BCPSLS

Data Principles

August 2018

Background and purpose

The mission of the BC Patient Safety & Learning System (BCPSLS) is to make healthcare safer for all British Columbians by fostering a culture of safety, shared learning and continuous system improvement. To accomplish our mission and protect future patients from harm we must promote a culture that welcomes and encourages the reporting of incidents and use the resulting data to drive change and improvement. The principles laid out below can help to ensure that we use the data effectively to successfully learn from patient safety incident reports and reduce harm.

This document sets out the circumstances in which BCPSLS data are the appropriate data to be used and describes their appropriate use.

The following principles emphasize the purpose and characteristics of the BCPSLS data and promote consistency across data users. It is essential that users of BCPSLS data understand and represent it appropriately, as inappropriate presentations of BCPSLS data could result in misdirected efforts and failed projects, and discourage reporting.

The principles apply to all stakeholders, including health authority coordinators, improvement leaders and teams using BCPSLS data.

The principles

What BCPSLS data tell us

1. They reflect the safety reporting culture in an organization.
2. They show the most frequent types of reported patient safety incidents at provincial, health authority and local levels.
3. They show which types of patient safety incidents are reported as most harmful, at provincial, health authority and local levels.
4. They help us to understand how patient safety incidents happen.

5. They show how incident reporting patterns change over time by degree of harm, by category and by care setting or organization.

What BCPSLS data do not tell us

1. They do not provide the actual number of patient safety incidents occurring in BC or in a particular organization.
2. They do not provide information on the full history and characteristics of patients involved in patient safety incidents.
3. They do not tell us if an organization is safe or unsafe.
4. They do not show an organization's level of compliance with safety guidelines or practices.
5. They do not measure the efficacy of specific safety initiatives.

Data notes

Further data notes to consider when using BCPSLS data:

Total numbers

BCPSLS is a largely voluntary scheme for reporting patient safety incidents, so it does not provide the actual number of patient safety incidents occurring in BC. The maturity of an individual's or organization's safety processes and culture will affect what is recognized as an incident. So too will new treatments and procedures, changing standards of accepted clinical practice, publications or campaigns raising awareness of under-recognized risks, and the effectiveness of local systems for seeking out incidents that would otherwise have gone undetected through case record review and audit.

Consequently, the BCPSLS database is an accurate source of incidents reported, rather than an imperfect source of actual incident data. BCPSLS data users can help to ensure that this is understood by always referring to '**reported**' patient safety incidents in reports, tables and figures.

Incidents, not errors

'Patient safety incident' is not a synonym for error. BCPSLS data includes reports of harm unrelated to errors (for example, adverse reactions to medication that could not have been anticipated or prevented), situations with potential for causing harm that staff recognize and report before they can result in error (for example, hazards and near misses), process problems that are pervasive in the healthcare system, and negative outcomes for patients that warrant investigation but do not involve errors. BCPSLS data users can help to ensure that this difference is understood by referring to quantitative BCPSLS data as 'reported patient safety incidents', or just 'reported incidents' in contexts where patient safety is implicit (for example, reported medication incidents) instead of 'errors'.

Dynamic database

BCPSLS is a dynamic reporting system and the number of incidents reported as occurring at any point in time may increase as more incidents are reported. Incident classification, particularly fields related to categorization and harm, can also change as local investigations progress and incident reports are updated. Therefore, the date of the data extraction should always be included on tables and chart references.

Trends over time

Another limitation to the data can be that changes to reporting requirements often result in changes to data series over time. When looking at the data, data users need to bear in mind the dates of changes in reporting requirements (for example, changes to medical imaging or radiation treatment reporting that affect an incident category) or guidance on reporting in BCPSLS (for example, bulletins with directions for reporters about identifying adverse drug reactions), as those may have an impact. Organizational change should also be borne in mind, as newly-created and newly-merged organizations take some time to mature and set up their systems and processes, which can impact reporting.

When comparing BCPSLS data across time periods, it is important to compare data with the same time period in the previous year(s) to take into account known '**incident seasonality**' in the data. Research suggests healthcare activity and the types of conditions requiring treatment relate to time of year and these changes may affect incident reporting.

Therefore, when reviewing changes over time, we recommend that:

- Proportions or percentages are used rather than actual numbers (to allow for the differences in the underlying numbers of incidents and the underlying activity of the healthcare system in BC).
- Either the same time period in the previous year or a full year's worth of data are used (to take seasonality into account).
- It is checked that any 'change/difference' is not caused by new or amended reporting requirements or organizational restructuring.

Timely reporting

We encourage reporters to report patient safety incidents in BCPSLS as soon as they are discovered and without delay. However, in practice there may be a delay between an incident occurring and being reported in BCPSLS. As a result, a search using the date the incident occurred may return different results from one search to the next as reports of incidents that occurred at an earlier date are added and meet the search criteria. To avoid this problem, all BCPSLS data users should search for records using the reported date, which is generated by the system software and read-only, meaning it cannot be modified after a report is submitted and no new reports can be submitted after the fact.

Interpreting BCPSLS reports with a degree of harm = 5-Death

Although the relationship of patient safety incident to the outcome of death in BCPSLS would imply that the death is directly attributable to the patient safety incident, mortality research has identified that this is rarely clear cut, and incident handlers often have to make a judgement call. BCPSLS data users can help ensure this is understood by not summarizing reported degree of harm with terms such as 'causing' death except where this is justified and documented after investigation.

Questions?

Contact BCPSLS Central Office by email at bcpslscentral@phsa.ca or by phone at 604.877-6420.

Adapted from: NHS Improvement, National Reporting and Learning System data principles, December 2016