement strategy undertaken

The impact of the change/s is...

The next PDSA cycle should be focused on...
Conclusion

Plan the work

Make sure you have a well defined question

Right and wrong

Correct analysis

Limitations discussed

Does the data show the impact of the changes?

Conclusions justified
References
