



Goals, Strategies and Expected Outcomes

A common problem encountered in improvement work is the confusion between “aim” and “strategy.” In flow work, the goal is to match our practice capacity with patient demand, with minimal delay. Minimizing delay is the basic system performance goal. Any type of delay can adversely affect performance outcomes: delays reduce satisfaction, increase cost, sub-optimize revenue and adversely affect clinical care and outcomes. The structure for improvement is time honored: form a team, set an aim, measure for baseline performance, make a change and then measure again to see if the change results in improvement. Many groups make the mistake of viewing the change as the aim and will often state that explicitly: “our aim is to implement such and such” or “our aim is to do such and such.” These are not aims. They are changes, crafted in order to achieve the aim of improved balance between demand and supply. The first example below will address this issue.

A corollary issue arises over confusion of aim, change and expected outcome. A group will often desire a specific outcome and will state that desired outcome as the goal. This confusion often leads to a poor choice of strategy (change) and a poor choice of measures to see if the “goal” was achieved. The goal in flow is always minimization of delays. The outcomes grow from that achievement, and are optimized when flow is optimized. If the expected or desired outcome is confused as the goal, the changes selected will often adversely affect the matching of demand to supply. This occurs because the measures (intended to answer the question “Have we improved system performance?”) are not measures that tell us that. They are measures of outcome, not system performance. If the system performs optimally the compass of outcomes will be optimal. The second example below addresses this issue.

Example 1: Confusion of Aim and Change, or Change as a Goal or an Aim

This approach neglects to take into account that the aim in flow is always minimization of delay and that measurement of success reflects that goal.

In some of the provinces in Canada, the referral process from primary care (PC) to specialty care (SC) was seriously flawed. Referrals were sent by fax to individual specialists, but because there was no acknowledgement of receipt of the referral fax or no time frame could be given for the appointment time, PC would send referrals to multiple individuals and sites and tended to send referrals to known specialists (referral by popularity), looking for the earliest entry point into SC. These behaviors resulted in uneven referral patterns, increased workload for specialty practices, multiple telephone calls, as well as a higher number of no shows. In addition, due to lack of standard forms, guidelines or referral criteria, there was high variability in the volume of referrals, the “appropriateness” of the referrals and the information contained within the referral. Patients were not informed and were delayed. Both SC and PC staff and clinicians were frustrated.



In order to mitigate these issues, a “central triage” (CT) mechanism was proposed. CT would provide a single entry point for all referrals, standardize the criteria and the process, and, most importantly, would load level the distribution of work across multiple sites of SC practices, based on availability. After extensive discussion and input, CT was implemented. Unfortunately, after implementation, measurement of basic system performance became close to impossible. Because the pooled distribution of work was based on availability, practices and individuals within practices, as a form of self protection, would “hide” their capacity. Consequently there was no consistent method to assess capacity or supply. The process from fax received to appointment made was delayed with a series of inspection steps within CT, so the third next available appointment measure of delay was inadequate to assess the patient’s experience of delay. With demand or workload distributed by pooling, once a schedule was filled, excess demand was sent to another schedule and therefore demand appeared to equal the supply limit. The question “Was this change an improvement?” was impossible to answer clearly.

The root of the problem was a confusion of goal (aim) and change. In flow systems where we match our system capacity to customer demand, the aim is always to minimize the delay between demand and supply. There are standard measures - demand, supply and delay - that assess system performance.

The goals in the development of central triage were far more ambiguous. The aim or goal seems to have been “to implement” with a large set of assumed outcomes that were not connected or explicit. These assumed outcomes included reduction of “shotgun” referrals, reduction of the errors, standardization of the process, development of a single entry point, allowance for more patient choice, development of referral inclusion and exclusion criteria, guidance for choice of correct packaging, improvement in the routing of patients to the right venue, development of more transparency for patients in the process, standardization of the work up and standardization of the process and perhaps reduction of delays. While implementation of CT contained informal assumptions that this change would result in improvement, there were no explicit flow measures of demand, supply and delay to assess these informal assumptions. That lack of clarity and ambiguity of aim resulted in a failure to develop measures linked to the aim in order to gauge and assess success. The proposed change thus became the aim.

Without an explicit aim and linked measures, how do we know that this change is an improvement? We measure. What do we measure?

If we focus on change as the aim, and as a consequence do not build in measures of flow to assess system performance, the measure for success becomes binary - either we implemented the change or we didn’t. So success is implementation. The only measures are: “Did we implement CT or not? Did we accomplish a standard referral process or not? Do we distribute the workload over all sites?” These are all process measures. While these processes are probably required to achieve the ultimate outcome goal of matching demand to supply, the measures for success in flow systems are missing. We could make a change



and even a change as large as CT and not improve the flow systems for the customer. In addition, if each developer had a different implicit hidden goal in mind, then the criteria for success are different, implied, hidden and personal. It is critical to have a common goal at the outset and a common goal that focuses on patient delays. Once the change is made, success is gauged against that patient-focused goal.

The development of central triage, therefore, should not be seen as the aim but instead should be seen as a tool, strategy or change crafted to improve flow of patients from one entity to another. It should be seen as a change that leads us towards achievement of a patient focused flow aim. In this situation, what should have been a change (implementation of CT) became the goal.

Example 2: Confusion of Goals, Strategies and Desired Outcomes

A medical practice in the US, reimbursed by the visit (same reimbursement for any visit) developed a “productivity” goal of 6000 visits per year. In order to achieve this goal, they implemented the following strategies:

1. Fill the schedule in advance and build up an intentional backlog to guarantee 20 visits per provider per worked day.
2. Do as little as possible per visit to make sure that visits are “up” (visit churn or spin)
3. Encourage patients to return for minor issues including requiring patients to return for refills of medications for long term chronic illnesses.
4. Make sure that all providers’ schedules are filled by actively moving “overflow” patients from linked panel provider to others.
5. Intentionally create provider incentives around visit “productivity” goals.

As a consequence of these strategies, the backlog not only persisted but expanded and no-shows and walk-ins increased. Continuity suffered, visits were lengthened to accommodate the lack of continuity, and capacity was decreased. The leaders increased the pressure on providers to increase visits and providers responded by increasing the visit rate. Patients did not comply and no-shows increased even more. The practice became more chaotic and could not grow. The desired outcomes were not achieved.

The practice altered their approach and achieved markedly different outcome. They changed the goal from a desired “productivity” to a goal of matching their capacity to customer demand without a delay. They measured baseline and achievement towards this goal by measuring basic system performance measures: delay, demand, supply, activity and panel size. They used the following strategies:

1. They determined the current and ideal panel size for both the whole practice and for the individual providers within the practice, adjusted the panels to reflect individual capacity, measured and compared the daily demand, supply and activity and measured the delays.
2. Once the delay was stabilized, they added temporary capacity to eliminate the backlog of appointment work.



3. They minimized the appointment type queues in order to load level the daily demand.
4. They developed plans for all the artificial (primarily supply side) variation and agreed to flex supply in order to meet any natural (demand) variation.
5. They reduced demand appropriately and effectively.
6. They observed that 67% of the provider daily paid time was filled with direct or indirect patient care while the other 33% of time was spent doing tasks that others could do. They altered this ratio in order to maximize the amount of patient care time.

After these changes, the backlog was reduced. Since provider panels were proportionate to provider time in office, continuity improved. The visit lengths were shortened because of continuity and there was improved focused staff support for patient flow. Providers were free to focus on direct patient care. Provider “productivity” increased and exceeded the cost of the added support. The desired productivity outcomes were exceeded and the practice was able to grow.

This approach was successful because aim, change and measure reconciled with the basic dynamics of patient flow. While their initial unsuccessful approach shared the components of aim, change and measure, since the aim did not reconcile with the basic flow dynamic from the customer perspective, the changes chosen to achieve the aim did not result in improvement.

The lesson in both examples is that not only is the improvement model of aim, change and measure appropriate and effective, it also critical to choose the right aim and measure initially and then craft the changes and measures toward achievement of that aim.