Quality Improvement Initiative 2022: Primary Care Provider Access

Problem Statement

The purpose of this quality initiative is to increase utilization and access to primary care providers (PCP). Stronger PCP systems and higher PCP utilization for appropriate services are associated with better health outcomes and a decrease in utilization of more expensive types of services, such as emergency room (ER) visits and inpatient (IP) stays.[1] In a research article written by Johns Hopkins University and New York University, it is stated that areas with greater primary care access experienced lower mortality rates, including mortality caused by cancer and heart disease. [2] CHP strives to give members the best possible health care access, and it is so important to overall health that members have access to PCPs.

Prior to 2016, members and patients complained of long wait times for appointments to see their PCP and that at times it was difficult to find a PCP in network that was accepting new patients. Cox HealthPlans (CHP) and CoxHealth values member and patient feedback and strive to give patients the best care possible. In 2016, CHP and CoxHealth began a focus on increasing access to primary care. Some of the interventions that have been implemented toward this goal include adding walk-in clinics to the primary care network, adding a telephone line to eliminate the barrier of new members searching for a PCP, adding providers to the network, and others.

Performance Goals

Based on CHP claims data from 2016 through 2019, the rate of PCP utilization rose from 2.55 to 2.8 claims per member, with each year showing a statistically significant increase of utilization. The internal benchmark we are using for this study is 2.68, which is the average rate of utilization for 2016 through 2019. Our external benchmark for PCP utilization is from a published research article from UTHealth School of Public Health, which shows 1,542 PCP visits per 1000 patients, or 1.54 visits per patient. [3] CHP is already ahead of this benchmark, but we want to keep measuring our rates against external benchmarks to ensure we are helping our members to get the best care possible. Our goal for 2022 is to continue to raise PCP claims per member by 5% from 2019, or 2.94 claims per member. With the COVID-19 pandemic affecting PCP utilization through 2021, CHP expected to see lower results than our goal, but we were very close. CHP is hopeful PCP utilization will remain higher and continue to rise in 2022. In looking at PCP utilization we would also like to see the trend for ER utilization continue to trend down, and the trend for IP Admission utilization begin to decrease.

After the initiative is complete, the measures for the initiative will be monitored on at least an annual basis to ensure sustained improvement over time.

Data Collection Plan

To measure member access to and utilization of PCP visits, we will look at claims data for Current Procedural Terminology (CPT) codes for PCP visits (99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, and 99215), CPT codes for ER visits (99281, 99282, 99283, 99284, and 99285), and claims data for inpatient admission rates. Utilization for April and May 2020 were highly affected by the COVID-19 pandemic; due to this, data used for April and May 2020 were averages of the other 10 months in 2020 to get a better comparison of normal year over year utilization.

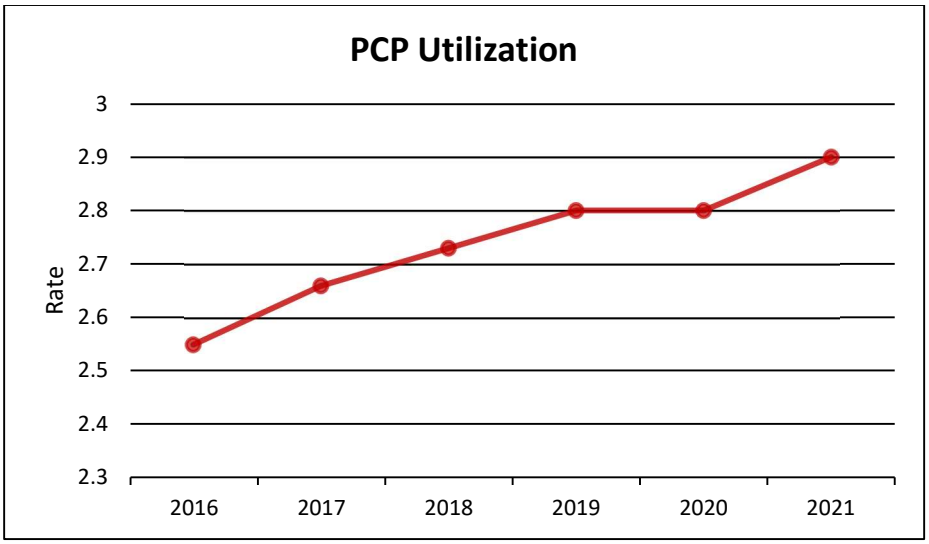
Data Collection

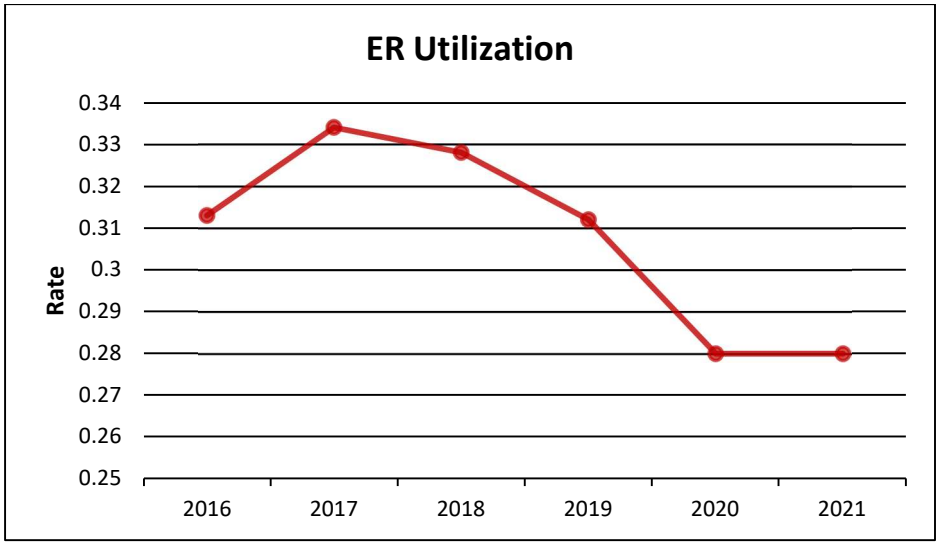
CoxHealth and CHP began this program in 2016. Data has been collected for 2016 through 2021. Results are provided and displayed below:

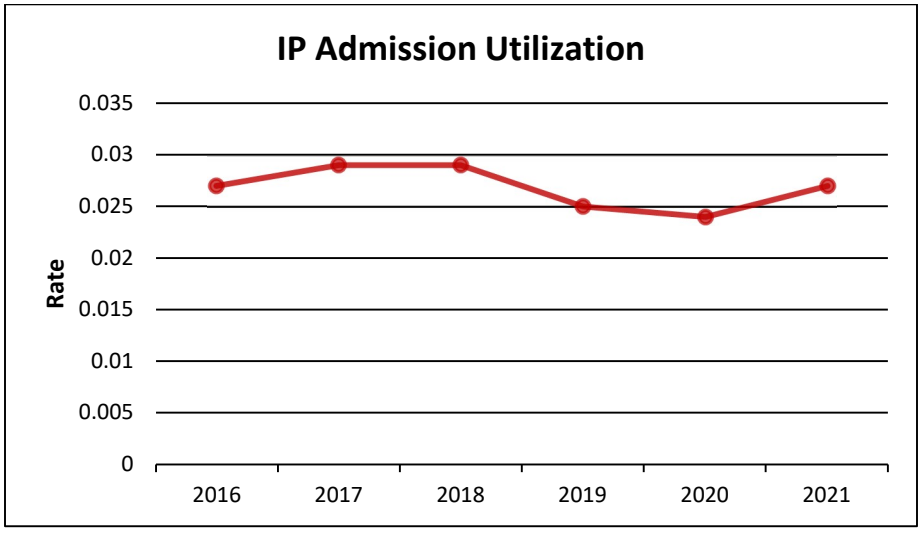
Year	Measure	**Numerator** (Total # PCP claims)	**Denominator** (Total # members)	Rate	Goal
2016	Primary Care Utilization	124,147	48,640	2.55	N/A
2017	Primary Care Utilization	128,745	48,385	2.66	N/A
2018	Primary Care Utilization	129,862	47,623	2.73	N/A
2019	Primary Care Utilization	117,374	41,946	2.80	N/A
2020	Primary Care Utilization	118,250	42,243	2.80	2.94
2021	Primary Care Utilization	121,177	41,843	2.90	2.94
2022	Primary Care Utilization				2.94

Year	Measure	**Numerator** (Total # ER claims)	**Denominator** (Total # members)	Rate
2016	ER Utilization	15,234	48,640	0.313
2017	ER Utilization	16,138	48,385	0.334
2018	ER Utilization	15,630	47,623	0.328
2019	ER Utilization	13,077	41,946	0.312
2020	ER Utilization	11,744	42,243	0.28
2021	ER Utilization	11,617	41,843	0.28
2022	ER Utilization			

Year	Measure	**Numerator** (Total # IP Admit claims)	**Denominator** (Total # members)	Rate
2016	IP Admission Utilization	1,330	48,640	0.027
2017	IP Admission Utilization	1,381	48,385	0.029
2018	IP Admission Utilization	1,368	47,623	0.029
2019	IP Admission Utilization	1,062	41,946	0.025
2020	IP Admission Utilization	1,030	42,243	0.024
2021	IP Admission Utilization	1,127	41,843	0.027
2022	IP Admission Utilization			


PCP Utilization
Rate
3
2.9
2.8
2.7
2.6
2.5
2.4
2.3
2016
2017
2018
2019
2020
2021


ER Utilization
Rate
0.34
0.33
0.32
0.31
0.3
0.29
0.28
0.27
0.26
0.25
2016
2017
2018
2019
2020
2021


IP Admission Utilization
Rate
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
2016
2017
2018
2019
2020
2021

Data Analysis and Statistical Testing

CHP uses chi-squared testing to demonstrate the statistical significance of our collected data. Chi-squared is a statistics test that measures how expected data compares to actual data. Results will be displayed in the chart below and indicate year to year changes in statistical significance. Statistical significance will be at $p< 0.05$. CHP will also address barriers here that effect statistically significant results, as applicable.

Statistical Testing: PCP

Year	Numerator	Denominator	Rate	Chi-square test	Statistical Significance
2016	124,147	48,640	2.55	N/A	N/A
2017	128,745	48,385	2.66	2016 to 2017: Chi-square 30.37 p-value is <0.00001	Statistically significant
2018	129,862	47,623	2.73	2017 to 2018: Chi-square 10.52 p-value is 0.001183	Statistically significant
2019	117,374	41,946	2.80	2018 to 2019: Chi-square 10.92 p-value is 0.000949	Statistically significant
2020	118,250	42,243	2.80	2019 to 2020: Chi-square 0.0022 p-value is 0.962256	Not statistically significant
2021	121,177	41,843	2.90	2020 to 2021: Chi-square 17.95 p-value is 0.000023	Statistically significant
2022					

Statistical Testing: ER

Year	Numerator	Denominator	Rate	Chi-square test	Statistical Significance
2016	15,234	48,640	0.313	N/A	N/A
2017	16,138	48,385	0.334	2016 to 2017: Chi-square 23.49 p-value is <0.00001	Statistically significant (but going up and not down)
2018	15,630	47,623	0.328	2017 to 2018: Chi-square 1.55 p-value .21335	Not statistically significant
2019	13,077	41,946	0.312	2018 to 2019: Chi-square 14.26	Statistically significant

				p-value is 0.000159	
2020	11,744	42,243	0.28	2019 to 2020: Chi-square 62.78 p-value is <0.00001	Statistically significant
2021	11,617	41,843	0.28	2020 to 2021: Chi-square 0.009 p-value is 0.9242	Not statistically significant
2022					

Statistical Testing: IP Admissions

Year	Numerator	Denominator	Rate	Chi-square test	Statistical Significance
2016	1,330	48,640	0.027	N/A	N/A
2017	1,381	48,385	0.029	2016 to 2017: Chi-square 1.21 p-value is 0.270866	Not statistically significant
2018	1,368	47,623	0.029	2017 to 2018: Chi-square 0.0275 p-value is 0.868284	Not statistically significant
2019	1,062	41,946	0.025	2018 to 2019: Chi-square 9.294 p-value is 0.002299	Statistically significant
2020	1,030	42,243	0.024	2019 to 2020: Chi-square 0.7233 p-value is 0.395054	Not statistically significant
2021	1,127	41,843	0.027	2020 to 2021: Chi-square 5.20 p-value is 0.02265	Statistically significant
2022					

Barriers:

- COVID-19 Pandemic
- Timeliness of PCP appointment vs using UC or ED
- Lack of knowledge about where to get care appropriate for needs

Comparison to Goal

CHP will show yearly data in the chart below to demonstrate the result of goal to actual rates. As described previously, the COVID-19 pandemic played a large part in PCP utilization for 2021, resulting in the rate being lower than our goal.

Measure: PCP Utilization

Year	Numerator	Denominator	Rate	Goal
2016	124,147	48,640	2.55	N/A
2017	128,745	48,385	2.66	N/A
2018	129,862	47,623	2.73	N/A
2019	117,374	41,946	2.80	N/A
2020	118,250	42,243	2.80	2.94
2021	121,177	41,843	2.90	2.94
2022				2.94

Interventions

CHP and CoxHealth have implemented the following interventions to improve its PCP Utilization measure:

Date	Intervention	Barrier Addressed
2016	Opened Walmart and Hy-Vee walk-in clinics	○ Remove barriers to accessing services such as: ○ Long waits for members to access services. ○ Limited options for members to access services
Ongoing	Added new primary care providers	○ Remove barriers to new members finding a primary care provider ○ Remove barriers to long wait times for new patient appointments
7/2017	Expanded some provider clinics to "super clinics" that offer primary care alongside services ranging from physical therapy to urgent care.	○ Remove barriers to accessing services such as: ○ Long waits for members to access services. ○ Limited options for members to access services.
7/2017	Implemented 269-INFO line to assist patients in finding a new provider and scheduling an appointment.	○ Remove barriers to finding a provider open to new members ○ Remove barriers to scheduling initial appointment
2019	Added walk-in times to existing provider clinics.	○ Remove barriers to accessing services such as: • Long waits for members to access services. • Limited options for members to access services.
2020	Made telehealth visits more accessible, broader hours and more providers at clinics offering telehealth	○ Remove barriers to accessing services in-person due to COVID-19

2021	Sent flyer explaining PCP importance to groups/members	○ Provide information about how to get set up quickly and easily with a PCP and why it is important
2022	Promote virtual visits for care in place of UC/ED	○ Remove barriers to accessing services such as: • Members unsure where to get appropriate care for needs • Timeliness of appointment

Re-Measurement

CHP will re-measure PCP Utilization at least annually to evaluate progress towards meeting its goal. Goals can be re-evaluated during this time and adjusted accordingly.

Additional Corrective Actions

Additional corrective actions are identified on the intervention grid above. CHP will initiate additional corrective actions each year, where necessary.

Findings and Outcomes

The findings and outcomes of this quality initiative will be shared with CHP employees, members, providers, the Quality Improvement Committee, and the Board of Directors. We may add and/or modify goals and interventions when necessary based on findings and outcomes. If the findings at any time during the initiative lead to needed training and education for staff, the education will be created and distributed within the following quarter.

References:

1. US National Library of Medicine. 2012. "The Impact of Primary Care: A Focused Review". https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3820521/ (January 2, 2020)
2. Johns Hopkins University; New York University. 2005. "Contribution of Primary Care to Health Systems and Health". https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2690145/ (February 19, 2020)
3. UTHealth School of Public Health. 2018. "Comparison of utilization of urgent care and primary care 2011-2015". https://www.oatext.com/pdf/FMC-1-102.pdf (February 19, 2020)