# Best Practice Clinical Learning Environments

# Performance Monitoring Framework: Data Collection and Reporting Guidelines

## 2nd Edition

August 2016

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# Abbreviations

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| BPCLE | Best Practice Clinical Learning Environment |
| BPCLEtool | The online tool that facilitates implementation of the BPCLE Framework and Performance Monitoring Framework |
| DHHS | Department of Health and Human Services (Victoria) |
| GMP | Graduate Midwifery Program |
| GNP | Graduate Nurse Program |
| GP | General practice (or general practitioner) |
| PMF | Performance Monitoring Framework |
| RTO | Registered Training Organisation |
| TAFE | Technical and Further Education |

# 1 Preamble

The Best Practice Clinical Learning Environments (BPCLE) Framework is a guide for health services and education providers in the delivery of high quality clinical experiences for learners. Following extensive development, testing and piloting that commenced in 2008, the framework has been implemented in Victorian public health services since early 2014 and has become one of the cornerstones of the clinical education and training system in Victoria.

When the BPCLE Performance Monitoring Framework (PMF) was first developed in 2011, it was always intended to be a *living* document, periodically reviewed and revised to ensure that performance monitoring in the context of the BPCLE Framework is relevant and appropriate. There were a number of minor amendments made between 2011 and 2015, primarily to the specifications for several of the indicators, but there was no substantive review of the BPCLE PMF document in this period.

More recently, the need to revise the BPCLE PMF became apparent through a number of important developments within the clinical education and training environment.

Perhaps the most significant development was the creation of BPCLEtool, an online resource that has integrated all of the requirements for implementing and monitoring the BPCLE Framework into a structured and seamless process. BPCLEtool was launched in 2013 and includes a number of resources that support the implementation of the BPCLE Framework and the BPCLE PMF. More importantly, BPCLEtool has become the focal point for the collection, monitoring and reporting of performance information for the BPCLE Framework.

As of late 2015, Victorian public health services had been using BPCLEtool for about 24 months and had completed a full cycle of self-assessment, action plan development, indicator selection and indicator monitoring for the BPCLE Framework. Stakeholders' experience with monitoring the indicators (including using the indicator specifications, collecting and collating data, and reporting data through BPCLEtool) demonstrated the overall utility of the BPCLE PMF, but also highlighted features that required improvement or further development. The Victorian Department of Health and Human Services (DHHS; referred in this document as 'the department') considered it was an appropriate time to review the content of the BPCLE PMF, amend the indicators as required and revise the associated resources.

Another development has been the growing interest in the use of the BPCLE Framework amongst organisations outside Victoria. By necessity, the original BPCLE PMF was targeted for Victorian public health services and as a consequence, there were (and continue to be) numerous references that have relevance and meaning only within the Victorian clinical education and training context. However, as a wider audience considers using the BPCLE Framework, it was recognised the BPCLE PMF should include appropriate information and direction, where practicable, for clinical education organisations that operate within different jurisdictional arrangements to those in Victoria.

This second edition of the BPCLE PMF is one of the major outputs from a series of projects commissioned by the department in late 2015 to review the BPCLE PMF and further develop BPCLEtool.

# 2 Introduction

## 2.1 Program evaluation and the use of performance monitoring frameworks

The BPCLE PMF is grounded in the methodology of program evaluation, which is a process for collecting, analysing and using information to answer questions about projects, policies and programs, particularly about their effectiveness and efficiency. Evaluation may involve quantitative and/or qualitative methods of research. The most common approach is to collect quantitative evidence on observable, measurable aspects of a program, although approaches that capture qualitative evidence about the perspectives, experiences and expectations of stakeholders are also commonly used.

While evaluation can be an *ad hoc* activity, greater benefit is derived when a *performance monitoring framework* (PMF) is developed to provide structure for the process. A PMF not only *characterises* the evaluation (in terms of the components to be monitored and the activities that comprise the monitoring process), it also *contextualises* the evaluation, defining the scope, purpose and principles (or assumptions) upon which performance monitoring is based.

## 2.2 The origins of performance monitoring for the BPCLE Framework

The principles and methods of program evaluation can be applied to monitoring the implementation of the BPCLE Framework by individual health services. Indeed, evaluation has always been an integral feature of the BPCLE Framework and the first version of the framework included 35 suggested performance indicators. However, it was apparent that a more holistic and defined system for evaluating the ongoing implementation of the BPCLE Framework within organisations was required.

To this end, a BPCLE Performance Monitoring Framework (PMF) was developed in 2011. The original BPCLE PMF incorporated detailed indicator specifications for 55 indicators, a weighting system to allow organisations to prioritise their performance monitoring activities, and other relevant contextual information.

## 2.3 Purpose of the BPCLE PMF

The BPCLE PMF serves two main purposes.

At an organisational level, the BPCLE PMF enables organisations to monitor their efforts to maintain and improve key features of their clinical education and training environment. It does this by providing comprehensive and practical directions for measuring performance against the ideals and objectives of the BPCLE Framework.

At a system level, the BPCLE PMF enables system-wide comparisons of performance, by providing a structured and consistent approach to performance monitoring across organisations. Comparable performance information is needed to inform policy development and related decision-making by agencies with overarching responsibility for health workforce development.

## 2.4 Who should use the BPCLE PMF

The BPCLE PMF incorporates *contextual* information (such as the principles underpinning the PMF, a glossary of terms, roles and responsibilities, etc), *practical* information (in particular, the specifications for each indicator) and *summary* information (such as lists of indicators sorted by the relevant data collection method).

The *contextual* information will be useful to any stakeholder with an interest in evaluation in the context of the BPCLE Framework. This includes individuals that are coordinating implementation of the BPCLE Framework within their organisation, senior managers who have overarching responsibility for the quality of activities within their organisation, and staff within education provider institutions that would like some insight into the performance monitoring activities being conducted by their health service partners. The contextual information would also be useful for government agencies or peak groups that are oversighting the implementation of the BPCLE Framework within their jurisdiction.

The *practical* and *summary* information in the BPCLE PMF is primarily targeted to BPCLE implementation coordinators within health services.

For individuals new to performance monitoring against the BPCLE Framework, it is recommended they read the BPCLE PMF before commencing indicator selection and monitoring. This will assist implementation coordinators to develop a solid foundation for indicator monitoring activities.

It is anticipated that individuals who have some experience in BPCLE performance monitoring will not need to re-read the PMF in its entirety on a regular basis. For these individuals, the focus will most likely be on the detail included in the indicator specifications.

## 2.5 Glossary of terms

There is no single, agreed set of terms in relation to clinical education and training that is used across the spectrum of health professions, health service settings and educational models. This is potentially problematic for the BPCLE PMF, as it is intended for broad application alongside the BPCLE Framework.

To address this issue, it is recommended that terms used within the BPCLE PMF are interpreted in their broadest sense (unless otherwise specified) and be inclusive of all possible variations, as appropriate.

Further, it is acknowledged that some terms or concepts used in the BPCLE PMF may be more pertinent to some settings than others. In those instances where a term does not appear to be directly applicable, it is recommended that stakeholders either interpret such terms in a manner that is appropriate for their circumstances or, if necessary, disregard the statement in which the term is used.

With these general considerations in mind, terms used throughout the BPCLE PMF are explained in Table 1 below.

**Table 1: Glossary of terms**

| Term | Definition |
|---|---|
| BPCLEtool | The online resource that integrates all aspects of the implementation and monitoring of the BPCLE Framework. |
| Clinical education staff | This term is used in the broadest possible context to refer to anyone who contributes to the education or training of another person. Within the BPCLE indicator specifications, this term potentially encompasses any or all of the following four categories of staff:<br>▪ **Clinical educator** – defined as a staff member employed specifically to deliver education/training to learners within the organisation.<br>▪ **Primary involvement** – defined as a clinician who, as part of their clinical duties, has direct, delegated responsibility for delivery of education/training to learners, for example as a supervisor, preceptor, mentor or clinical associate (or equivalent). Primary involvement will usually be planned for and scheduled by prior agreement between the clinical education coordinator and the clinician.<br>▪ **Secondary involvement** – defined as a clinician who has incidental, *ad hoc* or opportunistic involvement in teaching.<br>▪ **Support** – defined as management, administrative, organisational or coordination responsibilities, as opposed to actual teaching or supervision. This includes managers with oversighting responsibility for educational activities or outcomes. |
| Clinical learning environment | Used in the broadest sense of the word 'environment', to encapsulate the range of factors that impact on the learning experience. |
| Early-graduate | An individual who has completed their entry-level professional qualification within the last one or two years. For example, this will encompass:<br>▪ Junior doctors employed in pre-vocational positions for postgraduate years 1 and 2 (PGY1 and PGY2) (also referred to as Hospital Medical Officers).<br>▪ Registered Nurses and Midwives in Graduate Nurse (or Midwifery) Programs (GNP/GMP). |

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| | ▪ Enrolled Nurses (formerly 'Division 2') in their first year post-qualification.<br>▪ Allied health professionals in their first two years post-qualification (generally employed at Grade 1 level). Where internship programs exist (e.g. Pharmacy), this would include the internship year and the first year post-internship. |
| Education and training | Used interchangeably, although *education* is usually used in relation to structured courses for professional entry learners or early graduates (e.g. graduate nurse programs within health services), while *training* is a less structured activity that occurs later in the professional development continuum. In this framework, use of either term covers all possible meanings of both terms. |
| Education provider | The general term given to the educational institution at which learners are undertaking their relevant tertiary course. For brevity, this term is used rather than *education or training provider*, and includes universities, Technical and Further Education (TAFE) institutions and other Registered Training Organisations (RTO). |
| Health service | Refers to any health or social care setting, large or small, public or private. This includes aged care, private allied health clinics, general practice clinics, social welfare services, etc. |
| Learner | Used generically to refer to individuals undertaking education or training at any level. Within the BPCLE indicator specifications, four sub-categories of learners are defined:<br>▪ **Professional entry** (formerly 'undergraduate') – defined as learners enrolled in a higher education course of study leading to initial registration for, or qualification to, practice as a health professional.<br>▪ **Early graduate** – see definition earlier in this glossary<br>▪ **Vocational/postgraduate** – defined as learners enrolled in formal programs of study, usually undertaken to enable specialty practice. Examples include registrars in specialist medical training programs; nurses and allied health professionals enrolled in Graduate Certificate, Graduate Diploma or Masters courses that increase current skills or knowledge, or develop new skills and knowledge in new professional areas.<br>▪ **CPD learners** – defined as staff of the organisation who are undertaking training as part of their continuing professional development. |
| Preceptor | A skilled clinician who supervises students in a clinical setting to allow practical experience with patients/clients. |
| Reporting period | Refers to the time period for which an indicator is being monitored. In most cases, where reporting against the indicator is on an annual, calendar year basis, the reporting period will be the calendar year preceding the report. |
| Student | Refers specifically to individuals enrolled in professional entry courses, regardless of the level of award. |

# 3 Measuring performance against the BPCLE Framework

## 3.1 Principles that underpin performance monitoring in this context

This section sets out five principles that underpin the BPCLE PMF. The principles define the assumptions on which monitoring against the BPCLE Framework is predicated, as well as the limits of application of the BPCLE PMF. These principles are distinct from the principles for the BPCLE Framework itself, which are outlined in the original BPCLE Framework.

*Principle 1: Evaluation is integral to the continual improvement of processes and protocols.*

This principle acknowledges the imperative for an evidence-based approach to quality improvement of clinical learning environments. Targeted data collection to address appropriate and meaningful performance measures will reveal those aspects of the environment that are working well and those aspects that are working less well. This evidence will assist organisations to target resources to where they are most needed, avoiding, as far as practicable, unnecessary duplication or waste.

*Principle 2: Evaluation is a dynamic process.*

By definition, quality improvement processes change the very nature of the systems to which they relate. Accordingly, the BPCLE PMF must periodically be updated to reflect the evolving nature of clinical learning environments.

At another level, it is reasonable to expect the emphasis of performance monitoring within organisations will change as the BPCLE Framework is progressively implemented. Indicators that are relevant in the early stages of implementation may become less relevant as new structures are embedded in routine practice. Over time, organisations may wish to select different indicators to monitor, either where performance has not previously been measured or where performance has not yet reached the desired levels.

*Principle 3: No single indicator will tell the complete story about the implementation of the BPCLE Framework.*

The BPCLE Framework comprises six distinct – but inter-related – elements, each of which incorporates a number of sub-objectives. Each element is necessary but not sufficient for achieving a best practice clinical learning environment. To be measurable, interpretable and actionable, indicators of achievement against each element and its sub-objectives must necessarily focus on single – as opposed to compound – aspects of clinical learning environments. Therefore, just as each element of the BPCLE Framework is only part of the story, no single indicator can be expected to accurately reflect the totality of the clinical learning environment or the clinical education experience of learners.

*Principle 4: Monitoring the implementation of the BPCLE Framework should not place an undue burden on organisations.*

It has been emphasised since the initial work on the BPCLE Framework that collecting, analysing and reporting on performance information for this framework should not require an excessive or unrealistic effort from organisations.

Organisations that don't have relevant indicator data collection systems already in place will need to establish such systems in the first instance, which will necessitate some allocation of resources. Importantly, the experience in Victoria has demonstrated that establishing systematic approaches to monitoring performance against the BPCLE Framework did not impact unduly on the delivery of clinical education or other core business of the organisation.

*Principle 5: Individual organisations are best placed to determine the indicators for internal monitoring that are most appropriate for their purposes.*

Given the range of organisations that deliver clinical education, it is recognised that not all of the BPCLE indicators will be equally relevant for all organisational settings, or for all disciplines or learner levels. Furthermore, organisations may be better resourced for monitoring some indicators compared to others.

While BPCLEtool functionality suggests appropriate indicators for organisations to monitor, this is intended to be used as a starting position. The final decision about the extent of performance monitoring and the specific indicators likely to be relevant and useful is most appropriately made by individual organisations, taking into account a range of contextual and resourcing considerations.

## 3.2 The BPCLE indicators

### 3.2.1 Development and refinement of the indicators

The indicators that form the centrepiece of the BPCLE PMF were developed and refined through a series of projects conducted between 2009 and early 2016. Stakeholders interested in reviewing the reports from these projects should contact peopleinhealth@dhhs.vic.gov.au.

The table presented in Appendix 1 provides a summary of the 55 indicators currently included in the BPCLE PMF, showing the alignment of each indicator to the elements and sub-objectives of the BPCLE Framework.

### 3.2.2 The structure of the indicator specifications

To assist health services with the use of the BPCLE Framework indicators, detailed specifications have been developed that define key aspects of each indicator.

The specification for each indicator is presented in 20 information fields as shown in Table 2, which explains the purpose or nature of the information included in each field. The detailed specifications for the 55 BPCLE Framework indicators are presented in Appendix 2.

Information fields likely to be of primary interest to organisations are:

- The indicator rationale
- The numerator and denominator values that will need to be reported and the data that should be collected to support the generation of these values
- Suggested/recommended benchmarks, if relevant or appropriate
- Specific data collection tools required
- Issues that might confound analysis or interpretation of the result.

**Table 2: Explanation of indicator specification fields**

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| **Indicator number** | Each indicator has been assigned a number. The number, while a *unique identifier* for the purposes of the BPCLE PMF, has little significance beyond the order in which objectives (i.e. framework elements) and sub-objectives are presented in the BPCLE Framework. Thus, indicators 2–13 relate to BPCLE Framework Element 1, indicators 14–17 relate to BPCLE Framework Element 2 and so on. |
| **Indicator** | This is the indicator title. The titles of a number of indicators were amended for this edition of the BPCLE PMF, following the PMF Review of 2015-16. |
| **Category** | The category reflects how the indicator was rated against the two criteria used in the indicator weighting system (see Appendix 3), which assists organisations to find an appropriate balance between the value of information derived from the indicator and the cost to the organisation of measuring the indicator. The weighting system defines four categories, *to wit*:<br>▪ *Category I* – these indicators were ranked *highly* with respect to their relevance to educational activities and scored highly (at least 10/15) on the combined criteria of *ease of data collection*, *actionability* and *interpretability*.<br>▪ *Category II* – these indicators were ranked *highly* with respect to their relevance to educational activities but scored lower (less than 10/15) on the combined criteria of *ease of data collection*, *actionability* and *interpretability*.<br>▪ Category III – these indicators were ranked *medium* with respect to their relevance to educational activities.<br>▪ Category IV – these indicators were ranked *lowest* with respect to their relevance to educational activities. |
| **BPCLE element** | Identifies which of the six BPCLE elements the indicator relates to. In a small number of instances, an indicator may relate to more than one element. |
| **BPCLE sub-objective(s)** | In developing the BPCLE Framework, each of the six elements (objectives) was further drilled down to a set of sub-objectives, thereby defining the detail of each element and allowing measurable indicators to be identified. This field identifies the sub-objective(s) to which the indicator relates. |
| **Indicator type** | Defines the indicator as *structural*, *process* or *outcome*, depending on whether the |

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| | indicator measures an input or an output of the system. |
| **Relevant output** | In developing the overall list of indicators, the inputs (structural and process) and outputs relating to each sub-objective of the BPCLE Framework elements were identified as part of an overall program logic for the BPCLE Framework. This field lists any outputs identified as being associated with the indicator. |
| **Relevant learner levels** | Identifies the levels of learners for which the indicator may be applicable. Four levels are specified: professional entry; early graduate; vocational/post-graduate; and, continuing professional development (CPD). |
| **Indicator rationale** | The rationale or evidence supporting the use of the indicator as a meaningful measure of some aspect of a high quality clinical learning environment. |
| **Numerator** | The value representing the performance of the organisation in the particular activity defined by the indicator. Some indicators require more than one numerator. |
| **Denominator** | Generally, this is information that allows contextualisation of the organisation's performance in this activity. Some indicators will not have a denominator, while others may list more than one denominator, depending on the particular context in which the organisation's performance is to be viewed. |
| **Benchmark(s)** | Suggested benchmarks for immediate use or recommendations about establishing benchmarks for the indicator in the future. |
| **Specific data collection tools required** | A list of tools and/or resources likely to be necessary to collect data relevant to the indicator. Where spreadsheets or data fields are recommended, it may be possible to incorporate these into existing data sets, databases or spreadsheets. |
| **Information required to support indicator measurement** | Inclusion and exclusion criteria and other parameters of the data to be collected, to ensure consistent and broadly comparable reporting against indicators. |
| **BPCLEtool data entry** | Lists the requirements for entering the relevant data for this indicator, using the relevant BPCLEtool data entry form. |
| **Disaggregation** | Additional categorisation of the data to allow more detailed analysis. |
| **Issues/comments** | Any issues or caveats likely to confound the analysis or interpretation of the indicator. |
| **Related indicators** | Lists other BPCLE Framework indicators that measure related aspects of clinical learning environments. |
| **Other potential uses of this indicator** | Suggests how the data collected for the indicator might be used for purposes other than those directly related to creating and maintaining high quality clinical learning environments. |
| **Actions to improve the indicator result** | Suggests activities or processes that an organisation might employ to improve their performance for this component of their clinical learning environment. |

## 3.3 Indicator monitoring

The complete suite of BPCLE Framework indicators provides a comprehensive assessment of the range of components and outcomes associated with clinical learning environments. However, few – if any – health services would have the resources available to monitor all 55 indicators. Moreover, it is apparent from the indicator specifications that not all the indicators will be as easily measured in some settings or by certain disciplines.

Therefore, indicator monitoring commences with the selection of an appropriate subset of indicators to monitor, which in turn informs the development of data collection tools and systems. Relevant data can then be collected, analysed and reported.

The advent of the online implementation tool BPCLEtool has significantly impacted on the indicator selection and data reporting steps of the process. The tool integrates the self-assessment and indicator selection steps of BPCLE Framework implementation, to provide an empirical evidence base for indicator selection. Moreover, the data reporting features of BPCLEtool ensure that comparable data is reported across the range of organisations measuring their performance against the BPCLE Framework, making it possible to make comparisons and observe trends.

The approach an organisation takes to selecting and monitoring indicators will most likely vary depending on whether the organisation is undertaking this process for the first time, or has previously undertaken at least one cycle of self-assessment, indicator selection and monitoring.

### 3.3.1 Indicator selection

The first step in the indicator monitoring process involves deciding which of the 55 BPCLE indicators the organisation (or discipline or work area) will monitor.

If they wish to do so, organisations are able to review the BPCLE indicator documentation (particularly the indicator specifications) and use this information to manually identify the indicators they wish to monitor. If such an approach is taken, in all likelihood, the indicators selected will reflect considerations such as known problem areas and current data collection activities or resources.

On the other hand, for organisations using BPCLEtool, they can complete the preliminary and detailed self-assessment steps in the tool and use the outcomes of those processes to inform their indicator selection. BPCLEtool has been programmed to suggest which of the 55 BPCLE indicators would be useful to monitor based on the consensus ratings the organisation gave to the various aspects of its clinical learning environment during the self-assessment process. The advantage of utilising this functionality of BPCLEtool is that this allows better alignment of the identified strengths and weaknesses of the current clinical learning environment arrangements with the indicators selected for monitoring.

The process of indicator selection is likely to be iterative. Whether indicator selection is completed manually or using the functionality of BPCLEtool, the initial list of selected indicators should be reviewed to ensure:

- There is a mix of indicator types (i.e. *structural*, *process* and *outcome* indicators).
- There is an appropriate mix of indicators across the four categories of the indicator weighting system (see Appendix 3), to find the right balance between the value of information derived from the selected indicators and the cost to the organisation of measuring those indicators.
- There is a good fit with organisational priorities, resources and current data collection activities.
- The number of indicators selected represents a manageable workload for the organisation.

One advantage of using the functionality of BPCLEtool to select indicators is that the tool has been programmed to refine the initial list of indicators suggested by the results of the self-assessment process. It does this in two steps. First, BPCLEtool applies *redundancy rules* that "decide" between two indicators, where those indicators are either measuring similar components of the system or are measuring components of the same process pathway. In the second step, BPCLEtool takes account of the weighting system categories to "decide" between two indicators, preferentially selecting indicators in the better categories.

Thus, BPCLEtool assists with indicator selection by automatically applying considerations that would otherwise need to be manually applied in deciding between two indicators. Even so, the final decision about the most appropriate indicators to select for monitoring sits with each organisation. Indeed, once organisations have completed one or more cycles of self-assessment, indicator selection and monitoring, the considerations used in selecting and refining the list of indicators may change, reflecting changing circumstances and priorities.

In some jurisdictions that are implementing the BPCLE Framework, a number of indicators have been nominated as *externally reportable* to the relevant government department or agency. For organisations within those jurisdictions, externally reportable indicators must always be included in the final indicator selection. Organisations that are using the functionality of BPCLEtool to select indicators will find that externally reportable indicators are automatically included in the list of selected indicators and cannot be removed from the list.

### 3.3.2 Data collection tools and systems

The collection of high quality data is essential to the effective monitoring of performance against the BPCLE Framework. For organisations monitoring BPCLE indicators for the first time, it is recognised that some effort may be required to establish the processes for the systematic collection of performance information. However, the experience from Victoria has shown this to be manageable, with stakeholders generally reporting positively on the relative ease of collecting information for the vast majority of BPCLE indicators.

Analysis of the indicator specifications identifies two major categories of data collection tool, namely *surveys* and *spreadsheets*, although there are variations within both categories. Table 3 and Table 4 respectively summarise the BPCLE Framework indicators according to the type of survey or spreadsheet data collection tool required. The BPCLE Resource Kit (available from the BPCLEtool website) contains a number of resources to assist organisations with indicator monitoring, including spreadsheet templates and survey question templates.

**Table 3: Indicators that require surveys for data collection**

| Data collection tool | Ind No | Indicator |
|---|---|---|
| Education provider survey | 40 | Level of education provider satisfaction about its relationships with health services |
| | 47 | Stakeholder perceptions of communication practices and outcomes |
| Learner survey | 9 | Learners feel they are valued by the organisation |
| | 18 | Student inclinations regarding return for employment |
| | 19 | Existence of high quality orientation materials and activities |
| | 20 | Learner satisfaction with respect to the welcome they receive |
| | 23 | Learner perceptions about their feeling of safety and wellbeing |
| | 24 | Proportion of learners included in inter-professional activities |
| | 29 | Learner satisfaction about their access to clinical educators |
| | 32 | Learner satisfaction about their direct access to patients |
| | 36 | Proportion of early graduate and CPD learners who have explicit learning objectives |
| | 37 | Satisfaction of post-registration learners about their access to learning opportunities and resources |
| | 41 | Learner perceptions about the relationship between their education provider and the health service |
| | 47 | Stakeholder perceptions of communication practices and outcomes |
| | 50 | Learner satisfaction with feedback processes during their clinical learning experience |
| | 53 | Learner satisfaction with respect to access to IT and internet within the health service organisation |
| | 54 | Learner satisfaction in relation to the availability and quality of other learning resources |
| Patient/client survey | 31 | Patients are satisfied with the amount of interaction they have with learners |
| Staff survey | 3 | Attitudes to professional development amongst staff involved in clinical education |
| | 4 | Staffing levels allow the time allocated to educational activities to be used for educational activities |
| | 8 | Staff feel satisfied their education role is valued by the organisation |
| | 15 | Existence and utilisation of frameworks, structures, tools or mechanisms to support evidence-based practice and decision-making |
| | 28 | Views of health service staff on the preparedness of learner cohorts |
| | 39 | Level of health service satisfaction about its relationships with education providers |
| | 45 | Effectiveness of mechanisms for resolving issues and concerns |
| | 47 | Stakeholder perceptions of communication practices and outcomes |
| | 49 | Perceptions of clinical education staff on feedback |
| | 51 | The organisation provides formal opportunities for training in communication skills |
| | 52 | Clinical education staff satisfaction with respect to access to IT and internet within their organisation |

**Table 4: Indicators that require spreadsheets/registers for data collection**

| Data collection tool | Ind No | Indicator |
|---|---|---|
| BPCLEtool | 1 | The organisation is internally monitoring at least 60% of the Category I indicators |
| Committee register | 12 | Education is included as a standing item on the agenda of senior management meetings |
| Corporate document register | 2 | Education-related issues are explicitly addressed in the mission, vision and strategic documents (or equivalent) of the health service |
| | 10 | There is a documented strategy for ensuring participation in education-related activities contributes to career progression opportunities for staff |
| | 11 | Education is included in the planning documents of the organisation |
| Education facilities and resources register | 13 | Facilities prioritised for educational uses exist within the organisation |
| | 19 | Existence of high quality orientation materials and activities |
| | 35 | Existence of tools to assess learner needs |
| Financial register | 5 | Annual expenditure on education activities compared to the previous year |
| Health service staff register | 6 | Proportion of relevant staff position descriptions (or performance management plans) with KPIs, or equivalent, relating to education |
| | 7 | Proportion of staff involved in clinical education that access professional development in education each year |
| | 16 | Proportion of clinical staff accessing clinical professional development activities each year |
| | 27 | Proportion of staff currently involved in clinical education activities that have educational training, experience or qualifications |
| | 30 | Proportion of learners to educators and clinicians |
| | 42 | Number of clinicians teaching into education provider courses |
| | 43 | Number of health service educators receiving training from the education provider partner to develop their educational skills |
| Learner register | 26 | Proportion of learners for whom the health service has received timely information about their knowledge and proficiency level |
| | 36 | Proportion of post-registration learners who have explicit learning objectives |
| Policy and protocol register | 14 | There is a schedule for review and updating of policies and procedures relevant to best practice clinical practice |
| | 21 | Statements exist within relevant policies in relation to the creation and maintenance of safe environments |
| | 22 | The existence of protocols for dealing with struggling learners requiring assistance |
| | 33 | Orientation materials and/or activities are adapted to accommodate learners returning for subsequent placements at the health service |
| | 48 | Existence of feedback mechanisms and measures |
| Practice guideline register | 17 | There is a schedule for review and updating of clinical practice guidelines against new evidence |
| Relationship agreement register | 25 | Relationship agreements include protocols for exchange of information on educational objectives, assessment and knowledge and proficiency level of students |
| | 34 | Relationship agreements cover resources and other requirements that underpin continuity of learning experiences for relevant disciplines |
| | 38 | Existence of resource exchange mechanisms |
| | 44 | Existence of an up-to-date point of contact within the health service and within the education provider |
| | 46 | The existence of KPIs that allow the partners to evaluate key aspects of the relationship |
| | 55 | Relationship agreements cover issues relating to learner accommodation and support |

The advent of various information management systems designed to assist with planning and administration of clinical education activities (particularly for professional entry learners) has provided both a source of data for several BPCLE indicators and a means of standardising the data that is reported. For example, viCPlace – developed in Victoria to support health services to manage clinical placements with education provider partners – has the capacity to capture a range of data relating to learners and the activities they participate in while on placement, as well as data about the staff who are involved in the various clinical education activities.

### 3.3.3 Frequency of data collection

Broadly speaking, indicators fall into two categories with respect to frequency of data collection. The first category includes indicators that require data collection once per reporting cycle. An example of this type of indicator is the existence of particular policies or protocols. Generally, data collection for these indicators will occur once as the end of the reporting cycle approaches, so that the reported data is a reflection of the state of affairs at the time of reporting.

The second category includes indicators that require ongoing data collection data throughout the reporting period. An example is survey responses collected from learners at the end of their placement. Questions about learner satisfaction with various aspects of their placement must be included in every survey administered to every learner that undertakes a placement at the organisation. If this is not the case, the data reported for the indicator may provide a very limited – and potentially skewed – picture of learner satisfaction levels over the course of the year.

### 3.3.4 Data analysis

The major purpose for collecting data against the BPCLE indicators is to perform analyses that will reveal the "health" and "quality" of each organisation's clinical learning environment. The first time indicator data is collected, those data provide a baseline measure against which future data measurements can be compared. However, analysis and interpretation of performance data against the BPCLE Framework is subject to limitations and caveats.

The major limitation concerns the *quality* and *completeness* of the data collected. The better the data that is recorded and the more complete the data set, the more meaningful the analysis that can be performed. A related issue is the *consistency* of data. If different data are being collected at different time points, or by different organisations, this impacts on the ability to use those data for meaningful comparisons.

The major caveat concerns any confounding factors that might make the indicator result difficult to interpret in terms of its significance to the quality of the clinical learning environment. This is best illustrated through the example of BPCLE indicator #18 – *Student inclinations regarding return for employment*. A low proportion of students being inclined to return to a health service for future employment may not necessarily be an indication of a poor quality clinical learning environment. Indeed, many learners who had a very positive experience at an organisation may not be inclined to return there for personal reasons, professional reasons (e.g. preferring another specialty or setting type) or geo-socio-economic reasons.

The indicator specifications attempt to identify where there might be confounding factors, some of which can be accounted for through collection of contextual information, but many of which cannot. Therefore, care must be taken to avoid over-interpretation of the data during analysis.

**Benchmarking**

Benchmarks can be useful during data analysis by providing comparison points for indicator performance and each indicator specification includes a field that addresses whether there are appropriate benchmarks for that indicator. Although the term *benchmark* is used, at this point in time there is little empirical evidence to support the levels of achievement recommended or suggested for individual indicators.

Due to the lack of supporting evidence and the problems inherent in comparing performance between organisations operating in different circumstances and settings, most indicators have been nominated for internal benchmarking only in the first instance. It is possible that, over time, the systematic and system-wide collection (and, in some instances, external reporting) of data relevant to clinical education activities will allow genuine benchmarks to be developed for selected indicators across the various categories of organisations and the range of health professional disciplines.

In the interim, with internal benchmarking, organisations will be tracking their own performance over time to determine whether a desired performance level is being achieved. The first time an indicator is monitored will, in most cases, provide a baseline for future comparison.

Note that for some indicators, no internal benchmark is suggested. The reasons for this vary and are usually explained in the benchmark field of the indicator specifications. Where a benchmark level has been suggested, generally one of two levels of achievement have been recommended:

- For indicators involving measurement of stakeholder satisfaction, a benchmark of 70% has been suggested in most instances. This reflects an observation that satisfaction levels in most workplaces will generally be around 70% in the absence of major positive or negative factors. Thus, satisfaction in respect of the clinical learning environment should at least achieve what might be considered *background* levels of satisfaction.
- For indicators that address components of the system for which anything less than full compliance cannot reasonably be expected or explained for reasons beyond the control of the system (or where safety issues are a consideration), a benchmark of 100% is suggested.

### 3.3.5 Data reporting

The major aim of the BPCLE PMF is to enable organisations to monitor their efforts to improve key features of their clinical education and training environment. For this to be achieved in practice, the data collected against selected indicators must be regularly and systematically reported. This is true not only for those indicators nominated for external reporting within some jurisdictions, but also for those indicators that are being monitored for internal reporting only.

BPCLEtool includes indicator monitoring functionality that allows organisations to record the data collected for each indicator, using data entry forms specifically designed for the requirements of each indicator. The benefits of using this feature of BPCLEtool are that it allows organisations to benchmark their own performance against other (de-identified) organisations that use BPCLEtool and it provides a streamlined process for external reporting of indicator data in relevant jurisdictions. In 2016, the data entry forms and indicator monitoring output reports have been updated in line with recommendations arising from the review of the BPCLE PMF, to improve data upload, summary reporting and comparison reporting for BPCLE indicators.

Of course, individual organisations are best placed to determine the most appropriate methods for internal monitoring and reporting and who should receive the reports. Nevertheless, reporting on monitoring against the BPCLE Framework should be an integral component of the mainstream reporting within the organisation. This entails widening the audience for reporting beyond those directly involved in clinical education to include senior management, and where relevant, the Board of the organisation. Ideally, organisations will incorporate some of the relevant BPCLE PMF indicators into organisation-wide KPIs or key result areas around clinical education.

From an organisational perspective, external reporting of BPCLE indicator data can occur in several contexts. If the organisation is in a jurisdiction that has mandated external reporting for some indicators, then external reporting of data represents a compliance issue. It is worth noting the Victorian experience in this context, where external reporting against some indicators allowed the Victorian Department of Health and Human Services to collect much-needed statewide data on clinical education and training activities, to inform departmental initiatives for improving clinical education and training in Victoria.

However, external reporting of indicators may also be undertaken as a voluntary benchmarking exercise. Organisations implementing the BPCLE Framework may wish to share indicator results with other comparable health services, or with their education provider partners.

Another form of non-mandatory external reporting has been in relation to the National Safety and Quality Health Service (NSQHS) Standards that are used in the accreditation process for health services. Several Victorian public health services have reported using their implementation of the BPCLE Framework, including relevant indicator results, as evidence of quality improvement being undertaken by the organisation in education and training. This is relevant to *NSQHS Standard One: Governance for Safety and Quality in Health Service Organisations*, Criterion 1.12 (Ensuring that systems are in place for ongoing safety and quality education and training).

# 4 Roles and responsibilities

This performance monitoring framework is the monitoring component of the BPCLE Framework and, as such, must be interpreted and implemented in that context. As with the BPCLE Framework, the implementation of the BPCLE PMF relies upon a commitment from a range of stakeholders involved with clinical education and training. The roles and responsibilities of the various stakeholder groups are discussed briefly below.

**Health services**

As the major target audience for the BPCLE Framework, health services have the largest role to play in ensuring the successful implementation of the BPCLE PMF. Monitoring of performance against the BPCLE Framework will require input from many staff directly or indirectly involved in clinical education activities.

Appropriate senior staff in the organisation need to ensure the necessary structures are created and sufficiently resourced to enable effective monitoring of the BPCLE indicators. Senior managers will also need to sign-off on decisions regarding indicator selection and authorise any externally reported data.

Organisations using BPCLEtool will have one or more staff members designated as *Organisation Administrators* within the tool. Staff members in this role have access to all administrative functions within the organisation's BPCLEtool account, including those that relate directly to indicator selection, data entry and data upload into the BPCLEtool database.

Other staff within the organisation will contribute to implementing the BPCLE PMF by:

i. Collecting high quality data relevant to performance monitoring.
ii. Providing input via staff surveys.
iii. Reinforcing to learners the importance of their feedback to the overall evaluation of clinical learning in health services.
iv. Inputting data into BPCLEtool for the indicators nominated for monitoring.

**Education providers**

Although education providers are not primarily responsible for performance monitoring against the BPCLE Framework (except in instances where the institution itself operates clinics or health services), they will contribute to the process in two ways:

- Completing surveys as requested by their health service partners. As education providers deal with multiple health services, this may require coordination between health services to avoid overburdening their education provider partners.
- Providing a range of information that will assist with performance monitoring of the BPCLE Framework, particularly in relation to learner numbers and other characteristics of individual learner cohorts.

**Learners**

Learners have a responsibility to participate in any reasonable performance monitoring activities that are conducted by health services and education providers. This will primarily take the form of completion of learner surveys conducted at the conclusion of clinical placements.

**Patients/Clients**

There is only one indicator in the BPCLE PMF that requires direct input from patients (Indicator #31 – *Patients are satisfied with the amount of interaction they have with learners*), which requires a specific question to be included in existing patient satisfaction surveys. Other patient involvement in the processes associated with monitoring performance against the BPCLE Framework will be at the discretion of individual health service organisations.

**Government agencies and peak bodies**

Government agencies and peak bodies play an important role as facilitators, supporters and – in some circumstances – drivers of performance monitoring activities. Nominating indicators for external reporting provides a source of performance information that can inform policies and programs and provides external impetus to performance monitoring.

# Appendix 1 – Indicators for evaluation of performance against the BPCLE Framework

| BPCLE Framework Element | Sub-objective | Ind No. | Indictor title | Category |
|---|---|---|---|---|
| | | 1 | The organisation is internally monitoring at least 60% of the Category I indicators | Outcome |
| Element 1: An organisational culture that values learning | Education is valued | 2 | Education-related issues are explicitly addressed in the mission, vision and strategic documents (or equivalent) of the health service | Process |
| | | 3 | Attitudes to professional development amongst staff involved in clinical education | Structural |
| | | 4 | Staffing levels allow the time allocated to educational activities to be used for educational activities | Structural |
| | | 5 | Annual expenditure on education activities compared to the previous year | Structural |
| | | 6 | Proportion of relevant staff position descriptions (or performance management plans) with KPIs, or equivalent, relating to education | Process |
| | Educators are valued | 6 | Proportion of relevant staff position descriptions (or performance management plans) with KPIs, or equivalent, relating to education | Process |
| | | 7 | Proportion of staff involved in clinical education that access professional development in education each year | Structural |
| | | 8 | Staff feel satisfied that their education role is valued by the organisation | Outcome |
| | Learners are valued | 9 | Learners feel they are valued by the organisation | Outcome |
| | There is a career structure for educators | 10 | There is a documented strategy for ensuring participation in education-related activities contributes to career progression opportunities for staff | Structural |
| | Education is included in all aspects of planning | 11 | Education is included in the planning documents of the organisation | Process |
| | | 12 | Education is included as a standing item on the agenda of senior management meetings | Process |
| | Use of facilities and resources are optimised for all educational purposes | 13 | Facilities prioritised for educational uses exist within the organisation | Structural |
| Element 2: Best practice clinical practice | There is an organisational commitment to quality of care and continuous quality improvement | 14 | There is a schedule for review and updating of policies and procedures relevant to best practice clinical practice | Structural |
| | | 15 | Existence of frameworks, structures, tools or mechanisms to support evidence-based practice and decision-making | Process |
| | Clinical staff are highly skilled, knowledgeable and competent | 16 | Proportion of clinical staff accessing clinical professional development activities each year | Structural |
| | The organisation adopts best evidence into practice | 17 | There is a schedule for review and updating of practice guidelines against new evidence | Process |
| Element 3: A positive learning | The organisation provides an overall positive learning experience for students. | 18 | Student inclinations regarding return for employment | Outcome |

| BPCLE Framework Element | Sub-objective | Ind No. | Indictor title | Category |
|---|---|---|---|---|
| environment | The environment is welcoming. | 19 | Existence of high quality orientation materials and activities | Structural |
| | | 20 | Learner satisfaction with respect to the welcome they receive | Outcome |
| | The environment is safe. | 21 | Statements exist within relevant policies in relation to the creation and maintenance of safe environments | Structural |
| | | 22 | The existence of protocols for dealing with struggling learners requiring assistance | Structural |
| | | 23 | Learner perceptions about their feeling of safety and wellbeing | Outcome |
| | Appropriate learning opportunities are provided. | 24 | Proportion of learners included in interprofessional activities | Process |
| | There is clarity about learning objectives. | 25 | Relationship agreements include protocols for exchange of information on educational objectives, assessment and knowledge and proficiency level of learners | Process |
| | | 26 | Proportion of learners for whom the health service has received timely information about their knowledge and proficiency level | Structural |
| | Clinical education staff are high quality. | 27 | Proportion of staff currently involved in clinical education activities that have educational training, experience or qualifications | Structural |
| | Learners are well prepared. | 28 | Views of health service staff on the preparedness of learner cohorts | Outcome |
| | There are appropriate ratios of learners to educators. | 29 | Learner satisfaction about their access to clinical educators | Outcome |
| | | 30 | Proportion of learners to educators and clinicians | Structural |
| | There are appropriate ratios of learners to patients. | 31 | Patients are satisfied with the amount of interaction they have with learners | Outcome |
| | | 32 | Learner satisfaction about their direct access to patients | Outcome |
| | There is continuity of learning experience. | 33 | Orientation materials and/or activities are adapted to accommodate learners returning for subsequent placements at the health service | Structural |
| | | 34 | Relationship agreements cover resources and other requirements that underpin continuity of learning experiences for relevant disciplines | Structural |
| | There are structured learning programmes and assessment. | 35 | Existence of tools to assess learner needs | Structural |
| | | 36 | Proportion of early graduate and CPD learners who have explicit learning objectives | Structural |
| | | 37 | Satisfaction of post-registration learners about their access to learning opportunities and resources | Outcome |
| Element 4: An effective health service-education provider relationship | The partners assist each other to optimise their contribution to the training of health professionals. | 38 | Existence of resource exchange mechanisms | Structural |
| | Mutual respect and understanding exists between the health service and its training provider partners. | 39 | Level of health service satisfaction about its relationships with education providers | Outcome |
| | | 40 | Level of education provider satisfaction about its relationships with health services | Outcome |
| | | 41 | Learner perceptions about the relationship between their education provider and the health service | Outcome |

| BPCLE Framework Element | Sub-objective | Ind No. | Indictor title | Category |
|---|---|---|---|---|
| | Practical mechanisms are in place to assist each partner to optimise their contribution to the training of health professionals. | 42 | Number of clinicians teaching into education provider courses | Structural |
| | | 43 | Number of health service educators receiving training from the education provider partner to develop their educational skills | Structural |
| | Open communication occurs at all levels of the partner organisations. | 44 | Existence of an up-to-date point of contact within the health service and within the education provider | Structural |
| | | 45 | Effectiveness of mechanisms for resolving issues and concerns | Structural |
| | Relationship agreements codify expectations and responsibilities of the partners in the delivery of clinical education. | 46 | The existence of KPIs that allow the partners to evaluate key aspects of the relationship | Structural |
| Element 5: Effective communication processes | Communication informs actions, behaviours and decision-making. | 47 | Stakeholder perceptions of communication practices and outcomes | Outcome |
| | Communication facilitates improved teaching and learning. | 47 | Stakeholder perceptions of communication practices and outcomes | Outcome |
| | Communication facilitates feedback. | 48 | Existence of feedback mechanisms and measures | Structural |
| | | 49 | Perceptions of clinical education staff on feedback | Outcome |
| | | 50 | Learner satisfaction with feedback processes during their clinical learning experience | Outcome |
| | Communication is not taken for granted by the organisation. | 51 | The organisation provides formal opportunities for training in communication skills | Process |
| Element 6: Appropriate resources and facilities | Learners and staff have access to the facilities and materials needed to optimise the clinical learning experience. | 13 | Facilities prioritised for educational uses exist within the organisation | Structural |
| | | 52 | Clinical education staff satisfaction with respect to access to IT and internet within their organisation | Outcome |
| | | 53 | Learner satisfaction with respect to access to IT and internet within the health service organisation | Outcome |
| | | 54 | Learner satisfaction in relation to the availability and quality of other learning resources (e.g. textbooks, clinical equipment | Outcome |
| | | 55 | Relationship agreements cover issues relating to learner accommodation and support | Structural |

# Appendix 2 – The Indicator Specifications

Complete specifications for the 55 BPCLE indicators are presented in a separate document.

# Appendix 3 – The BPCLE indicator weighting system

The weighting system developed for the BPCLE Framework indicators is based on two categories of criteria, namely:

(1) **Relevance rating**, in terms of the direct impact of the component being monitored on the clinical learning experience. Based on accumulated stakeholder input across all the BPCLE projects conducted to date, indicators are rated *high*, *medium* or *low* as follows:

- High – this rating is for indicators that measure a component of the system that is directly related to the clinical learning environment or clinical learning experience, and which stakeholders have flagged as a key component of the system.
- Medium – this rating is for indicators that measure a component of the system that is directly related to the clinical learning environment or clinical learning experience, but which stakeholders have **not** highlighted as a key component of the system.
- Low – this rating is for indicators that measure either a component of the system that is not specifically concerned with clinical education, or that is very specifically in relation to a non-generalisable aspect of clinical education (e.g. only relates to certain small cohorts of learners).

(2) **Methodological rating**, comprising:

i. **Ease of data collection** – indicators are rated on a scale of 1 (= difficult) to 5 (= easy) based on the type of data collection tool required, the process by which data must be obtained (e.g. self-report by staff, audit of documents, etc.), the type of data being collected and whether data collection is likely to be time-consuming or resource intensive.

ii. **Actionability of the indicator result** – indicators are rated on a scale of 1 (= not directly actionable) to 5 (= directly actionable) based on whether the indicator result can lead directly to action to address/improve performance in this component of the system, or whether further data collection is required before action can be taken. Generally, indicators drawing on stakeholder surveys, where further data may be required to understand the factors underpinning the responses, scored lower than indicators requiring *yes/no* answers. Similarly, indicators that measure elements of the system heavily influenced by other systems (such as professional standards, industry awards, long-standing organisational policy or practice, compliance requirements, etc.) generally scored lower for this criterion. In scoring indicators for this criterion, *directly actionable* was not equated with *easily actionable*. That is, no further data may be needed to permit action to be taken (i.e. the indicator result is directly actionable and therefore scored highly), but the action needed to effect change may be quite onerous for the health service (i.e. not easily actionable).

iii. **Confounding issues that could restrict interpretation of the result** – indicators are rated on a scale of 1 (= many confounding issues) to 5 (= no identifiable confounding issues) based on whether the indicator result could be explained by factors not directly related to the aspect of the clinical learning environment the indicator is meant to measure. Indicators with many (or significant) confounding issues may still be used to measure performance against the BPCLE Framework, although additional data may need to be collected to exclude explanations beyond the scope of the BPCLE Framework.

Thus, indicators are rated high-medium-low for their direct relevance (or importance) to best practice in clinical learning environments and are scored out of 15 (the sum of three components) for the methodological rating. Combining the relevance and methodological criteria results in a four-tier hierarchy of indicators as defined in the following table.

| Category | Relevance rating | Methodological score | Number of indicators in this category |
|---|---|---|---|
| Category I | High | At least 10/15 | 15 |
| Category II | High | Less than 10/15 | 10 |
| Category III | Medium | All scores | 16 |
| Category IV | Low | All scores | 14 |

Indicators in Category I are characterised as being directly relevant to clinical education, relatively easy to collect data for, more readily actionable in terms of performance improvement and relatively straightforward to interpret. Category II indicators are characterised as being directly relevant to clinical education, but rating less well against one or more of the methodological criteria.

Further tiers in the hierarchy could also be included, if the indicators with a *medium* or *low* relevance rating (Categories III and IV, respectively) were split into two tiers based on the methodological score, as has been done for indicators with a *high* relevance rating (Categories I and II).

It should be noted these indicator categories are intended to assist health services with making cost-benefit determinations about indicators for *internal* monitoring. However, organisations may decide to monitor indicators regardless of which category they fall into. For example, an organisation may consider a particular indicator is a high priority despite anticipated difficulties in collecting data or the need to collect additional data to minimise the impact of confounding factors. Similarly, an indicator determined to have medium or low direct relevance to clinical education could nevertheless be useful to an organisation that wishes to address that aspect of its operations. Indeed, where government departments or other agencies elect to nominate indicators for external monitoring, other considerations are likely to influence those decisions, such as the existence of statewide data gaps or the need for evidence to support policy development.

**A cautionary note on the weighting system**

Although this weighting system represents a rational attempt at a systematic approach to prioritising the BPCLE Framework indicators based on *relevance* and *methodological* criteria, it is acknowledged the resulting hierarchy of indicators is not without issues.

The most obvious caveat is that the scores assigned to each indicator reflect a subjective assessment of how the indicators rate for each criterion. Stakeholder input was sought about the criteria and examples were worked through with mixed stakeholder groups to guide scoring across the complete set of indicators. Moreover, the original methodological scores were revised in 2016 based on actual stakeholder experience of working with the indicators. Nonetheless, it is acknowledged that such a scoring system has a sizeable factor of error and the resulting categorisation of indicators cannot be viewed as absolute.

Three particular points should be noted in considering the categories derived using this weighting system:

- The relevance rating (*high*, *medium* or *low*) assigned to individual indicators may vary between disciplines and/or health service settings.
- The total methodological rating score is derived by assigning equal weighting to the criteria of *ease of data collection*, *actionability* and *confounding issues*. However, some organisations might consider one of these criteria to carry more weight than the others, warranting use of a multiplier for a more 'important' criterion, which would change the overall methodological rating score. While this would not affect Category III and IV indicators, it might produce a different list of Category I and II indicators.
- The *ease of data collection* criterion is likely to be scored differently depending on the circumstances of individual health services. An organisation that already maintains registers of various documents, activities, staff attributes, etc. will find data collection for the indicators for which these registers are relevant far less onerous than organisations that do not currently have these registers.

Finally, it should be noted that all of the indicators relevant to Element 2 of the BPCLE Framework (*Best practice clinical practice*) end up in Category IV as a result of the weighting system described in this PMF. In terms of the priorities for monitoring performance in respect of clinical *education*, this is seen as a reasonable outcome, given that quality assurance and performance monitoring in respect of clinical *practice* are covered under other frameworks.

### BPCLE indicators by category: a starting position

The tables on the following pages present the full set of BCPLE indicators by category, as determined by the weighting system. The tables also show the rating given to each indicator against the relevance and methodological criteria, updated in light of feedback collected from stakeholders in the 2015–16 review of the BPCLE PMF. For brevity, only the rating scores are shown; information that informed the assignment of scores can be found in the detailed indicator specifications.

The primary value of the weighting system is that it outlines a systematic approach for organisations to determine which indicators would be most appropriate to monitor. Organisations inclined and able to do so could rate the BPCLE indicators for themselves, using the lens of their own circumstances and priorities to assign scores to the indicators for each of the criteria and thereby produce a hierarchy of indicators tailored to their own situation. Any such revision of the weighting system should be documented internally for future reference.

Organisations disinclined or unable to undertake such an exercise are able to use the tables presented below as a reasonable starting point for their performance monitoring activities.

**Category I indicators**

| Indicator number | Indicator | BPCLE Element | Relevance rating | **E**ase of data collection (1=hard; 5=easy) | **A**ctionable? (1=not directly; 5=directly) | **C**onfounding issues (1=many; 5=none) | Total methodological score (E+A+C) |
|---|---|---|---|---|---|---|---|
| 1 | The organisation is internally monitoring at least 60% of the Category I indicators | 1 | high | 5 | 5 | 5 | 15 |
| 2 | Education-related issues are explicitly addressed in the mission, vision and strategic documents (or equivalent) of the health service | 1 | high | 4 | 5 | 4 | 13 |
| 8 | Staff feel satisfied their education role is valued by the organisation | 1 | high | 5 | 2.5 | 4 | 11.5 |
| 11 | Education is included in the planning documents of the organisation | 1 | high | 4 | 4 | 5 | 13 |
| 19 | Existence of high quality orientation materials and activities | 3 | high | 4 | 5 | 4 | 13 |
| 20 | Learner satisfaction with respect to the welcome they receive | 3 | high | 5 | 4 | 2 | 11 |
| 22 | The existence of protocols for dealing with struggling learners requiring assistance | 3 | high | 4 | 5 | 5 | 14 |
| 23 | Learner perceptions about their feeling of safety and wellbeing | 3 | high | 5 | 3 | 3 | 11 |
| 27 | Proportion of staff currently involved in clinical education activities that have educational training, experience or qualifications | 3 | high | 1 | 5 | 5 | 11 |
| 35 | Existence of tools to assess learner needs | 3 | high | 4 | 5 | 5 | 14 |
| 44 | Existence of an up-to-date point of contact within the health service and within the education provider | 4 | high | 5 | 5 | 5 | 15 |
| 46 | The existence of KPIs that allow the partners to evaluate key aspects of the relationship | 4 | high | 4 | 4 | 5 | 13 |
| 49 | Perceptions of clinical education staff on feedback | 5 | high | 4 | 4 | 3 | 11 |
| 50 | Learner satisfaction with feedback processes during their clinical learning experience | 5 | high | 5 | 4 | 3 | 12 |
| 53 | Learner satisfaction with respect to access to IT and internet within the health service organisation | 6 | high | 5 | 2 | 3 | 10 |

**Category II indicators**

| Indicator number | Indicator | BPCLE Element | Relevance rating | **E**ase of data collection (1=hard; 5=easy) | **A**ctionable? (1=not directly; 5=directly) | **C**onfounding issues (1=many; 5=none) | Total methodological score (E+A+C) |
|---|---|---|---|---|---|---|---|
| 4 | Staffing levels allow the time allocated to educational activities to be used for educational activities | 1 | high | 5 | 1 | 1 | 7 |
| 5 | Annual expenditure on education activities compared to the previous year | 1 | high | 2 | 5 | 2 | 9 |
| 9 | Learners feel they are valued by the organisation | 1 | high | 5 | 2.5 | 2 | 9.5 |
| 13 | Facilities prioritised for educational uses exist within the organisation | 1 | high | 3 | 2 | 3 | 8 |
| 18 | Student inclinations regarding return for employment | 3 | high | 5 | 1 | 1 | 7 |
| 29 | Learner satisfaction about their access to clinical educators | 3 | high | 5 | 1 | 1 | 7 |
| 30 | Proportion of learners to educators and clinicians | 3 | high | 2 | 5 | 2 | 9 |
| 31 | Patients are satisfied with the amount of interaction they have with learners | 3 | high | 2 | 3 | 1 | 6 |
| 39 | Level of health service satisfaction about its relationships with education providers | 4 | high | 4 | 1 | 2 | 7 |
| 52 | Clinical education staff satisfaction with respect to access to IT and internet within their organisation | 6 | high | 5 | 2 | 2 | 9 |

**Category III indicators**

| Indicator number | Indicator | BPCLE Element | Relevance rating | **E**ase of data collection (1=hard; 5=easy) | **A**ctionable? (1=not directly; 5=directly) | **C**onfounding issues (1=many; 5=none) | **Total methodological score (E+A+C)** |
|---|---|---|---|---|---|---|---|
| 6 | Proportion of relevant staff position descriptions (or performance management plans) with KPIs, or equivalent, relating to education | 1 | medium | 2 | 2 | 3 | 7 |
| 7 | Proportion of staff involved in clinical education that access professional development in education each year | 1 | medium | 2 | 1 | 1 | 4 |
| 10 | There is a documented strategy for ensuring participation in education-related activities contributes to career progression opportunities for staff | 1 | medium | 4 | 2 | 5 | 11 |
| 12 | Education is included as a standing item on the agenda of senior management meetings | 1 | medium | 3 | 3 | 3 | 9 |
| 21 | Statements exist within relevant policies in relation to the creation and maintenance of safe environments | 3 | medium | 3.5 | 5 | 3 | 11.5 |
| 24 | Proportion of learners included in interprofessional activities | 3 | medium | 2 | 1 | 2 | 5 |
| 25 | Relationship agreements include protocols for exchange of information on educational objectives, assessment and knowledge and proficiency level of students | 3 | medium | 3.5 | 5 | 5 | 13.5 |
| 28 | Views of health service staff on the preparedness of learner cohorts | 3 | medium | 5 | 2 | 2 | 9 |
| 32 | Learner satisfaction about their direct access to patients | 3 | medium | 5 | 1 | 1 | 7 |
| 36 | Proportion of early graduate and CPD learners who have explicit learning objectives | 3 | medium | 4 | 4 | 3 | 11 |
| 37 | Satisfaction of post-registration learners about their access to learning opportunities and resources | 3 | medium | 4 | 2 | 5 | 11 |
| 38 | Existence of resource exchange mechanisms | 4 | medium | 2 | 4 | 4 | 10 |
| 40 | Level of education provider satisfaction about its relationships with health services | 4 | medium | 3 | 1 | 2 | 6 |
| 54 | Learner satisfaction in relation to the availability and quality of other learning resources (e.g. textbooks, clinical equipment) | 6 | medium | 5 | 2 | 2 | 9 |
| 55 | Relationship agreements cover issues relating to learner accommodation and support | 6 | medium | 4 | 4 | 5 | 13 |

**Category IV indicators**

| Indicator number | Indicator | BPCLE Element | Relevance rating | **E**ase of data collection (1=hard; 5=easy) | **A**ctionable? (1=not directly; 5=directly) | **C**onfounding issues (1=many; 5=none) | **Total methodological score (E+A+C)** |
|---|---|---|---|---|---|---|---|
| 3 | Attitudes to professional development amongst staff involved in clinical education | 1 | low | 5 | 2 | 2 | 9 |
| 14 | There is a schedule for review and updating of policies and procedures relevant to best practice clinical practice | 2 | low | 5 | 5 | 5 | 15 |
| 15 | Existence and utilisation of frameworks, structures, tools or mechanisms to support evidence-based practice and decision-making | 2 | low | 5 | 2.5 | 5 | 12.5 |
| 16 | Proportion of clinical staff accessing clinical professional development activities each year | 2 | low | 2 | 3 | 3 | 8 |
| 17 | There is a schedule for review and updating of clinical practice guidelines against new evidence | 2 | low | 4 | 5 | 5 | 14 |
| 26 | Proportion of learners for whom the health service has received timely information about their knowledge and proficiency level | 3 | low | 1 | 2 | 4 | 7 |
| 33 | Orientation materials and/or activities are adapted to accommodate learners returning for subsequent placements at the health service | 3 | low | 3.5 | 5 | 4 | 12.5 |
| 34 | Relationship agreements cover resources and other requirements that underpin continuity of learning experiences for relevant disciplines | 3 | low | 3.5 | 5 | 4 | 12.5 |
| 41 | Learner perceptions about the relationship between their education provider and the health service | 4 | low | 3 | 1 | 2 | 6 |
| 42 | Number of clinicians teaching into education provider courses | 4 | low | 3 | 1 | 1 | 5 |
| 43 | Number of health service educators receiving training from the education provider partner to develop their educational skills | 4 | low | 3 | 1 | 1 | 5 |
| 45 | Effectiveness of mechanisms for resolving issues and concerns | 4 | low | 4 | 5 | 5 | 14 |
| 47 | Stakeholder perceptions of communication practices and outcomes | 5 | low | 3 | 2 | 2 | 7 |
| 48 | Existence of feedback mechanisms and measures | 5 | low | 4 | 5 | 5 | 14 |
| 51 | The organisation provides formal opportunities for training in communication skills | 5 | low | 2 | 3 | 3 | 8 |