

LABORATORY REPORTING SYSTEM AND LABELING SYSTEM THEREFOR

BACKGROUND OF THE INVENTION

The present invention relates generally to a system for reporting the results of pathology laboratory tests. More particularly, the present invention relates to a pathology report system including labels containing diagrams, anatomical site, photomicrographs, photographs and summarized reports that may be adhered to the patient's chart.

Presently in the United States, virtually all pathology service companies provide a general pathology or dermatopathology report, along with their pathology laboratory services, that normally includes the name, address, telephone and fax number of the pathology service company. The pathology report also includes other information such as the patient's name, date of birth, sex, race, file number, physician's (client) number, location of biopsy, pathology number, and the dates that the biopsy was obtained, received and reported. In addition, this report includes clinical data provided by the provider concerning the impression, specimen site, gross description, the microscopic description and the diagnosis, as well as the provider's signature. This information is contained in essentially all pathology reports, whether specialized for dermatopathology, general pathology or other fields of pathology.

It is a standard practice of physicians to enter the information on the pathology reports directly into the patient's chart, either by themselves or, more often, by having their staff copy the diagnoses and notes (comments) by hand from the pathology report into the chart, initialing the entries and writing the date received. Several errors can occur during this process. For example, the diagnosis may be incorrectly transcribed into the chart, such as by miswriting squamous epithelium as squamous cancer or other serious cancers. Or, the information may be incompletely transcribed into the chart, such as by omitting from the report a comment (note) that states that the margins of the body area are clear and completely excised. In addition, the biopsy information may be copied into the wrong chart. Each of these errors can easily lead to disastrous results, such as unnecessary surgery and perhaps even malpractice suits. Unfortunately, there exist few double checks in the commonly utilized procedures.

Another common practice that causes errors is when a doctor merely notes on the file "pathology report received" and then places the pathology report in the chart. The problem with this approach is that the physician may later be unable to figure out the results of all the previous biopsies performed, especially for patients having thick charts or multiple biopsies. The only biopsy whose results are easily determined in such a case is the biopsy reviewed on the most recent biopsy report. This has often led to confusion in diagnoses and in treatment of lesions, especially when a chart is filled with multiple biopsies and reports that deal several different skin cancers and pre-cancers, as commonly occurs in the field of dermatology. Moreover, the time expended reviewing pathology reports for all previous visits is extremely wasteful. As a result, some doctors forgo reviewing the reports and instead rely on their memories, especially since as managed care has forced some physicians to shorten the time of the office visits. Until now, there has been no way for a diagnosis and other pertinent information to be entered into the patient's specific clinical chart and biopsy books as well as into any summary reports in order to facilitate rapid review of the chart without writing these out by hand and risking the errors described above.

Another common practice is for many doctors to maintain biopsy books in which they write the name and other pertinent information regarding the patient and in which some doctors note whether or not the patient needs to be treated. The "treatment performed" section serves as a check on whether or not the lesion was treated appropriately. However, several errors can result in this instance, as well. First, many doctors do not have biopsy books and, even if they do, do not note whether the biopsy requires treatment. In addition, if a biopsy is not written or is incorrectly written into the biopsy book, there would be no check on the system. Also, if a medical assistant or nurse mistakenly checks "no treatment needed" in the chart, due either to difficulty in reading the doctor's handwriting or a lack of understanding of the diagnosis, there is no cross check in the system since the same nurse generally handles all aspects of the pathology report. There also exists the possibility of someone writing the biopsy report in the wrong place or of someone with poor handwriting preparing notes, thereby allowing other staff to skip over it, etc. In addition staff members may forget to enter notations into the book. Because there is no appropriate check on the system, all these potential failures may lead to additional problems with obtaining appropriate treatment for the specific pathological diagnosis, with almost disastrous results. Biopsy books are, therefore, another area of the clinical record in which a new system would be helpful to increase accuracy and tracking, to save time and money, and to decrease errors and potential lawsuits.

Historically, there has been no easy way to follow up on biopsies entered in the patient chart, even though follow up can be particularly important with a patient who has had multiple biopsies performed on different dates, often in similar areas. Until now, a physician noted on the pathology report only whether or not the patient needed treatment. There is no system that illustrates the specific area treated and that also produces a charting system that can be entered directly into the patient's chart. Presently, the required clinical follow-up falls primarily on the shoulders of the physician with minimal backup from the responsible support staff, or, alternatively, primarily on the support staff, especially with minimal input from the physician. This situation has often led to difficulty in treatment or to improper treatment. There has not been a good follow-up system developed that would blend the two so that the clinician is specifically responsible and actively monitors this function. In particular, a follow-up should be organized, once the physician has had input during the set-up stage, through the use of specialized software in a simple way such that the physician's staff will know automatically from the color-coded label and pathology report which diagnoses require what type of follow-up. This will allow the report to be followed in the chart and allow patients to be called automatically with the appropriate message, so that other follow-up steps can be taken if required. This procedure eliminates duplicate work and improves patient care, delivery and thus saves both time and money, while delivering a better quality of care. A detailed follow-up system to allow the support staff to give the patient the appropriate and more detailed information and reassurance required has not been available in a simple automatic manner.

Pathology reports have historically lacked accurate diagrams detailing the area of the body that has been biopsied. In addition, standard pathology requisition forms and reports do not specify the exact or even the general area to be treated, often leading to improper treatment or inappropriate tracking of the disease. Without a diagram, an area that a clinician refers to on the pathology requisition form as, for