dried to obtain specimens for culture, others have
downplayed the role of sputum culture in CAP.4,5 Early
studies have noted the increased mortality associated
with this disease when underlying risk factors have
been present, although this concept has been chal-
enged recently.6,7 The study by Levy and coworkers
in this issue (see page 43) attempts to place several of
these issues in proper scientific perspective. One
hundred-sixteen patients meeting standard clinical
criteria for CAP seen in an emergency room and
subsequently hospitalized form the basis for the in-
vestigation. Data were analyzed to document
etiologies, outcomes, and the diagnostic methods
that impacted on management strategies. With regard
to the latter, special interest was focused on the role
of noninvasive studies such as Gram stains (as com-
pared to quantitative sputum cultures [QSC]), blood
cultures, and the pattern of infiltrate seen on chest
film. Importantly, no attempt was made to assess
antibiotic usage scientifically.

A specific etiology was identified in 65 percent of
cases, similar to that seen in other recent reports.1,3 Streptococcus pneumoniae and H influenzae were the
most commonly implicated pathogens in this popu-
lation of older individuals. Legionella was diagnosed in 4
percent of all patients studied and 7 percent of those in
whom an etiologic diagnosis was made. Somewhat un-
usual was the large number (10 percent) of patients
with tuberculosis. Sputum acceptable for evaluation
was obtained in only 56 percent of samples, but in 86
percent of these, Gram-stain corroborated information
from QSC. Neither blood cultures nor soluble antigen
detection studies were generally helpful in furth-
ering the diagnosis. X-ray film patterns were divided into
classes, and tabulated with regard to etiologies
defined bacteriologically. A strong correlation was seen
between the presence of alveolar densities and the
presence of bacterial pneumonia.

Overall mortality was 13 percent, but was related
neither to the documentation of a specific etiologic
diagnosis nor to underlying conditions of the patient.
However, this information should be cautiously in-
terpreted because specific data are not provided and
antibiotic usage was not controlled. It would appear,
however, that patients diagnosed as having tuber-
culosis (all had positive sputum smears) could be
managed with appropriate antituberculosis agents.
Nonetheless, these are rather titillating data requiring
further substantiation.

The clear implication of this study is that significant
therapeutic information can be obtained from the x-ray
film pattern and sputum Gram stain (when available) in
patients who present with CAP. For the patient not sick
enough to warrant admission to an intensive care unit,
ampicillin appeared to be more useful than erythromy-
cin, noting again that antibiotic usage was not con-
trolled. The recommendations are tempered (as men-
tioned by the authors), however, by the relatively few
patients in the investigation who were diagnosed as
having Legionella, or if geographic considerations
raise the possibility of antibiotic resistance. \(H influenzae, B\) catarrhalis, etc.).

In this era of high technology there continues to be a
scientific rationale for the use of basic cost-effective
diagnostic instruments. However, the clinician must
continue to be aware of the likely pathogens in his
geographic area and their antibiotic susceptibilities.
This information will temper initial antibiotic manage-
ment strategies not only for pneumonia, but for other
community-acquired infections.

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Righting DRG Publications

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ince the implementation of the Medicare prospec-
tive payment system, numerous DRG publications
have portrayed an alarming perception of insufficient
hospital reimbursement that threatens the quality and
availability of needed health care services.8,9 Yet, it
appears that most DRG articles fail to report pertinent
DRG data. The financial impact of DRGs upon hospi-
tals can be determined only if the following errors are
avoided.

Selecting Patients on Severity of Illness

Under the current Medicare payment system, pa-
tients are assigned into one of 473 groups. The group
distribution of patient costs allows the calculation of an
averaged allocated payment. In this payment scheme,
critically ill high-cost patients are offset by less ill patients whose costs are below the DRG payment. Erroneous conclusions about the financial impact of DRG-PPS may result when authors focus upon the tremendous losses incurred when caring for critically ill patients without mentioning the profits received for the less ill patients. Unless all patients and reimbursements within the same DRG group are presented, a meaningful conclusion regarding the economic impact of DRGs cannot be made.

Selecting Diagnostic-Related Groups or Categories

A hospital’s efficiency to provide care in different diagnostic-related groups varies. Errors in interpreting the effect of DRG payments can occur when DRG articles present selected diagnostic-related groups or categories which incur major financial deficits but fail to provide the profit and losses in the remaining DRG groups. Unless all DRG groups and reimbursements are presented, the overall Medicare reimbursement cannot be calculated.

Confusing Non-Medicare with Medicare Reimbursements

Frequently, DRG publications apply the Medicare prospective payments to non-Medicare patients. If the actual financial effects of DRGs are to be assessed, non-Medicare and Medicare reimbursements need to be delineated.

Confusing Charges with Costs

Before cost-accounting systems became fully developed, early publications on DRGs often presented data in which hospital charges versus DRG payments were compared. Such comparisons often showed tremendous financial losses under the DRG-PPS. When costs instead of charges are used, the economic losses are often less dramatic. The interpretation of DRG “losses” or “profits” requires that hospital costs, not charges, be compared with DRG reimbursements.

Failure to Include Outlier Payments

Outlier payments are additional subsidies provided when critically ill patients exceed their day or cost allotment. Although these subsidies fail to provide reimbursement suitable to meet the patient’s true cost of care, it is an additional amount of revenue which should be included in the DRG payment.

Failure to Include Pass-throughs

Unlike the outlier payments, pass-through payments can be considerable. Presently, hospitals are given an annual stipend from Medicare to help cover

ditures. Most DRG papers omit the amount of pass-costs of capital equipment and educational expen-
throughs received. Unless the pass-through payments are included, a comprehensive evaluation of the federal Medicare payment is not possible.

Failure to Report the Hospital’s DRG Bottomline

The single most important component in evaluating the financial impact of the DRG-PPS in any DRG publication is, “Did the hospital make a profit or incur a deficit under the Medicare prospective payment system?” Few, if any, articles report such data.

Any conclusions drawn about DRGs from patient segments and applied to the overall hospital population may be incorrect. Ultimately, the DRG system will have to be judged on its health care benefits. Yet, before meaningful conclusions on the financial impact of DRGs can be drawn, we authors of DRG papers must make sure that it is rightfully evaluated and that all pertinent data are presented.

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