



Summary Paper on Measurement of Third Next Available (TNA) in Specialty Care

Value in Specialty Care (SC) is primarily related to seeing new patients and seeing new patients with a minimal delay. In SC new patient appointments have to be carved out against return appointments. If the visit rate is greater than 2 visits per patient per year, and if new is not carved out against return and there is no distinction between these two appointment types, then random variation would lead to instances where the disproportionate number of return to new would overwhelm the new, causing a delay for that component.

In order to continuously assess system performance, a practice needs to measure. Critical measures include caseload, DSA (Demand Supply Activity) and TNA (Third Next Available). Optimal performance is reflected in minimized delays for all patients. Often when the current system cannot deliver acceptable measured results the tendency is to change the measures in order to accommodate a poorly performing system. The other option—and the best of course—is to change the system. If the system performance goal is to minimize the delays, the following features define the measure and the system changes needed to achieve minimal delay.

Measures of TNA

1. How TNA “ought to be” measured in SC has evolved due to a better understanding of the flow in SC
2. We work in demand-supply systems. Whether it is PC or SC, the most effective, satisfying (for customers), and efficient systems work with a minimal wait time. This is universal truth.
3. The key success factor in SC requires us to minimize the delays for new patients into the practice. This addresses satisfaction and clinic risk concerns.
4. With sporadic office supply due to competing demand streams into SC, the “on-call” function, hospital, the OR and procedure streams all compete with office. Office has internal competition between new and return.
5. The first set of these streams are never substituted (for there is always an on call function) and the second set are commonly considered a priority over office. So office and, in particular, the new patient demand stream suffer from loss in this competition. Hence delays for new patients are highly variable and build up quickly.
6. This situation is exacerbated when a practice does not measure demand, supply, activity and caseload and caseloads in particular are allowed to float. Some caseloads exceed the provider capacity to manage the demand, as a result of this demand to supply mismatch, expanding delays ensue.

7. The expanding wait times result in individual delays and reactive behaviors: close the practice arbitrarily, force patients and referring providers to make choices between expanding delays and personal popular choice, constant tension between the needs of the department practice (On call, etc) and the individual (get caught up on consults and OR/procedures). In addition, the system starts to perform badly: patients balk and renege, cut in line, the PC's exaggerate symptoms in order to get their own patients to the front of the line, patients admitted to the hospital for consults and tests etc.
8. Measurement of individual TNA in this environment shows high variability and commonly shows results that exceed the goals. SC providers then look for alibis and excuses and exceptions. Measurement is fraught with customization and becomes useless.
9. Get back to basics: both sets of customers - patients and PC referring providers want their patients to be seen soon. In order to achieve this there are a few critical behavior changes that are absolutely necessary if we are to achieve this:
 - a. Eliminate priority- all waits for all patients are bad. Priority systems just guarantee that the highest priority patients will not get seen within the chosen threshold. See attachments.
 - b. Measure DSA, and caseload
 - c. Ensure that caseloads DO NOT exceed capacity. This requires elimination of popularity as a method of referral. This also requires an overall equitable distribution of new patients based on proportion of time worked in office. Because exposure to new patients will vary due to department requirements to keep up with new demand, providers will have to relinquish the practice of working set days in the office. Because of this change, distribution of new patients will have to be measured and reconciled retrospectively. When all providers worked set days in the office with set ratios of new to return visits, then equitable distribution was assumed since the time in office was distributed evenly each week.
 - d. Pool the referrals. Referrals go to the department , not to individuals
 - e. Schedule enough departmental new patient capacity to meet measured and expected new patient demand and schedule enough capacity within the time frame of the goal (i.e. enough new patients slots within 5 days to meet the demand for that 5 day period).
 - f. Adjust schedules continuously so that there is enough new patient capacity by not only making sure that "someone- anyone" is positioned to take new patients that week, but also by changing as needed the ratio of new to return on the schedule in order to get the required new patient slots-capacity (this last statement assumes that SC providers' office schedules contain a blend of new and return visits, when they may not – they may be all new or all return). Adjusting schedules means that the practice of having a rigid clinic day must shift.
 - g. If there is a temporary demand increase due to expected variation, then expand or flex the supply in order to meet that surge.

Without these behavior changes, delays for new patient consults will be highly variable, dependent on the presence of the individual chosen provider, and these delays will commonly exceed any threshold. The tendency then will be to relax the delay expectation. This does not solve the problem at all but covers it up and makes the issue worse: a longer delay goal just increases the desire for priority which is a “fail for sure” strategy, uses up far too many resources in sorting and a longer delay puts more patients at risk and increases the dissatisfaction. There is an operational reality here and this reality, whether we see it or not, trumps any other intention. If the provider is gone from the office, demand continues unabated against absent supply. If demand exceeds supply, the delays will increase and there is no solution. Improvement in SC delays (access) is a choice. That choice is commonly informed solely by opinion and preference. Opinion and preference are interesting but there is an operational reality here. If we want to minimize delays for new patients we have to deal with that reality. If we choose not to, then we will get delays and excuses.

Thus, I would suggest these changes and measurement of TNA as individuals, as an average for the department/practice and most importantly as TNA for “any”. In this way, the practice has to act together and can be primarily incented, measured and evaluated as a unit.

In complex departments, we have to measure TNA for each, the average AND the first TNA for any. Complex is not a feeling or an opinion. Complex means competing demand streams. In OB-GYN, for example, the clinicians who are working have to support a number of distinct flows of work: the on call function, hospital (maybe more than 1), procedure, OR, ASC and office. Some of these streams can be merged. Some of these streams are met each day with flexible supply – on call function – in which the supply flexes to meet any demand. Some of these streams are supported 100% of the time. This means that the office (low priority) gets supported at less than the percent of providers working and the office capacity (supply) is highly variable. This results in variable delays (since demand is steady). This also means that due to all the other duties, any individual provider is commonly not even in the office within the goal threshold (lets say 5 days). We could change the measure or the goal (mistake) or we can change the system.

I would use all the strategies I suggested and measure any, each and average. The dividing line between complex and non-complex department is whether or not the providers are commonly in the office at a frequency that is under the 5 day goal. For example, in Endo if the providers are commonly in the office each week then this is not complex. Here the measure emphasis is on each individual and on the average, and thirdly I would still look at any.

I worry that we all get measures confused, and confuse measure for performance with measurement for judgment. For example, all judgment aside you don't want a provider with 50 day delays. There is something wrong here.

Second, visualize this: if we have a system that gets patients into the complex department within 5 days, pools the referrals, measures TNA for any and a provider is on vacation and has no new appointments until the first week back in November and we look at her schedule, what do we see? We see that her schedule is open. We are pooling referrals, sending the new patients to the first openings and we are scheduling enough new openings each week in order to keep up with demand so her schedule is out 50 days but it is still open. It fills as we close in on the week (get close to Nov 1) and the pooled referrals land on her schedule this week of Nov 1. Think of it this way – we measure demand, we pool new patients and we keep up. The future is open.

To achieve a 5 day delay in SC where the supply is diluted by other indispensable duties deep inside the system:

1. Eliminate referrals based on “popularity”
2. Pool the referrals to a central site or mechanism
3. Separate new from return visits
4. Measure demand for new
5. Provide for an equitable distribution of new patients proportionate to time in office (“input equity”)
6. Avoid pooling in sequence but pool in boluses, filling one entire schedule for one provider in sequence
7. Measure and reconcile input equity retrospectively
8. Schedule the office supply time to meet predicted new patient demand – have enough capacity to meet that demand each week
9. Appoint today’s received referrals to an open new patient appointment slot no longer than 5 days from now. Flex supply if demand rises.
10. To help ensure that there is enough new patient capacity each week, avoid rigid scheduled days—“I only see new patients on Wednesdays”--and adjust those days as needed to ensure enough new patient capacity
11. Re-adjust the ratio of new to return, either on each providers schedule or in scheduling, in order to ensure enough new patient appointment capacity. Some weeks there may be all new patient visits in the office while other weeks may have a high proportion of returns, dependent on the new patient need and the practice capacity.

These combined strategies will ensure that the practice, acting in concert, can guarantee enough capacity to meet new patient demand. The practice will commonly have to work below the 5 day threshold in order to have enough flex capacity to keep up with new patient demand. The practice and individual provider caseloads must be balanced with the measured practice capacity limit set by the caseload formula. Individual providers, either due to vacation or due to working on other demand streams, might not have any new patient days scheduled for extended periods of time. These schedules, however, will be and can be left open since appointments are only made within the 5 day window. The TNA for these individuals may be extended, and this extension may affect the practice TNA average. At the same time, the practice has achieved and maintained the goal of providing a new patient appointment for any referred patient within the 5 day goal. The appropriate measure for TNA then is to measure the TNA for any or the first available TNA.