



## **Measuring Nurse Practitioner Productivity**

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As the role of the nurse practitioner (NP) evolves, the need to demonstrate productivity becomes more important. Productivity data provides NPs with practice statistics to generate business or use in contract negotiations with potential clients such as employers, managed care organizations, and insurance companies. However, beyond the numbers of patients seen per day or amount of reimbursement a provider brings to the practice, NPs may provide additional benefit that is not captured with physician productivity measures. Information to acquaint NPs with key aspects of recording productivity and ways NPs can organize productivity data within their practice to determine worth of service are presented.

Over the years the nurse practitioner (NP) role has evolved into an impressive dimension focused on providing quality care to the community served. This focus includes the tasks of teacher, researcher, consultant, mentor and coach, leader, and ethical decision maker. It involves practice in a variety of acute and chronic care sites such as hospitals, clinics, and private offices. The care the NP provides includes information on health maintenance and disease prevention, counseling, and patient education.

As the role of the NP evolves, the need to demonstrate productivity also becomes more important. Twenty years ago research measurement focused on public safety and quality of care. Today measurement of productivity is important in determining the worth or value of NP practice. Further, productivity measures are used to monitor individual

performance, create incentive plans, compare departmental contributions within institutions, and monitor resources needed for patient care (Johnson & Newton, 2002). Industries outside of health care have long recognized the vital importance of productivity measurement on its enterprise. They believe that enhanced productivity improves the business enterprise's opportunity to create wealth for its workforce (Proctor, 2005). But very little information has been published related to ways NPs can measure productivity and efficiency.

### Defining and Assessing Productivity

Productivity has been defined as a measure of output per unit of input. Within the discipline of nursing, productivity is described as proof or evidence of how efficient the NP is in his/her labor, job setting, or how efficiently she/he handles resources and equipment (Martin, 2005). It is a measure of how well the health care provider meets the needs of the community she/he serves (Blumenthal, 1999; Martin, 2005). Frequently productivity is expressed in terms of numbers of patients seen per day or amount of reimbursement a provider brings to the practice. But productivity is really much more than that. Martin (2005) reminds providers that all successful practices build on the three A's: availability, affability, and ability.

How available the health care provider is to patients is crucial for productivity. Obviously the more available a health care provider is to the community served, the greater the client base. Martin (2005) states that being available to patients is essential: "you can't get 'em in if you're not there..." Availability speaks to both physical presence and the ability to move smoothly from one patient to the next. Providers who cannot move from patient to patient because of ancillary demands on their time are not "available."

Beyond the basic availability question of how many patients can the NP see in one day, is the issue regarding how much support the practice provides for seeing the number of patients expected. For example, does the practice provide the practitioner with adequate space and support staff to see patients efficiently; are support staff available to perform diagnostic and treatment regimes ordered by the practitioner (for example,

blood work, immunizations, allergy injections, spirometry, dexascans, EKG, and diabetic education)? If this support is not available, the practitioner may find that a portion of his/her productivity includes functioning as the clinic nurse. Under these circumstances, traditional methods of collecting provider productivity will not capture the full value of the practitioner's efforts. Practitioners who function as both the clinic nurse and a clinic provider will clearly lower productivity as a provider. In the analysis of "how available is the practitioner," ancillary duties not performed by other providers will reduce provider revenue, but may be offset by the value of the ancillary duties to the clinic. If this is the case, simply reviewing billables will not provide an adequate picture of the productivity of the practitioner. On the other hand, if the clinic is focused on the income generation potential of the provider, all providers should be given similar supports.

Affability addresses the health care experience from the patient's point of view. It requires health care providers to examine how pleasant, open, responsive, and approachable they are. Because the discipline of nursing is grounded in caring, most NPs do well on this measure. Nevertheless, we must review how patients view their interactions with us. On the whole, do patients feel comfortable with the provider? Does the provider listen to the patient, taking his/her concerns seriously? Additionally, the patient experience within the clinic should be reviewed. For example, how difficult it is for patients to contact the provider? Is the staff in the clinic responsive to patient needs? Do patients complain about the service or that the staff is rude? This is an important aspect of productivity as providers who spend a portion of every visit apologizing for rude or dismissive staff cannot function as smoothly as those who can dedicate the entire visit to the patient's health issues. Measurement of these key issues can be done through patient satisfaction surveys.

Ability is also important, not only of the health care provider but of the office staff as well. Is diagnostic data readily compiled for the health care provider to review? Incomplete and confusing medical records reduce the efficacy of the most capable practitioner and set the stage for missing key components of adequate followup. If practice records and scheduling are in disarray, and the practitioner must serve as the manager to alleviate these problems, the practitioner's revenue figures will be reduced.

Support staff who cannot keep records, materials, and bookings up to date will negatively affect the patient's experience and, over time, will directly reflect on the patient's evaluation of the practitioner's competency. This directly impacts the productivity of the office, costing the practice patients and revenue (Martin, 2005).

Although Martin's (2005) three A's are one method for reviewing productivity, there are additional models to consider. Ability or NP competency must be held against a specific standard, and availability can be measured indirectly by the number of patients seen each day.

### Nurse Practitioner Core Competencies

To determine the foundational framework for NP ability in the productivity equation, the basic core competencies expected of an NP should be used as guiding principles. In August 2000, the U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Division of Nursing, funded the National Organization of Nurse Practitioner Faculties (NONPF) to develop consensus-based primary care competencies for NPs in the areas of adult, family, gerontological, pediatric, and women's health practice. These core competencies provide description of entry-level competencies of graduates prepared as adult, family, gerontological, pediatric, and women's health primary care NPs (NONPF, 2003). They are the foundational skills for those NPs who enter into specialty practices such as dermatology, they provide a structure for broad-based, periodic review and are the model for quality assurance reviews of NP in- service training. These competencies can also serve as principles to measure the ability component of NP productivity in practice. Table 1 displays a condensed version of the 2003 NONPF competencies.

Table 1.

### Condensed Version of NONPF Competencies

Although these competencies directly address the ability of NPs, using these competencies to demonstrate how a NP meets each competency is, realistically, too

time consuming and not reimbursable. Thus an additional burden would be placed on NP practice. For the most part, NPs can track their productivity by identifying the needs and expectations of the population or community served, always keeping these competencies in mind (Martin, 2005). The community served is the NP's stakeholder those who will determine if they will continue to utilize the service provided or move to another service that will better address their needs. The NP's contribution to the practice or institution needs to speak to these stakeholders' needs and include products or services essential to the operation of that practice. Ideally, the NP can track productivity by measuring improvements in health outcomes within a given community, longitudinally over a period of many years.

#### Provider Measures of Productivity?

Because NPs work is typically paid as that of a health care provider, the productivity measures that are the basis of health care provider payment (physician productivity payment) influence NP reimbursement for services. Traditionally, physician productivity measures are based on a variety of factors including total gross charges, total net medical revenue, total cost, patient panel size, growth rate of patient base, hospital admissions, visits and consults, office hours, practice coverage, and CPT or procedural volume or number of cases (Cascardo, 2003). As for nurse practitioners, productivity comprises additional factors which for the most part can be a challenge to measure: time devoted to productive activities, efficiency of that time (patients seen and dollars made each day), procedures per encounter, appropriateness of that procedure or charge, motivation of the provider to see additional patients such as walk-in, etc. (Cascardo, 2003).

Cascardo (2003) describes a method to measure these challenges in terms of relative value per unit of service or relative value units (RVUs). RVUs were developed by the Center for Medicaid and Medicare Services (CMS) and used to determine compensation for services provided by the physician. In 1986, the Physician Payment Review Commission mandated the creation of a new resource-based physician fee schedule, with a goal of establishing a system that improved reimbursement for primary

care services, was less procedure oriented, and controlled health care costs (Johnson & Newton, 2002). They outlined factors that determine providers' activities and include three components: RVUs, time the provider takes to do the work; RVUpe, practice expense to do the work; and RVUm, malpractice risk to do the work (Johnson & Newton, 2002). RVUs are updated annually by CMS and can be obtained from the CMS Web site. Cascardo (2003) compares three office visit CPT codes to show differences in their values as an effort to determine physician effort, efficiency, and compensation. These measures can translate to NP providers.

Table 2.

#### CPT Codes and MD Time

Table 2 shows how much time a health care provider is expected to spend with each office encounter/ each office CPT code. For example, the physician provider doesn't need to be present for an outpatient CPT code 99211, whereas the physician provider time spent is expanded for the outpatient CPT code 99215 because the activity or procedure requires more activity. Table 3 displays how RVUs are compiled for each CPT code based on amount of provider time spent. In this case, CPT code 99212 receives a total RVU of 0.06 and a 99215 receives a total RVU of 2.21.

As expected, low provider activities result in lower RVUs whereas moderate provider activity to high provider presence results in higher RVU value. The higher the RVU value the higher the reimbursement. But it is unclear whether provider generation of high RVUs is a sufficient measure of value to the organization. Because NPs practice in a wide array of settings, some non-reimbursable services may be essential to the maintenance of the practice (for example, staff management).

#### Factors to Consider

It is agreed that NP productivity is the measure of the work produced during a frame of time. It becomes a measure of efficiency when it includes factors such as time, complexity, and number of clients seen in a certain period of time. But numbers can be

deceiving. If a NP is very productive but the quality of his or her work is lacking, the long-term consequences may be negative. For example, patient satisfaction surveys may disclose poor interpersonal communication that resulted in clients leaving the office feeling hurried, not valued, or taken seriously (Jacob, 2001; Proctor, 2002). If a client's questions and concerns are never addressed, the result can be the client moving to a provider who will meet his/her needs. If the trend is consistently a loss in a provider's panel or client base, the consequences are financially devastating despite the RVU originally generated (Jacob, 2001; Proctor, 2005).

Table 3.

RVU Comparison

Table 4.

Critical Questions to Ask

So how does one determine productivity of an NP in a certain practice? Critical questions each NP should ask is: Will the CEOs of that practice continue association with the NP because they are productive? Will CEOs be pleased with NP productivity and hire additional NPs? What factors should be measured to determine NP productivity?

In practice, NP productivity is based on a number of factors such as time devoted to productive actions or skills, efficiency of time spent with patients, and volume of CPTs per encounter or RVUs. These variables and those listed in Table 4 can be measured to a degree and provide NPs with useful information on whether they are productive health care providers, and most importantly, if they serve the community efficiently and safely.

Nine critical measures can be used to determine NP productivity:

1. Patient visits – are they consistent or have they decreased? Are patients returning because treatment didn't work?

2. New patients – are you getting new patients into your practice?
3. Total MD referrals – is this percentage consistent or is the number of MD referrals rising?
4. Diagnoses – numbers rising?
5. Average visits per diagnoses – how many visits does it take to make diagnosis?
6. Percentage of cancellations – how many cancellations per week? Are the numbers increasing?
7. Cancellations or no-show numbers – are these numbers increasing each month?
8. Reasons for no shows.
9. Average wait time per patient.

These measures can provide timely, essential data to determine NP productivity as evidenced not only by RVUs, but patient satisfaction as well.

#### Methods to Measure Productivity

How can these measures be utilized in a format conducive to NP practice? A format is needed that will provide the NP with information useful to measure productivity.

Traditionally the NP has resorted to keeping track of patients encountered each day by hand, struggling to log in or track patients with the help of the office manager and staff.

Today computerized databases can be used to reflect key measures of NP productivity.

It is a simplified way to collect each patient encounter data utilizing instant on-line access to view tallies and charts of cumulative clinical experiences. Such programs as ePatient, Pocket MD, Patientkeeper, Wardwatch, and Typhon NP Portfolio System are a few of the most widely used designs.

For the purposes of this article, it is not possible to report on all listed patient tracker programs that exist today. The choice of a specific program will depend on the specific needs of the NP. The system should be practical and useful. An electronic format is important as health care records are moving toward electronic data. The program must keep an organized and complete log of all cases/ clinical encounters and have the capacity to analyze the productivity data within the NPs current practice as well as provide the NP with instant reports, tallies, and charts demonstrating the NP's productivity (Merlin, 2005). Additionally, the system should allow each NP to design a practice portfolio to record her/his work histories, or other information useful in contract negotiations, regulatory reporting, research, and data export for proof of billing with managed care organizations and/or insurance companies. Finally, quality indicators such as patient satisfaction surveys, colleague evaluations, and staff input on work efficiency would be desirable (Merlin, 2005).

The NP should be able to log in anywhere using home or office PCs, or handheld devices. The software should be able to work with any Web browser and without any additional software; therefore, the NP can retain control and ownership of all data (Merlin, 2005). As NPs enter encounter data for each patient, the system should dovetail with the encounter system to provide maximum data at lowest additional response cost. At the end of a quarter, month, or year, the NP can print out tallies or charts on any or all productive measures identified as important to provide evidence of productivity (Merlin, 2005). Daily data entry is required for each patient; the downside to this and any software productivity program is that data must be entered daily. The greater the information needs, the greater the data entry needs. Because data entry is not reimbursable, the data must be important enough to justify the response cost of entering the data. Some may decide to live with fewer data components due to time constraints and subsequent cost.

## Conclusion

There are many variables to measure NP productivity, some that have been used traditionally and other well-defined measures that have come into use more recently. No

measure is perfect, each has its own limitations. Measurement systems must reflect the reality that NPs are affected by a large range of independent variables, including competencies expected of the role and the organization in which the NPs practice. Nurse practitioners must track their productivity with mechanisms that allow capture of key elements of the practice. NPs who let others (for example, employers) determine their value without understanding the basis of that evaluation will certainly be undervalued. Ownership of the evaluative components for productivity, quality, and patient satisfaction measurements will allow NPs to survive and flourish within an organization. To maintain this ownership, it is important that every NP have direct access to his/her productivity data as well as the capacity to analyze and track productivity in an objective and meaningful way.

Because NP productivity is a measure of an NP's work or output, it is closely related to efficiency, quality of care, and service provided. Although RVUs were an attempt to measure primary care patient complexity by measuring additional work, it is not clear that it is a sufficient measure of the complexity of different patient populations. RVUs also do not measure the quality of the care received. They do not reflect outcomes or patient satisfaction; they merely reflect what work was done (Johnson & Newton, 2002). Although RVUs positively increased the average Medicare payments to family physicians by 35% from 1991 to 1997, the quality-complexity gradient was not fully addressed (Johnson SL Newton, 2002).

Ideally, measures of nurse practitioner productivity would account for all that a NP does in practice and for participation in activities that are not easily valued in an objective way. Traditional and current productivity measures do not address the value-added components the nurse practitioners bring to the practice environment. New methods of documenting productivity as it relates to quality, service, and outcomes are needed. These methods should embrace existing technology to allow ease of data collection.

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#### Additional Readings

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