Optimizing Primary Care Wellness Visits

Team Members:

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Project Selection

Annual Wellness Visits (AWV) are an appointment with the patient's primary care provider to create or update a personalized prevention plan. These plans may help prevent illnesses based on the patient's current health and/or risk factors. Medicare and Medicare Advantage recommend that patients have an annual wellness visit once every 12 months. During the baseline period, April 2019 – April 2020, 79% of eligible patients did not receive an annual wellness visit.

Annual Wellness visits help promote overall health and wellness for patients. The visit helps update a screening schedule including colorectal cancer screenings, mammograms, and many other health preventative services. The visit also reviews functional ability and screens for cognitive impairment to help promote better health and safety in a patient's life.

In addition to the health benefits for patients, this project was selected because it could have a positive financial impact on the organization. On average, Medicare and Medicare Advantage pay $146.00 per annual wellness visit. Increasing the number of patients who take advantage of this visit, which is free to the patient, would also have a positive revenue impact.

For this project, five of the primary care practices in our Primary Care network were selected to be in-scope for this project.

Goal

During the baseline period of April 2019 – April 2020, 79% of eligible patients did not take advantage of the annual wellness visit. The goal of this project was to incrementally decrease from a 79% defect rate to 60% defect rate within one year, which would be a statistically significant change. This goal was selected to align with the legacy Floyd corporate quality goal with an overall goal to decrease our failure rate to 0%.

Improvement Process

The methodology used for this project was a Lean Six Sigma DMAIC project. Key stakeholders from frontline teammates to executive support were involved with weekly team meetings. Improvement ideas were developed by team members and approved by process owners before being implemented. Executive support was available to remove barriers and provide support to the team as changes were implemented.

Potential X's (potential causes of the high failure rate) were developed by the team using various tools including Ishikawa (Fishbone) Diagram, Cause and Effect Matrix, and FMEA (Failure Modes Effect Analysis). These potential Xs were analyzed by isolating variables in the baseline data related to the potential X. Hypothesis testing including 2 Proportions Test and 2 Sample T Test were used to analyze the potential X's. In addition, Chi Square, and proxy rapid cycle tests (RCT) were used to analyze the potential X's. If a p-value output of the hypothesis test was less than 0.05 ($p<0.05$), the potential X was considered a Critical X, which is defined as an actual cause of why the failure was high.

The following Data Collection plan shows the potential X's that were identified through the project as well as how it was evaluated, the output, and the conclusion if the potential X was a critical X.

Potential X	Potential Cause	Null (H_o)	Alternative (H_a)	Tool	Conclusion	Critical X?
X_1	Patient doesn't find value in wellness visit	Patient not finding value in wellness visit does not impact annual wellness visits to not be completed.	Patient not finding value in wellness visit does impact wellness visits to not be completed.	Chi Square, 2 Proportions, Proxy RCT	With 2-proportions test p=0.000, and p=0.038, the patient not finding value in wellness visits has an impact on patients getting a wellness visit.	Yes
X_2	We do not have provider buy-in	Provider buy-in does not impact annual wellness visits to not be completed.	Provider buy-in does impact wellness visits to not be compoleted	Chi Square, 2 Proportions	With a 2-proportions test p=0.00, provider buy in has an effect on patients getting a wellness visit.	Yes
X_3	Providers feel documentation is too burdensome	Providers feeling documentation is too burdensome does not impact annual wellness visits to not be completed.	Providers feeling documentation is too burdensome does impact wellness visits to not be completed.	2 Sample-t	With a 2-proportions test p=0.534 and p=0.930, providers feel documentation is too burdensome does not have an effect on patients getting a wellness visit.	No
X_4	There's no clear indication that patient needs AWV	Having no clear indication that a patient needs AWV does not impact annual wellness visits to not be completed.	Having no clear indication that a patient needs AWV does impact annual wellness visits to not be completed.	2 Proportions, Proxy RCT	With a 2-proportions test p=0.000, no clear indication that patient needs AWV does have an effect on patients getting a wellness visit.	Unknown

During this project, four potential X's were identified. Two of the potential X's were proven to statistically be a critical X while one potential X was not. One potential X is listed as unknown because the variable was unable to be isolated in the baseline data, but it did show improvement through a rapid cycle test.

Using tribal knowledge learned from the team and the potential/critical X's identified in the Analyze phase of the project, the team identified eight changes that were trialed through rapid cycle testing (RCT). Each of the changes was evaluated, implemented, then verified through additional hypothesis testing to see if the change had an impact on the overall performance of the project.

The RCT Summary below provides a snapshot of the rapid cycle tests tested during the Improve phase of the DMAIC project.

Rapid Cycle Test	Date Range	Rapid Cycle Test Results	Process Capability - Failure %	Hardwired
Pre Project RCT 1 - AWV report	5.1.20 - 7.31.20	p=0.000	76%	Yes
Pre Project RCT 2 - RIM care extender	8.4.20 - 8.26.20	p=0.000	69%	Yes
Pre Project RCT 3 - Identify AWV on next day schedule RIM	8.27.20 - 9.30.20	p=0.580	69%	Yes
RCT 1 - Dedicated person to call and schedule AWV Summerville/Helms	10.5.20 - 11.30.20	p=0.007	62%	Yes
RCT 2 - Preventative Services Coordinator	11.2.20-12.31.20	p=0.000	64%	Yes
RCT 3 - Send letter to patients Rockmart/Taylorsville	1.22.20-2.26.21	p=1.000	58%	Yes
RCT 4 - AWV Pamplets in Clinics	3.1.21-3.31.21	p=0.000	46%	Yes
RCT 5 - Call Center Collins/Virtue	4.1.21-4.30.21	p=0.351	94%	Yes

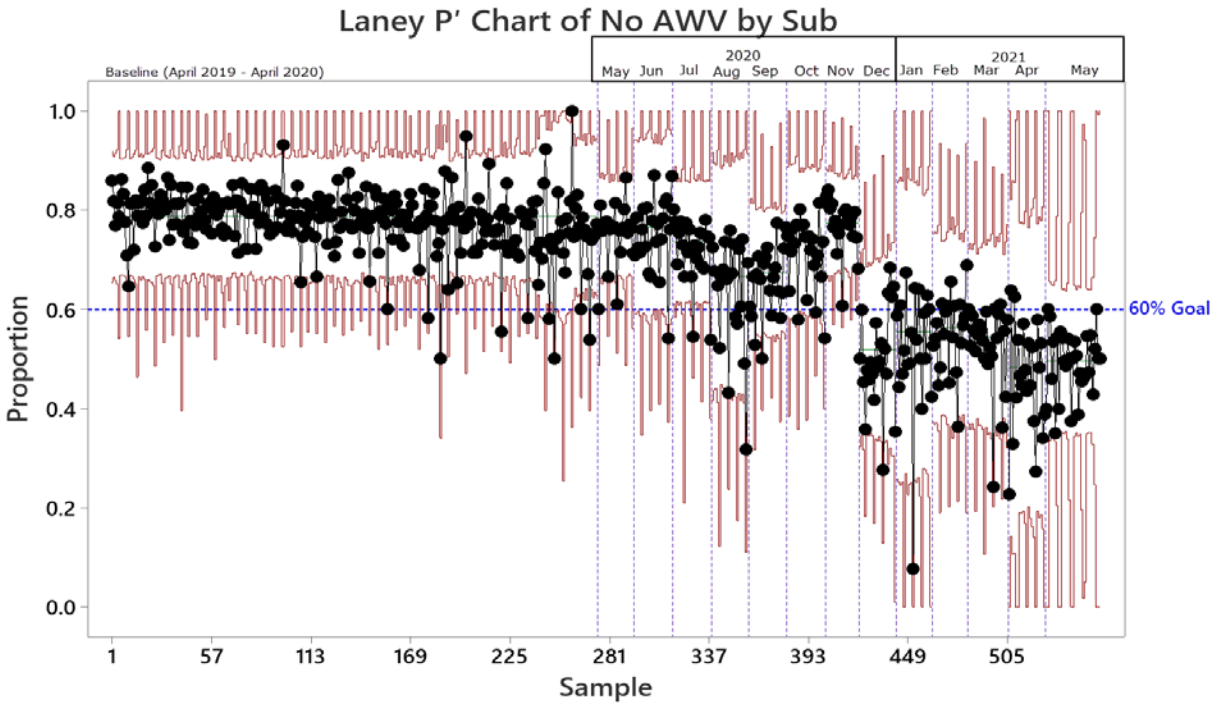
Overall, eight changes were identified and implemented during the Improve phase of the project. Each change was subsequently hardwired after identifying that the change resulted in

better performance or was a good process change for the staff involved in the process, even if the improvement was not statistically significant.

These changes included the creation of a new IT tool through the current ambulatory application to identify patients that were eligible for the AWV and whether the patient had an AWV performed. This new tool helped create the pool of potential patients and track those that had received the AWV. Once we were able to identify the patients, we worked in RCTs to get the identified patients an AWV on their next scheduled visit or schedule a future appointment for the patient to come back for an AWV. The team was innovative in finding a way to identify this patient population where in baseline period, those patients were not easily known as needing an AWV.

Results/Outcomes

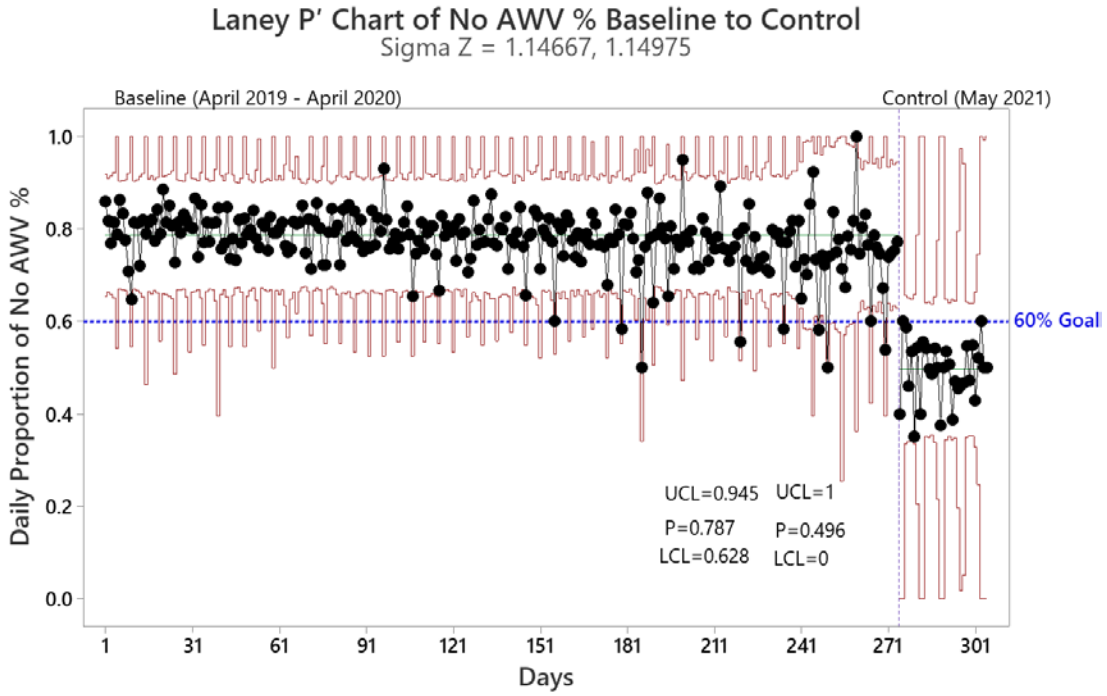
The team implemented changes based upon the learnings from the team meetings. By hardwiring the rapid cycle changes, the team was able to improve the failure rate of Annual Wellness Visits from 79% during the baseline period to 50% during the control phase (May 2021) after the project. We exceeded our goal of achieving 60% defect rate within year one. The below control chart shows the month-to-month improvement as the project progressed and RCTs were tried and implemented.



Tests are performed with unequal sample sizes.

The control chart below compares the baseline data to the control period data and illustrates the overall performance improvement of the project. Hypothesis testing between the baseline

and control period resulted in a p-value = 0.00, which shows that the overall improvement was statistically significant. The control period after the project shows the sustained improvement in the project.



Tests are performed with unequal sample sizes.

During the baseline period, only 936 Annual Wellness Visits were performed at the in-scope clinics. During the project, an additional 2,107 visits were done in the in-scope clinics, which doubled the previous year's performance. This performance improvement had an estimated revenue impact of $307,622 to the organization (2,107 visits x $146.00/visit).

Innovation: There are three key learnings from the project that were identified through hypothesis testing. The importance of a patient finding value in a healthcare service and a provider promoting the value of a healthcare service to a patient are instrumental. Once the rationale for the AWV is shared by a trusted source, there is better acceptance and alignment. Lastly, frontline teammates need effective, reliable tools in real-time, in this case reports to identify patients who need AWV, to set them up for success.

Knowledge Sharing/Spread: The outcomes achieved during this project would provide a roadmap to any clinic to help improve AWV performance and increase revenue at those clinics. The importance of an AWV to patients and providers is assumed by many; however, educating and explaining the why to customers provides the alignment, acceptance and accountability needed to drive successful, sustainable change.