Work Unit Compensation: A Win-Win Compensation Plan for Nuclear Medicine

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Work Unit Compensation has been developed with the goal of rewarding quality individuals for work performed above a predetermined threshold. This threshold is set by the institution to represent the 100% expected performance of an individual or department during a specified amount of time. In our nuclear medicine department, the threshold is defined as: for each 60 min of pay, the technologist or group is producing 52.5 min of chargeable work. This represents 87.5% efficiency by the individual or the area being reviewed. The normal or acceptable level is 60% for employees in our radiologic service areas.

The non-productive time has been calculated into the production time threshold. The non-productive time includes room preparation, injection time, placement of patients into positions, removing patients from the procedure room and the administrative responsibilities of the supervisor or chief technologist. In our system the nuclear medicine department has developed a mechanism to compensate for the time spent in the radiopharmacy and on quality control procedures.

In anticipation of the major expansion of the hospital and the department, the staffing shortage in the area needed to be addressed. Since 1988, the nuclear medicine department has replaced two computer systems and purchased an additional camera. Currently, we are replacing an additional system to meet the growing needs of the medical staff. The department is busy recruiting quality personnel that can meet the demands and the quality standards set by the department. The current nuclear medicine schedule has produced as many as 60 procedures in one day of operation (7am–8pm).

In order to meet this volume the hospital has purchased state-of-the-art equipment, which experiences minimal downtime (<0.01% over the past two years).

The key to the operation is a staff of quality personnel willing to give 100%. In this area, our supervisor and staff have recorded statistical data that supports the benefit of strong recruitment efforts. The current staff numbers five with a recent opening and an additional position pending in 1991. The ability of our staff to continue meeting the demands of the medical staff needed to be rewarded. The fact that we are a busy department also made recruitment of personnel difficult. Factors contributing to the difficulty of recruiting qualified staff were identified as competition from outside agencies, private offices, other area hospitals and the geographic and economic considerations of the state. The standard efforts to attract qualified individuals were unsuccessful. Increasing the salaries above other comparable professional service individuals was economically unfeasible. The efforts in the past to exceed the salary levels of other institutions were met with a price battle, whereby, despite our higher starting salaries, the other institutions would offer less work for equal or slightly less hourly rates. Recruitment via professional recruitment agencies and rental groups was an expensive and frustrating alternative.

Our goal was to develop an incentive process that would be a win-win situation for both the staff and the institution. The process must meet the four basic building blocks of all departmental suggestions: it must be fair, economical, lasting, and transferable. Once the goal had been met, the departments tried the system. Development of the program lasted over 12 mo as a result of input by other departments in the hospital and the staff to insure that all the affected areas were involved in the process.

Setting a realistic threshold for the hospital's expectation was our first task. The basic formula was to reward personnel who exceeded the expectation (threshold) of the department. This reward would be in addition to the normal salary and benefits that already existed. A realistic threshold needed to be established that would both be achievable and fair to all parties. It was agreed by the department supervisor that during an 8-hr shift a threshold of 7-hr work was acceptable.

For example, the daily production efficiency would be acceptable if an employee produced 336 min (7 hr) of real work during the 408 min (8 hr) they were paid. This time for which they were paid would be void of personal time and be directed toward completion of their specific tasks.

The group agreed that we should not expect a greater than 87.5% production rate by an employee in our department (7 hr of actual work in an 8 hr day). The threshold (100%) was set at 87.5% production. Prolonged production by staff...
employees at levels above the 100% threshold would result in decreased morale, increased mistakes, and decreased effectiveness.

The Incentive Compensation Level (ICL) was a threshold set by our department that represents production above the 87.5% effectiveness by the group of technologists in an average day. This level was calculated by the number of hours paid during a workday by the hospital, including overtime, compared to the total number of work units produced.

For example: three technologists were paid for 30 hr of combined work (two technologists at 8 hr, one technologist at 14 hr). This time is representative of 1,800 work units (30 hr × 60 min = 1,800 total units). The threshold for this day is 87.5% of this total (1,800 × 87.5% = 1,575 units). The normal daily quality control in our department is 2 hr or 120 units. The hospital subtracts this time from the threshold and we have a daily threshold of 1,455 units. Thus, the ICL was fair to both the technologists and to the hospital.

This "work unit" threshold, is based on 52.5 min of actual work during an hour of work (87.5% production efficiency). This threshold is the expectation of the department for the salary and benefits offered to the technologists for their work. A unit value was assigned, based on the average salary paid.

Calculations of a "work unit" value was made in which each unit equal 1 min. A bonus, or incentive, cannot be generated until the threshold has been exceeded by the group of individuals involved.

For example: an hourly rate of $16.00 divided by 60 min places a unit bonus value of $0.27/unit.

To identify procedural values the department and staff set times for each procedure in the area that generated a charge. The times would include the direct time spent by the staff to complete the procedure. This time excluded the delays between injection and imaging and the quality control time spent in the radiopharmacy (2 hr of department quality control subtracted from daily threshold). By using this method, the value of each procedure can be adjusted to specific institutions and procedure performance differences. The institution that is designed to perform only pediatric or geriatric patients will have a higher value for the same procedure than a department that has an adult outpatient population.

In an effort to recognize the team approach used throughout the department, compensation bonus dollars are pooled between all areas of the department. The technical staff in nuclear medicine share equally the technical portion of the bonus. The clerical, nursing and administrative staff also share in the bonus program. In some departments the physician could also be part of the pool, if the situation supports the decision. If the physician is included, the base salary for unit value should be based on the technical component only. The percentage breakdown of all bonus dollars is consistent in the radiology department as follows:

- 83% (technologists),
- 12% (clerical staff),
- 3% (nursing),
- 2% (administrative).

A unit value based on actual completion time is set for each individual study that produces a charge. Although minor modifications between the same procedures develop, an average time should be made. During this process, include the technologists in the calculations along with the supervisor. The administrative time that is assigned to a working supervisor or lead in a department must be considered as nonproductive time and subtracted from the threshold. This administrative time may include the preparation of weekly time cards, ordering pharmaceuticals, employee evaluations, etc.

Discussions, at this time, should also include the time spent on quality control in the department.

For example: this time in our department includes the floods, thin-layer chromatography on all kits, tagging of white blood cells, regulated paper work (i.e., Radioactive Survey Receiving Report, Department of Transportation, logging of all isotope receipts, dose calibrator quality control, etc.) checking of charts and the injection of patients.

Once a threshold is exceeded, a compensation would be made based on the unit value and number of units produced. The ICL will fluctuate based on daily staffing levels. The ICL for the department with four employees that worked 8-hr shifts each would be 1,920 units. The ICL is calculated by multiplying the number of hours worked by 60 (units = min).

Four technologists worked 8 hr to produce 32 hr of work. The 32 hr is multiplied by 60 units for each hour to calculate the ICL for that specific day. As the staffing increases or decreases the threshold will adjust. This will allow the department to always have an equal chance to achieve the ICL on any day.

Since the threshold is based on daily work loads, the plan does not penalize the employee on slow days. This plan is in addition to the base salary and overtime. The days the threshold is not exceeded will result in no additional compensation to the staff.

The disbursement of the dollars generated is made each quarter. As with any benefit, the compensation dollars generated are lost if an employee terminates during a quarter. Their share is returned to the institution as part of the process. This return of compensation dollars is also returned in the process. Compensation dollars are also returned in the process if a temporary employee is utilized to reach a specific ICL.

The cost of the Unit Compensation Plan had been evaluated over a 12-mo period. The generated bonus dollars were always offset by the unpaid salary and benefits for open positions, decreased length of stay and improved outpatient utilization due to noncancellations. The dollars generated by the increased procedural revenue will more than support the plan.

During the last 6 mo the acceptance by the staff has been good. The average bonus to the technologist is in the area of $300 for the 16 wk. The total compensation is just over $1,500 for the area of nuclear medicine. The area has one open technical position. The production level in the area over the past 16 wk has not fallen off due to the vacant position. The technologists have exceeded the threshold based only on the decrease in staffing. The staff technologists have not
requested the assistance of a rental technologist during this period. This had been the standard in the past in this area of the department.

The staffing cost of an open position is $640/wk without benefits in our department. The cost over a 16-wk period for a staff technologist is $10,240. Over the 16-wk period, the department had registered a total overtime payment associated to the missing position of under $4,000. The projected savings to the hospital is $4,700 plus benefits. The Work Unit Compensation Plan has worked for our institution.

As staffing levels are maintained and expanded, based on service requested, the thresholds will be adjusted to meet the same expectation. The implementation of the bonus program will improve the incentive to staff to give the 110% on the days when requests outweigh the time. Compensation for the work above the expectations in this process is fair to all parties.

The plan recognizes all members of the process in its reward process. The “team reward” recognizes all individuals that share in the process of completing a procedure including the secretary and the administrative staff. This has maintained the “team atmosphere” in our department.

The staff has recognized that the hospital appreciates their efforts and the level of professionalism they maintain. The technologists recognize the importance of the support staff in the completion of their procedures. The hospital has recognized the value of quality employees that are willing to give that 100%. The requests of the staff for additional help have fallen off, including the use of rental agencies.

The nuclear medicine field is projected to grow faster than the supply of quality technologists. The Work Unit Compensation plan is a possible solution to an existing problem. The department of radiology at our institution has introduced the plan into all areas of radiology. The ability to implement the plan into other department areas has proven that the plan is transferable. The plan is fair, economical and, hopefully, lasting. The process has the ability to be started in any size department or office setting.

The plan is controlled on a personal computer using PROPLAN (Compaq Computer). In the program developed for our department, the subtraction of units each day is built in for the administrative time, quality control and time spent in the radiopharmacy. The process to reward the staff takes only a few minutes of time each pay-period using forms that have been developed for our areas. The check and balance for the process is the use of units for only procedures that generate a charge. Periodic review of the daily charges are made to insure accuracy. The quality of the work being produced has not changed.

The departmental standards for each procedure must be maintained to work in our institution. Substandard work will result in removal from the team. The work is not charged until completed. Peer pressure to improve accurate productivity will develop in this process.

The need to reward the staff for work above the expectation of your operation is a valuable tool to future expansion. The plan has been received by the department with excellent results. The current inpatient routine delay from time of order to time of completion is under 12 hr in diagnostic and 18 hr in all other areas. This plan is only part of the many programs that have been instituted in our department to reward our staff. A strong staff is your most valued resource and reference.

As noted, the cost saving to the hospital in the last 16-wk period has been almost 50%. This is higher if the use of rental agencies is calculated into the dollars saved. The Work Unit Compensation Plan is working successfully at our hospital.

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