No Show Rates in Academic Clinics: Why We All Should Care

Focus Paper Submission

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Introduction

Patients who make appointments and choose not to attend those appointments create a tremendous burden for medical clinics. This burden is wide spread. Certainly, there is financial loss. More importantly, however, the health is at risk for those who no show as well as for others who wanted to be seen but couldn't as the slot was taken by the patient who didn't attend their appointment. In academic clinics, there is an additional type of loss. When patients choose not to show up, learners miss an educational opportunity. In instances where the no show rate is high, the lack of learning for students and residents can be quite impactful. The downstream effect of these missed educational moments can be devastating.

The purpose of the focus paper that follows is to identify the causes of no-shows in an academic clinic and then implement processes to reduce those no shows. Literature review as well as original research will be used.

As a result of this work, there will be a reduction in the percentage of those who choose not to attend their appointments. Subsequently, financials will be positively impacted, learning will increase, and above all, patients will realize an improvement in their health.

Background

No show rates are a wide spread problem that can affect clinics of any type. The negative outcomes derived from high no show rates are vast. Clinics who serve the underserved are particularly burdened with this issue.[13] One source noted an average no show rate of 20% in the United Kingdom.[1] Other research found that the no show rates for US clinics range from 10%-40%, with one pediatric clinic run by residents having a no show rate of 80%.[4]

Much study has been done in order to identify characteristics held by patients who choose to not attend their appointment. Those who no show at the highest rates include those in a lower socioeconomic status, those who hold a history of no-showing in the past, those who have no insurance or Medicaid, the length of time from scheduling the appointment to the time of the appointment itself, the distance from their home to the facility, those who are young, and those suffering from a mental illness or alcohol use disorder. [3,4,7] Interestingly, the no show rate on Mondays tends to be higher than other days of the week.[9]

High no show rates impact several areas negatively. First, and arguably least important, is the financial loss experienced by institutions with high no show rates. One study in the United Kingdom estimated that 150 million pounds (198 million dollars) were lost on primary care no-shows. [13] In expanding the view to all specialties in the United Kingdom, another study estimated the annual cost at 790 million pounds (963.6 million dollars).[1]

In medical education clinics, each patient who chooses not to attend their appointment causes an educational "miss." Over the course of one's medical school or residency training, these missed opportunities to learn can result in both knowledge and experience deficiencies, as it is realized that with more patient encounters, more learning is experienced. The downstream effect for the learners' future patients could be devastating.

Most importantly, patients' health suffers when they miss their appointment. Each missed opportunity to see their provider increases the risk for disease progression and/or delayed diagnosis. One trial found that a clinic serving low-income individuals realized a greater mortality rate from common chronic conditions, such as diabetes and heart disease.[8] No doubt, this is in part due to lack of access. In addition to the individual that misses the appointment, it must also be realized that patients who cannot schedule their appointment due to the slots being full are negatively impacted, as well. Certainly, in primary care, the wait time can be quite prolonged.

Organization

The company studied in this paper is an academic internal medicine clinic that serves a low-income, urban population. It is uniquely poised to bring the blessing of improved health to those in the greatest of need. The mission statement for the group is to be a refuge for those in the greatest need, while providing the highest quality of healthcare and the highest level of education to medical students and residents.

There is great opportunity in the market for the clinic. The grim reality of the lack of access for those that are deemed underserved is ever present. Additionally, there is a national shortage of primary care providers. When combined, the need is staggering.

Competitors for the clinic include other primary care clinics who serve a largely underserved population. The clinic, however, does have competitive advantages. Patients enjoy the extra face time they get with learners and also enjoy contributing to their education. This reality brings a unique opportunity for the clinic. Additionally, the clinic is part of a system that holds a regional reputation for excellence. Finally, patients of the clinic also have access to tertiary care if needed, and this availability increases the clinic's competitive advantage.

The clinic has a unique strategic relationship. Learners and attending physicians in the clinic provide inpatient care in addition to ambulatory care. By working in both the ambulatory and the inpatient setting, flow from one to the other is streamlined. This relationship provides an ease for discharge follow up appointments that are more likely to be kept.

With each missed appointment, revenue is lost. On average each month, there are 80 established patients who no show and 43 new patients who do the same. The average net payment for an established visit is $62, and the average net payment for a new visit is $105. Therefore, on average, there is a monthly net payment loss of nearly $9500. In approximating the yearly financial gain for reaching a no show rate of 0%, a calculation of $114,00 could be realized.

After reviewing all of the ramifications realized by patients who no show to the clinic, it was confirmed that something indeed had to be done. To make the needed changes and improve processes, there will be a slightly increased capital requirement. This should amount to no more than one hour daily of an administrative assistant's time. Stakeholders in this situation include the organization's administration, attending physicians, learners, and most importantly, the patients.

Management for this effort will be provided by a dyad between the Medical Director for Access and the Practice Manager. The Medical Director for Access will report the findings and results to the CEO and be accountable for the financial impact.

Data Findings

In planning for success and brainstorming how to measure such, realization of historical data was needed. In reviewing the clinic's average no show rate for the year, a value of 11.5% was calculated. Also, a time frame for research, process development, process implementation, and reassessment was developed. See these details below.

To start the process of improving the no show rate, data was collected for one month by calling those who chose not to show up for their appointments. During the course of the four week period, there were 90 patients who did not attend their appointment. The reasons given are expressed below.

NS reasons (%)
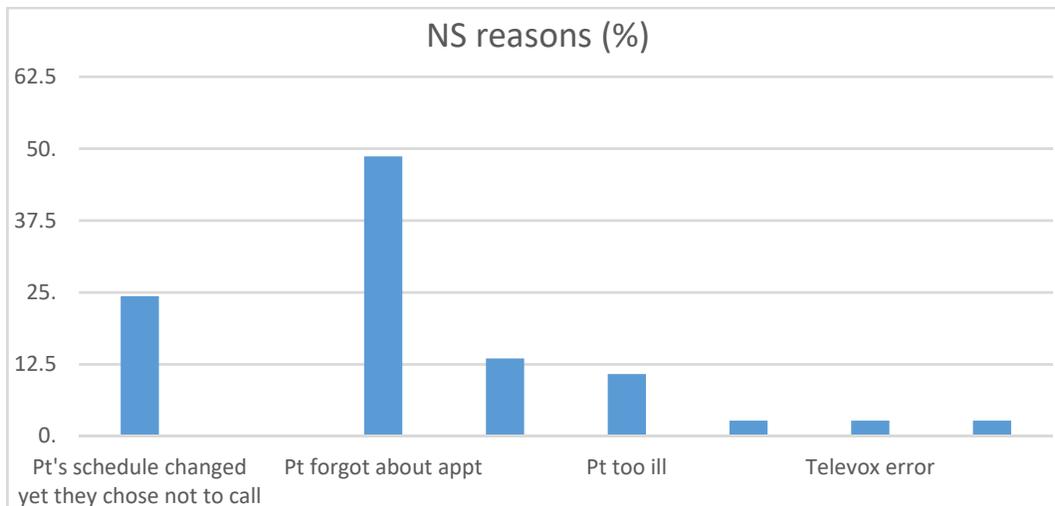
The trend above clearly revealed that the primary reason the clinic's patients did not attend their appointment was that they forgot about it. This was used to focus brainstorming on process improvement. Two key areas were identified where the greatest and fastest improvement could be made.

First, research was done on the clinic's primary cause for no-shows. It was found that other primary care offices struggled with similar challenges.[11] Therefore, investigation was undertaken to determine the current appointment confirmation process. While an automated appointment confirmation texting service was utilized by the clinic, it was realized that the reporting process regarding the successfulness of the texts was not accurate. (Data comparing the no show rate prior to the long-used automated appointment confirmation system was not available.) Further, schedulers were only calling patients that couldn't be reached by the texting or calling service (i.e. busy signal, phone didn't accept text, etc.) They were not calling any of the patients who received a text or call, yet chose not to confirm their appointment.

The second greatest opportunity was found when examining the clinic's lack of a structured processes for sending missed appointment and/or termination letters. One member of the office staff was occasionally and randomly looking through schedules to identify names that appeared "familiar" with regard to their appointment frequency and then arbitrarily sending missed appointment or termination letters.

5

In seeking resolution to both of these issues, schedulers were provided with an updated and accurate daily report of future scheduled appointments, which had been confirmed by the patient via text or telephone. They were then asked to start calling each patient who did not already confirm their appointment in order to verify that the patient indeed planned to attend. Additionally, a standardized process was created and implemented to identify those who no show, notify them of the same, and upon a third violation in six months, terminate them from the practice. On every Monday, a report will be generated identifying all who no-showed the previous week. Staff will look up each patient and send a missed appointment letter for the first and second no-shows. Upon the third no-show in a six month period, staff will send a termination letter.

Three months after implementation of these two initiatives, the no show percentage rate was reviewed and found to have dropped by 3.68%. The rate will continue to be examined monthly in order to analyze the continued benefits. Any needed adjustments will be made, of course.

It is expected that after the implementation of the above processes, the clinic's no show rate will improve. Further, these processes are expected to be adopted by other groups within the large, multi-specialty organization in which the clinic is a member.

Operational Plan

For four weeks, data was gathered by calling the patients who chose not to attend their scheduled appointment. This data was analyzed and the greatest cause for not showing up for the appointment was found to be that the patient forgot about it. The goal was set to implement a process to reduce the no show percentage by 0.5% by three months post-process implementation and subsequently realize an increase in revenue, education, and ultimately patient access.

For eight weeks, processes for termination of those who no show as well as confirmation of appointments was drafted.

From week nine and on, both processes developed in weeks 1-8 will be implemented. From week twelve and on, the no show percentage as well as financials will be assessed to realize the degree of improvement.

Collaboration with leadership will be continuous to seek more and more ways of reducing no shows. Roadblocks of time management and staffing will be monitored as these were found to be weaknesses and threats. By projecting the revenue increase as a result of more visits, a proposal for more staff members will be presented to the CEO.

Discussion

Patients choose not to attend their appointment for a variety of reasons, many of which are listed above (schedule changes, they forgot about the appointment, duration from time from scheduling to the actual appointment date, etc.) A not often thought about reason for skipping one's appointment is one's relationship with their provider or their healthcare system. When patients feel disrespected or distrust the scheduling system, they tend to feel no burden to either attend or cancel their appointments.[10] Practices should strive to better understand their patients and the reasons they miss and then mold their practices to fit those particular needs.[13]

This original research and discovery had both pros and cons. Certainly, there was great time and effort put in initially with numerous phone calls, literature search, meetings, and process development. Time devotion will need to be continued for further data analysis. Despite the minimal con of this original research, the positive outcomes are quite obvious. There is an expected reduction in the no show rate and therefore, improved education and access to those most in need. A financial gain will also be realized.

Great research has been performed by other clinics on this subject and how to best reduce the number of no-shows. As one can imagine, there are varying opinions on what things work and what things do not work. One study demonstrated that a phone call prior to the appointment helped.[2] For patients deemed to

be at a high risk for not showing up, a second phone call was beneficial, as well.[8] Some practices have implemented a double-booking initiative for those categorized as having a high risk for not keeping their appointment. Another study found that improving patient education as well as asking them to sign an attendance agreement helped.[6] Many practices use a punitive approach to reducing no-shows. In this model, patients are sent a bill for the appointment in which they schedule but do not attend. Some feel as though this increases the burden on those that are most marginalized.[1]

The aforementioned key initiatives of an improved appointment confirmation process as well as implementation of a fair, yet strict termination policy have notable pros and cons. In addition to the additional time spent for more phone calls from the schedulers as well as letter drafting and data analysis, another challenge with this initiative is employee push back. It is natural for one to resist change and feel protective of one's own domain. Encouragement for change can clearly be disruptive. A second point of concern lies with those who meet the termination criteria, and that concern is obviously where those patients will go for their healthcare. With there being a shortage of primary care providers, especially for the underserved, there is certainly a risk for diminishing the health of terminated patients. On the other hand, the pros to implementing these two processes (calling to confirm appointments and streamlining termination) are very real. Revenue will increase, educational opportunities will increase, and patients who can schedule with greater freedom will realize improved health.

The administrative plan, as charged by the CEO, is for the Medical Director for Access and the Practice Manager to be successful in reducing the no show rate, as they jointly approve any new measures to further this initiative. They will be responsible to the CEO for the outcomes.

Analysis of processes will occur throughout the research and implementation phases. Brainstorming by all parties will be recommended and welcome. When all is said and done, the anticipated outcome of improved revenue, better education, and ultimately, greater access and health for patients will be realized.

In summary, after researching the reasons why patients did not keep their appointments, it was found that the primary reason was that they forgot. (Secondary causes, which included a schedule change, too ill,

problem resolved, late arrival, were all far beneath the primary cause. Therefore, they were not the focus of the two processes aimed at reducing the no show rate.) In focusing on the primary reason given for not keeping the appointment, the processes of proper appointment confirmation as well as sending fair and consistent no-show reminder and termination letters was implemented. Reassessment of data will occur monthly, beginning three months after implementation. Collaboration with leadership as well as frequent assessment of effectiveness will be continuous.

Conclusion

No show rates are a problem for nearly all aspects of health care. While this is particularly pronounced in academic clinics across the country, similar struggles exist in non-academic clinics who serve low-income individuals. High no show rates certainly impact the bottom line. More importantly, when patients don't show up, learners lose an opportunity to gain knowledge. Most importantly, patients' health suffers because of missed opportunities to see their provider. By implementing the above key processes of appointment confirmation and the termination of those who choose not to attend their appointments, the clinic will realize an increase in revenue, a furthering of education, and most importantly, improved health and outcomes for the community they serve. Further study could be done in one year by repeating the four week polling of all patients who no show and analyzing the trend.

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