To survive these tough economic times, hospitals must give top priority to the development and maintenance of sufficient operating cash reserves. Hospitals may want to use operating lines of credit, a popular approach to short-term financing, to meet the temporary need for cash. Another source of operating cash is the factoring (sale) of receivables. Lines of credit provide ongoing financing up to a prearranged limit to cover daily operating needs. The interest rate may be as much as 3 percent above the prime rate, and collateral is usually required ("A Steady Friend in Rough Waters," Canadian Business, October 1987, pp. 79-80). Hospitals in this financing arrangement may find that patient receivables are an excellent source of collateral.

Hospitals are becoming interested in factoring (selling) receivables to secure badly needed cash, and various federal agencies are examining the feasibility of the procedure (Judith Nemes and Karen Pallarito, "Agencies Raise Eyebrows at Selling Receivables," Modern Healthcare, July 30, 1990, pp. 42-43). Hospitals can sell patient receivables (with or without recourse) at a discount to a financial institution. The cash may provide a means for covering day-to-day operating expenses.

We conducted a study to determine the extent to which for-profit and not-for-profit hospitals currently use lines of credit and factoring of receivables to obtain operating cash. We randomly selected a large stratified sample (281 respondents) from some 6,400 nongovernment hospitals listed in the American Hospital Association’s 1989 Guide to the Health Care Field. The sample consisted of 57 (20 percent) for-profit hospitals and 224 (80 percent) not-for-profit hospitals. These percentages are consistent with the proportionate stratification present in the population. The statistical results obtained have a maximum error of 5 percent, with a minimum confidence level of 90 percent.

More should use lines of credit

More than half the responding hospitals (154 of 281, or 54.8 percent) do not currently use lines of credit. And no statistically significant relationship exists between the mode of operation (for-profit versus not-for-profit) and whether they use lines of credit. Of the not-for-profit hospitals, 54 percent (121 of 224) do not use lines of credit, compared with about 58 percent (33 of 57) of the for-profit hospitals. It seems, therefore, that hospitals in general may underuse ongoing credit lines.

Commercial banks: The most used line of credit

Although only 45.2 percent (127 of 281) of the responding hospitals currently use lines of credit, they make financial arrangements through a variety of sources. About 97 percent (123 of the 127 hospitals responding that use lines of credit) have lines of credit with commercial banks. When the profit motive is considered, not-for-profit hospitals use lines of credit with commercial banks slightly less than for-profit facilities (99 of 103, or 96 percent, versus 24 of 24, or 100 percent).

Vendors: A viable line of credit

The survey results also indicate that vendors are a viable source of credit. About 69 percent of the hospitals have lines of credit with vendors. Approximately 64 percent (66 of 103) of not-for-profit entities use credit lines with vendors, whereas more than 83 percent (20 of 24) of the for-profit facilities use this source. These proportional differences in the
use of lines of credit with vendors are statistically significant ($p \leq .032$).

Obviously, vendors have a vested interest in the hospitals with which they do business and therefore represent a potential source of continuing short-term credit. Perhaps not-for-profit facilities should seek regular lines of credit with their vendors to a greater extent.

Other Credit Lines: Savings Banks and Savings and Loan Associations More than 29 percent (7 of 24) of the for-profit hospitals and more than 13 percent (14 of 103) of the not-for-profit entities use other sources of credit. These differences, although not statistically significant, suggest that for-profit hospitals seek lines of credit from sources such as savings banks and savings and loan associations more frequently than do their not-for-profit counterparts. Perhaps not-for-profit hospitals are failing to use all available sources of short-term credit.

Responsibilities for Lines of Credit Although a variety of leaders participate in initiating and maintaining lines of credit, top managers handle lines of credit in both for-profit and not-for-profit hospitals (Table 1). The placement of the responsibility at the vice presidential level or higher likely indicates the relative importance of the task to the organizations. Interestingly, purchasing managers seem to have little involvement in negotiating lines of credit with vendors, a major source of short-term financing. The separation of the task of purchasing from negotiating the credit line may well represent a valid internal control technique.

Both for-profit and not-for-profit hospitals indicated that more than one manager was responsible for lines of credit. Columnar totals in Table 1 would thus be meaningless, and the percentages cannot be expected to total 100 percent.

Factoring of Receivables Underused In this study we looked at factoring of receivables as two components: (1) conventional factoring, whereby accounts receivable are factored (sold), with or without recourse, at a discount to a third party, and (2) a hospital's acceptance of credit card payments in settlement of patient accounts, a form of selling (factoring) receivables. Recourse occurs when the factors may hold the seller (hospitals) liable if debtors do not pay. The factors bear the risk that debtors will not pay in without-recourse agreements.

Only about 4.7 percent (13 of 278) of the responding hospitals factor receivables in the conventional manner. (One not-for-profit and two for-profit hospitals did not answer this question.) Interestingly, almost 5.4 percent (12 of 223) of responding not-for-profit hospitals factor accounts, and only 1.8 percent (1 of 55) of the profit-seeking entities sell receivables. We analyzed these results and found that for-profit hospitals factor accounts less often than expected, while not-for-profit facilities factor receivables more frequently than expected (statistically significant at $p \leq .065$).

Regardless of the mode of operation, hospitals rarely use factoring to meet a short-term need for cash. Although government restrictions, regulations, and other rules limit the extent to which some receivables may be factored, for-profit and not-for-profit hospitals may be overlooking or neglecting this important source of cash.

We asked the 13 hospitals that practice factoring to provide additional information about the process. Nine respondents receive 90 percent or more of the face value of the accounts being factored, one receives between 70 percent and 89 percent, and three collect less than 70 percent. Eleven of the 13 respondents factor with recourse, which likely explains why most of the hospitals receive 90 percent or more of face value. However, the recourse feature is rarely detrimental to the hospital, as reclamation (paying the factor) is necessary less than 20 percent of the time. Those hospitals which practice factoring seem therefore to achieve sound financial results, and not-for-profit entities are currently more inclined

### Table 1: Hospital Leaders Responsible for Lines of Credit

<table>
<thead>
<tr>
<th>Leader</th>
<th>For-Profit</th>
<th>Not-for-Profit</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator/chief executive officer</td>
<td>12</td>
<td>47</td>
<td>59</td>
<td>46.5%</td>
</tr>
<tr>
<td>Vice president or chief financial officer</td>
<td>15</td>
<td>62</td>
<td>77</td>
<td>60.6%</td>
</tr>
<tr>
<td>Purchasing manager</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>3.2%</td>
</tr>
<tr>
<td>Controller</td>
<td>4</td>
<td>5</td>
<td>9</td>
<td>7.1%</td>
</tr>
</tbody>
</table>
FINANCIAL MANAGEMENT

to use factoring than their for-profit counterparts.

We asked 265 respondents that currently do not practice factoring to indicate plans for the future regarding the selling of receivables. Almost 12 percent of the hospitals plan to initiate factoring in the future, but 88 percent of the respondents do not plan to factor receivables soon. (No statistically significant difference exists between for-profit and not-for-profit entities.) The factoring of receivables will be slow in gaining widespread hospital acceptance partially because of the uncertainty about government agency action in the future.

Many Accept Patient Credit Card Payments

Even though conventional factoring of receivables is unpopular with hospitals, they often accept credit cards in settlement of patient accounts (Table 2). Approximately 87.5 percent of the respondents accept credit cards, with little difference between for-profit and not-for-profit hospitals: 193 of 222 (86.9 percent) of not-for-profits versus 51 of 57 (89.5 percent) for-profits. We found no statistically significant relationship between the acceptance of credit cards and profit motive.

We are somewhat surprised that any hospital refuses to accept credit card payments on patient receivables. The availability and use of real-time electronic account authorization for credit card use should allow hospitals quick access to cash at minimal cost and no risk.

SOLVING THE CASH PROBLEM

We found that little more than 45 percent of for-profit and not-for-profit U.S. hospitals currently use lines of credit as a means of short-term financing. Fewer than 5 percent of these same hospitals practice conventional factoring of patient accounts receivable to meet a temporary need for cash. Most, but not all, hospitals accept credit card payments in settlement of patient accounts.

The data indicate that not-for-profit hospitals do not use lines of credit from vendors as extensively as for-profit facilities. Not-for-profit hospitals may find it desirable to increase their use of credit lines with vendors, savings banks, savings and loan associations, and others as an attempt to protect cash reserves. They should maintain or expand similar arrangements with commercial banks.

We also found that for-profit hospitals do not factor receivables as much as not-for-profit entities do, but only 5 percent of the not-for-profit hospitals use factoring. Thus both types of hospitals may want to accelerate their use of factoring as a short-term financing arrangement.

To facilitate an increase in the use of factoring, hospitals need to continue to ask government agencies for favorable rulings and guidelines that would permit the selling of receivables. Hospitals can seek factoring arrangements with organizations such as insurance companies, brokerage firms, and cooperatives.

If cash is not a problem, hospitals should seriously consider accepting credit card payments of accounts. The discount may be a small price to pay to avoid having to wait 60, 90, or 120 days or more to collect. Operational needs will not normally wait.

Hospitals' survival necessitates the development and maintenance of a positive cash flow from operations. Hospitals need innovative approaches to financing the operation as cost-curtailment programs become a reality for the industry. Hospitals should correct the underuse of well-established methods for securing cash on a temporary basis. The maximum use of lines of credit and factoring could be a partial solution to hospitals' cash problem.

TABLE 2: ACCEPTANCE OF CREDIT CARDS IN SETTLEMENT OF PATIENT ACCOUNTS

<table>
<thead>
<tr>
<th>Credit Card Acceptance</th>
<th>For-Profit</th>
<th>Not-for-Profit</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accept</td>
<td>51</td>
<td>193</td>
<td>244</td>
<td>87.5%</td>
</tr>
<tr>
<td>Do not accept</td>
<td>6</td>
<td>29</td>
<td>35</td>
<td>12.5%</td>
</tr>
<tr>
<td>Total</td>
<td>57</td>
<td>222</td>
<td>279</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

*Two of the 281 participants did not respond to this item.