



# Superior Productivity in Health Care Organizations

## HOW TO GET IT, HOW TO KEEP IT

by Paul Fogel, MBA

**P**roductivity commands constant attention because labor is the largest single expense in a service enterprise like the health care industry. But fundamental problems must be solved before productivity can be managed effectively. These include overly complex measurement systems that confound understanding, no clear accountability, lack of authority at the right management level, short review cycles that emphasize statistical variation, no incentives to improve, and no disincentives to prevent decline.

### How to Develop Realistic Productivity Standards

A labor standard is a productivity measure that relates workload to staffing. Realistic labor standards form the foundation of superior productivity. Effective standards define what the organization expects of its managers. Drawing from each department's history, standards are the result of careful negotiation disciplined with data. Using historical analysis, many organizations will find that productivity has slipped over time. This can be reversed.

#### Assign Performance Measures

Workload measures, or units of service, should be assigned for every department, including the traditionally "fixed" departments: those without readily measurable work volume. The unit of service describes a department's mission, its purpose, or its patients. Examples include patient days, visits, procedures, treatments, and cases. Relating the growth of fixed departments to that of the organization (by adjusted discharges or adjusted patient days) reveals whether such departments have grown faster than the patient base.

The unit of service does not measure individual tasks or activities, such as charting, filling out logs, reporting, answering call lights, family consults, etc. Rather, it is a measure of a department's main output, not its inputs. If the unit of service is patient days, then all the tasks associated with patient care make up the unit of service, from admission workup to discharge planning and everything in between. The output measure of patient days captures all the related activities. If the unit of service is tests, but personnel also prepare reports, attend meetings, and make follow-up calls, then the number of tests will capture all the associated tasks. This is the final output and it is what the customer is paying for. Counting every task or activity might offer an unintended inducement to perform more activities when the goal should be improving performance through simplifying and reducing the number of activities required for good patient care.

#### Do the Math

Combining workload with hours and salaries determines each department's productivity loss or gain for several years. Hours and salaries can be divided by workload to yield productivity ratios. These ratios can then be applied to current workload volumes and

compared with current productivity levels. The results reveal the savings each department could achieve by operating at a better standard of performance—a standard that had once been achieved and therefore is repeatable (with some exceptions, as discussed later in this article).

Each department's productivity should be compared against itself over several years. Current actual performance can be compared to historical actual performance on a completely variable basis for every department, no matter whether the department is classified as fixed or variable.

A nursing unit analysis is depicted in Figure 1. Hours per patient day were 12.0 in 2001 and then improved (i.e., declined) to 11.9 hours per patient day in 2002. The productivity improvement saved the organization 512 hours. In 2003, productivity dived to 12.8 hours per patient day, costing an additional 2,910 hours. To quantify the financial impact of the productivity lost since 2002, the increase in hours worked per patient day in 2003 is multiplied by 2003 (current) workload volume. The analysis reveals a productivity improvement of \$15,653 in 2002 over the prior year, but a \$93,348 loss in 2003. The goal is to reverse the productivity loss that occurred in 2003 by returning the department to its performance of 11.9 hours worked per patient day achieved in 2002.

When 20 or 30 departments are in this same situation, there are serious savings to pursue. The next task is to turn potential savings into reality.

The analysis uses "productive" or worked hours and wages only, excluding vacation, sick leave, and holiday pay. Employees are entitled to varying amounts of vacation, and sick time is unpredictable. It is best to estimate the nonproductive impact at the facility level. Vacation, sick leave, holiday pay, and employee benefits such as health insurance and payroll taxes add about one-third to productive wages. If an analysis showed that \$3 million in productive wage

## The Calculations

$$\text{Productive hours per unit of service} = \frac{\text{productive hours}}{\text{workload volume}}$$

$$\text{Productive wages per unit of service} = \frac{\text{productive dollars}}{\text{workload volume}}$$

Productivity change:

$$\text{Productive hours} = (\text{current year productive hours per unit of service} - \text{last year's productive hours per unit of service}) \times \text{current year workload volume}$$

$$\text{Productive wages} = \text{productive hours (productivity change)} \times \text{average hourly wages (including temporary worker and registry)}$$

$$\text{Average hourly wages} = \frac{\text{total productive dollars}}{\text{total productive hours}}$$

savings could be realized for the entire organization, then adding one-third to this sum would mean \$4 million in savings when employee benefits are included.

For each department, it is essential to include hours and dollars spent on registry and temporary employees. Failure to do so would exclude a significant fraction of many departments' workforces, making departments look more productive than they really were.

### Communicating the Findings

Arranging the departments' analyses in descending order of productivity lost, further categorized into four groups, serves to focus senior management attention. Groups can be categorized as follows:

- **Losing Ground:** Departments whose productivity has worsened
- **Holding Steady:** Departments whose productivity is roughly the same over the study period
- **Gaining:** Departments in which productivity has improved
- **New Programs and Other:** New departments or services, grant-funded services, clinical research programs, etc.

Typically, about a quarter of departments will generally place in the first group, Losing Ground. This category is of particular interest, for the objective is to return these departments to a higher standard of performance. New Programs and Other excludes startups and grant or temporary programs where cost cutting is not an objective.

The number three category, Gaining, highlights departments that are more efficient now than in the past. If this year's budget puts them at a higher

Unit of Service	Volume	Total Labor		Per Unit		Productivity Change	
		Hours	Wages	Hours	Wages	Hours	Wages
2001 Patient Days	2,806	33,810	1,039,276	12.0	370.38	NA	NA
2002 Patient Days	2,942	34,936	1,067,652	11.9	362.90	512	15,653
2003 Patient Days	3,015	38,713	1,241,986	12.8	411.94	(2,910)	(93,348)
<b>Three Year Performance</b>	<b>8,763</b>	<b>107,459</b>	<b>3,348,913</b>	<b>12.3</b>	<b>382.17</b>	<b>(2,397)</b>	<b>(77,695)</b>

0.9 more hours worked per patient day in 2003

labor cost per patient day

0.9 more hours per patient day in 2003 applied to 2003 patient days

2,910 hours at 2003 salary rates

**Figure 1. Department Productivity Analysis: A Productivity Loss of \$77,695 Over Three Years.**

standard of performance, managers can stick with the current budget. If their year-to-date actual productivity is better than ever, then maintaining current performance is all that is required in this group.

The chart in Figure 2 separates the gainers from the losers. While some departments improved, some did not. The chart in Figure 3 shows most of the savings were concentrated in a few departments, with the rest were distributed in small, but widely scattered portions throughout the organization.

The farther back the analysis goes, the greater the potential opportunity if productivity has been sliding for several years. Going back more than about three years can pose significant challenges—different managers, processes, and functions make a more difficult analysis and may compromise its acceptance. Three years is generally recent enough that in the majority of cases there has been no change in function or process.

### Translating the Analysis Into Standards

Each of the department managers should be met with individually to discuss their results. The analysis should be used to address openly operations and productivity, not exploited as an indictment of past misdeeds. Cooperation, not confrontation, is called for.

A working knowledge of the department, its operations, and its goals should be considered prior to setting labor standards. The resulting standards will be drawn from the productivity analysis, plus or minus any operational changes. This important phase makes it possible to arrive at a realistic, mutually agreeable productivity standard that will work for both managers and the organization.

## Implementation

It is critical that the project be nurtured until it is working smoothly before the new arrangement becomes entrenched as a part of the culture (Fitz-enz, 1997). Executives must support the program without reservation, imparting conviction and support to their managers. If executives have mixed feelings about pursuing this project, it is doomed to fail, no matter how compelling the analysis or well orchestrated the implementation (Sperry, 2003).

### Don't Take Testimony

Most organizations make hiring decisions by executive committee. Department managers appear before the committee to give “testimony” about staff being overworked, patients not getting quality care, department growth, too many meetings, etc. Doctors can be drawn into the fray with testimonial letters. It becomes exceedingly difficult to separate emotions from facts and decide strictly on objective merits, so the com-

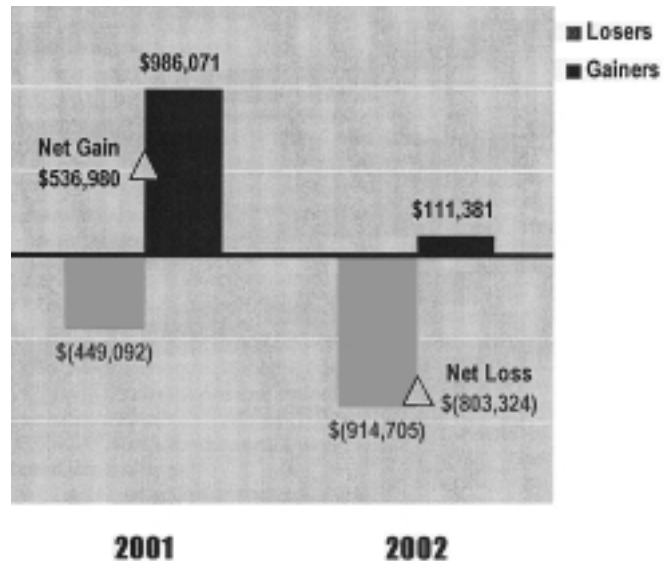


Figure 2. Sample Losers and Gainers.

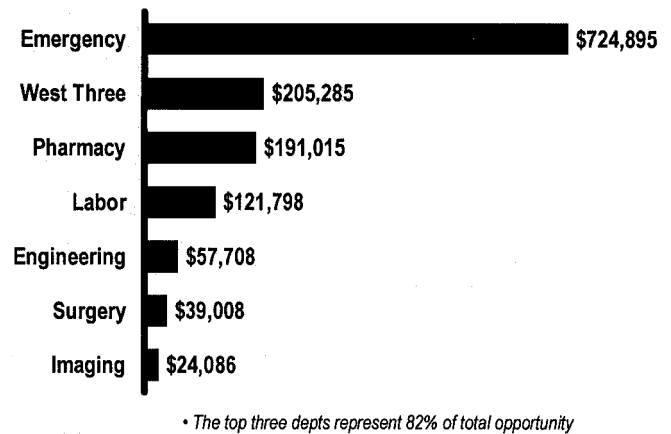


Figure 3. Cost Savings Across Departments.

mittee generally goes along. Moreover, it feels good to give, to dole out rewards to the deserving while denying petitions from the unworthy. Taken individually, these are often “little” decisions that do not seem important enough on which to take a stand. Still, most financial crises take some time to build, growing one small step at a time. A seemingly trivial decision today can have enormous consequences later.

### Create Accountability

Accountability is a necessary building block for any effective organization. The alternative is micromanagement from the top. Such a system depends on those at the top having a comprehensive knowledge of all employees, patients, and information concerning every aspect of the business, at every moment. As a practical matter, these conditions cannot be met, and any management system depending on all-inclusive knowledge by a few at the top cannot be sustained in a dynamic business environment (von Hayek, 1991).

Productivity management is not about hardware or software technology, flashy reports, or detailed budgets; it is about management. No amount of budget police can compensate for a lack of individual responsibility and accountability. Managers must have the ability to act on their own authority, but they also must accept ultimate responsibility for their department's performance. Anything less creates excuses and destroys accountability. Executives should monitor outcomes, not processes. A system structured around greater autonomy, accountability, and focus on outcomes is fairer and more effective for both managers and executives than a system that relies on top-down, centralized control.

For people to be both responsible and accountable, they must have the power to act. Logically, without operating authority, no one can be held accountable. If a department manager lacks the authority to make change, it follows that others outside the department must be accountable. The problem is that those who have such authority do not have the day-to-day operating knowledge necessary to make decisions quickly as circumstances change. If a vice president makes decisions for a department manager, and the manager is then held accountable, neither need bear the consequences of their actions. This eventually spells certain trouble.

#### Terms of the Deal

Every department manager assumes responsibility for meeting productivity standards that are 100% variable with workload volume or 100% fixed. This is the simplest, most intuitive arrangement for managers. For variable departments, standards are hours and labor cost per unit of service. For fixed departments, the standards are total hours and total labor cost for the year—the normal budget. To enhance acceptance and maintain continuity with the analysis, the temptation to over engineer it further than this should be strongly resisted. Department managers can hire on their own authority but are held strictly accountable for meeting standards. This effectively pairs authority with responsibility.

Funding for new positions or new functions would continue to need executive approval. One of the former hiring committee's roles would be authorizing changes to standards. Generally, the only reasons to change existing department standards are adding new non-workload related functions or new programs, upgrading the level of service currently provided, or hiring to prepare for future patient volume. Unlike the old testimonial process, managers would be required to realize objective and measurable goals as a condition of approval.

#### How Long Should the Transition Take?

Since financial problems take time to develop, solutions should be given time to succeed. A transition period allows managers to adjust and plan accordingly and avoids the costs of severance, outplacement, and extended benefits that would

ensue without a transition period. This also practically eliminates the unquantifiable, but considerable, costs of lowered morale and unscheduled absences that occur when organizations go through troubled times. Paradoxically, then, it may be cheaper to act slowly than quickly.

### Monitoring

Acceptance of a complex performance monitoring system will always be wanting. The arcane language of management engineering is largely impenetrable to department managers, the very people charged with using the system. People will not support what they do not understand. What is needed is a simplified, realistic system that managers can understand and accept. Executives will then be in a far better position to monitor the results and ensure superior outcomes.

Conceivably, detailed performance monitoring systems could help introduce discipline and eliminate arbitrary judgment by way of electronic support systems. For any performance monitoring system to be effective, clear objectives for managers must be set, followed by delegation of authority to those managers to follow through on their plans. But in terms of performance measuring, whom should the organization put in charge—the managers or the software?

Control is a management issue, not a technical or systems problem. Paradoxically, frequent, intense, and complex monitoring leads to withdrawal from individual responsibility. The more managers are dictated to, the less responsibility they can and will assume. They devote their efforts to defeating the “budget police,” finding ways around the supposed discipline of the monitoring system. Managers can always blame incorrect assumptions about labor mix, pay rates, and patient volumes—largely the baffling work of the budget department—for problems. The promised control ends up defeating itself.

#### Timing of Reviews

When workload volume is suddenly high, managers cannot react immediately to what might turn out to be temporary episodes of greater activity, nor can they react instantly to slower activity. The time lag usually means brief periods of above-average and below-average productivity. The shorter the time spans, the more highlighted timing differences and unexpected staffing and workload functions, emphasizing all that is out of the manager's control. This shifts the focus away from management responsibility and toward the measurement system. The most common monitoring interval matches the biweekly payroll cycle, but even two weeks is a relatively short time. Realistically, a quarter's worth of data is needed to evaluate a trend or problem that requires action. Over a quarter, temporary timing issues and statistical aberration that obscure reality can be virtually eliminated. Therefore, performance should be monitored formally each quarter in a group review among senior man-

agement. This period defines the point at which senior management would commence corrective action, if any is called for.

Monthly or bimonthly monitoring reports will suffice for department managers, though such reports are best treated as managers' private tools. The monitoring report should parallel the original performance analysis. For example, if patient days were used to develop the standard, then the monitoring report should use patient days and not other workload units. If treatments were the workload unit used, then treatments should remain the yardstick. Simplicity and continuity of method, from analysis to implementation to monitoring, will greatly aid acceptance. Whatever the arrangement, the demands of reporting should never be permitted to become an excuse for poor performance.

## Incentives and Consequences

Once productivity standards are implemented, a balanced strategy is needed to encourage superior performance and ensure adherence to the new system. If managers have no compelling reason to observe their standards, let alone exceed them, they probably will not. Without the effect of incentives to motivate people, or of consequences for not delivering, implementation will fall short of the potential. Any system of cost controls, however clever in its design, is overwhelmed when the organization unintentionally punishes initiative and rewards inaction by having no incentives or consequences (Nadler & Tushman, 1997).

While labor standards define minimum acceptable performance, an effective incentive plan motivates managers to surpass the minimum. Obstructions to improving productivity may include budget limitations, capital spending restraints, and other administrative hurdles. The greatest barrier to superior performance, however, is the lack of any incentive to risk making a change or to put forth the effort.

### Executive Incentives

An executive's main task is to improve the long-term financial and operational performance of the whole organization. An effective incentive plan rewards long-term, not short-term, performance. Hourly wages without incentives tend to foster conservatism and a reluctance to act.

The sidebar above shows a sample incentive for executives, based on a target that is easily measurable and very important to the organization's mission.

For example, if the organization achieved a 5% net operating margin in five years, compared to 2% today, the bonus would be 12% ( $5 - 2 \times 4 = 12\%$ ). If operating margins were 10%, the value of the incentive would escalate quickly to 32%. That is a more generous bonus than many health care organizations might pay today, but the value is many times

## Executive Incentive

Based on operating margin percentage, every fifth year executives can earn a percentage bonus, applied to their base salary at that time, equivalent to four times the increment in the operating margin percentage of five years before.

more than what it might cost. Clearly linked to an easily measurable and objective standard of performance, it is also flexible. It does not specify what the result should be—no specific, arbitrary target is defined. It is better to have the incentive open ended, so executives are encouraged to experiment, learn, and innovate.

Net operating margin is a more comprehensive measure of financial performance than revenue growth or expense reduction. It is a combination of the two, within the sphere of executive influence. If the health care organization did not improve its operating position, it would pay nothing in incentives.

### Manager Incentives

Knowledge and ability are not limited to the executive suite, yet most incentive plans reward just the executives. If incentives help motivate senior managers to further the organization's goals, why should they not work even better to spur department managers? Department managers have direct control over business processes, work methods, and procedures, and therefore over costs. The existence of an incentive plan in no way sets up an expectation that all managers would earn a reward, but it allows for the possibility that managers might well find ways to become more efficient.

For the calculation of the Manager Incentive in the sidebar on page 20, department expenses would exclude any depreciation, interest, or bad debt charges from cost center reports. What remains is a good measure of what is under the department manager's direct control.

Suppose that total expenses, less depreciation, interest, and bad debt, totaled \$100 million for the year, and that net operating margins are now two percent. If such "controllable" expenses were reduced by six percent, then \$6 million would be saved, nearly quadrupling operating income and margin. If sustained for five years, such a margin would generate a long-term incentive bonus for senior management as well; that would have the desired effect of aligning incentives.

Year-over-year comparison means that purely temporary improvements are not rewarded—only those of a lasting nature. If a department improved its operating position, the organization would pay the bonus from a portion of the savings. Today, managers may devote considerable energy to increasing their labor pool, but with an incentive plan (and a push from productivity standards) they might direct their energy to eliminating valueless or unnecessary tasks. For



## Manager Incentive

The Triple Your Money Back program: A manager's percentage salary bonus is triple that of the percentage cost reduction per unit achieved in his or her area year over year (excluding depreciation, interest, and bad debt expense, if any). The current year is the base year. For example, a 6% decrease in department expenses per unit would earn the manager an 18% bonus.

example, it is estimated that about 50% of all hospital labor is devoted to documentation, scheduling, and transportation (Lathrop, 1994). Is there a better way?

It may be true that some managers have more potential for reducing their costs than others, and that a few that did not perform in the past may be rewarded. All the same, an organization cannot be crippled on a quest for social justice. If getting results were the most important goal, it would be wrong to do nothing just to avoid uneven outcomes. It is unfair to burden many dedicated and capable people by subsidizing the incompetent few.

### How to Draft the Performance Policy

Health care organizations are generally reluctant to discipline poorly performing managers, particularly if there are suspicions that budgets are unrealistic. Many organizations have no explicit rules to hold managers accountable for meeting standards and no productivity policy spelling out who should be disciplined, what form discipline should take, and under what circumstances it should be administered. Although defining minimum expectations and prescribing remedies is simple in essence, drafting the actual performance policy presents a challenge. It has to be administered fairly, everyone must understand what is expected, and adequate resources must be made available to assist any faltering managers.

Even with a firm set of rules that all agree to observe, there still must be some discretion in the rulebook for rare, unforeseen events. It is neither possible nor desirable to eliminate discretion. Instead, unlimited discretion can be reined in, providing a place and time for its proper exercise.

These six principles can be used to draft a workable and effective productivity policy.

- Who is responsible? Who has authority?
- For what are they responsible?
- When will performance be measured?
- Where will this take place?
- How will performance be measured?
- Why is the organization doing this?

While senior management must make adequate expertise available to assist managers in meeting their responsibilities, productivity is properly the responsibility of each manager, with financial performance an essential element of management jobs.

Any performance policy should specify compliance to both hours and labor cost standards. For example, if performance was below standard in one quarter, managers might be required to make it up the next quarter, so that two-quarter performance meets standards. In the absence of extenuating circumstances, if department performance had not materially improved after two quarterly reviews, it must be time to prepare for the manager's departure to avoid cost escalations and eventual layoffs—better a few managers than many more employees. In all probability, few managers would actually get to this stage. Paradoxically, the certainty of action would make it less likely to be carried out. Virtually every management job description says something about proper financial management. Organizations must insist those responsibilities be made real. 🏠

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