Appendix 6.3

Data Source Described in Detail – Hospital and Patient Services Logs

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Source or Site

- Hospital unit logs
- Patient services logs (in non-hospital settings)

Hospital units operate within a hospital or clinic and serve specific operational functions. Traditional units relevant to birth defects case ascertainment include Neonatal Intensive Care, Critical Cardiac Care, Labor and Delivery, and the Newborn Nursery. In some hospitals, units are their own departments, like Pathology and Surgery. A ***unit log*** is the documentation that provides information in general terms on the patients who used (or were admitted to) the unit.

Legal or Professional Mandates

- *Legal – state statute*. Hospital-based unit logs are operated in accordance with hospital licensing and accreditation.
- *Legal – state statute*. Non-hospital-based unit logs (e.g., birthing centers, prenatal diagnosis referral centers, genetics clinics), are usually operated in accordance with licensing guidelines.

Mission or Objective

Determined by site. Logs are used to record specific events or health system encounters in a particular hospital department or facility setting. Logs may also account for equipment use. The log represents an inventory of events or activities.

Scope or Breadth

Logs are point-in-time accounts of events. The unit log accounts for each entry or use of services into the specific area. Most logs identify an entrance time, and an exit time, as well as other information specific to unit requirements.

Operational Structure

Determined by site. Logs are designed to be read easily and to provide sufficient information to establish why the patient was in the unit or department.

Type of Information Collected

Determined by the site. Generally, logs are used by surveillance programs as a case identification screening tool. Most logs provide enough cross-referencing information to support follow-through or tracking. This includes name, date of birth, medical record or other identification number, and current date and time. Additionally, information is collected specific to the purpose of the encounter. Examples include:

- *Labor and delivery log.* Prenatal information, maternal risk issues, prenatal diagnosis, and event or outcome measurements.
- *Neonatal Intensive Care Unit (NICU) log*. Event/outcome measurements, perinatal medical issues, diagnosis, other risk factors.
- *Surgery log.* Preoperative diagnosis, possible risk factors.
- *Prenatal diagnostic center log.* Prenatal information, referring physician, referring diagnosis, procedure, medical risk factors.

Accessibility and Retrievability

Logs are used as management tools within individual facility units. Therefore, information is gathered for and used by the unit and, possibly, by the facility. While some information may be collected and entered into a database, most logs consist of paper copy record books or reports.

Strengths as a Data Source

- *Timeliness.* Information is recorded in real time, as events occur. Rapid identification of potential cases is possible.
- *Consistency in recording information.* The population base is well defined for each particular unit since each service encounter is recorded. For example, if a surgical procedure was performed at the site, a surgical log will record the episode.
- *Case identification screening tool.* Generally, enough information is recorded so that surveillance staff can identify potential cases for further investigation.

Weaknesses as a Data Source

- *Effort to retrieve the information.* Generally, logs are kept in hard copy format and are based on a handwritten recording of events. Review of the information can be effort intensive.
- *Accuracy and clarity of clinical information.* Information recorded may be inaccurate or incomplete with respect to diagnoses or medical conditions. For example, a prenatal ultrasound log may state 'referred for cardiac irregularity'.
- *Documentation in the log.* Information recorded on a log may be of limited use for case identification. Sites establish criteria for log documentation to meet internal or ward management objectives, not for disease coding. As such, the information is most relevant for immediate patient management rather than as a tool in medical diagnosis and treatment.
- *Different logs within the data source* may provide conflicting information on the same patient. Surveillance staff should develop management tools to keep track of information recorded from different logs.

Liaisons and Partnerships

- *Unit staff.* These persons are usually front-line staff who work in the unit and have a use for the information that is recorded.

- *Office staff*. These are the persons at the unit who are usually responsible for compiling statistics for the unit and who monitor occupancy. They may be able to assist the surveillance staff in identifying efficient ways to access log information. For example, they may be able to generate a computer listing of the log or provide a photocopy of the log sheet.

Issues to Consider

Surveillance program time and efficiency issues. Unit logs usually require surveillance staff to spend time identifying potential cases on the log and following up by reviewing medical records. Case identification screening criteria and the quality of information included in a log are significant factors to consider when evaluating the amount of time spent on finding cases using this source. Inefficiencies result when follow-up medical records reviews result in too many non-cases. Time and effort evaluations should be conducted for the case identification processes involved in using unit logs.

Unit logs serve as a management tool for individual components of a facility. Therefore, a potential birth defects case may show up on multiple logs. It is useful to compare the information recorded at each unit within the data source and to develop a surveillance management tool that tracks case-finding activity. Such a tool will minimize staff time spent requesting and reviewing a medical record multiple times.

References

None.