Anderson County, SC
Claims Analysis

Analysis Overview

Date Analyzed: June 2020

Dates of Service Analyzed: 01/01/2019 – 12/31/2019

Data Sources: Claims, Eligibility, AtlasMD EMR

Total Number of Claims: 18,628

- **Direct Primary Care Plans:** 9,593
- **Standard Plans:** 9,035

Number of Active Members: 1,911 (21,070 Member Months)

- **Direct Primary Care Plans:** 1,090 (11,921 Member Months)
  - **Average Age:** 33.5 Years Old
- **Standard Plans:** 821 (9,149 Member Months)
  - **Average Age:** 36.2 Years Old

Unique Members with a Medical Claim: 815

- **Direct Primary Care Plans:** 450 (41.3%)
- **Standard Plans:** 365 (44.5%)

Total Plan Paid Amount (Medical + Rx + DPC): $6,735,238

- **Direct Primary Care Plans:** $3,728,965 (Includes Direct Access MD, Varity Primary Medicine, and Gold Standard Pediatrics Costs)
- **Standard Plans:** $3,142,288

Introduction

We at KPI Ninja, a healthcare analytics firm, have provided this case study report to help quantify the return on investment value of Anderson County, SC employee health plan utilizing local Direct Primary Care (DPC) services from Direct Access MD, Verity Primary Medicine and Gold Standard Pediatrics. In the DPC model, patients can email, text, video chat, or call their physician with care needs at any time; or schedule same or next day appointments as needed. Instead of providing short-term reactive care, DPC clinics focus on proactive, preventative care, while building relationships and trust with patients. For example, in addition to adult and family primary care, DPC services include:

Acute and Chronic Disease Management	Weight Management
Allergy Evaluation and Treatment	Women's Health
General Dermatology	Well Checks for Children
Mental Health and Stress Management	Same/Next Day Urgent Care Visits
School, Sports and Workplace Physicals	Patient Education Sessions
Treatment of Sprains, Lacerations, and Broken Bones	Sleep Assessment

Direct Primary Care is the fastest growing model of primary care innovation across the country. Over the past few years, we have seen DPC grow from 273 clinics in 2015, to 1,273 in June of 2020. Further fuel to the flame has arrived from recent government developments. First, through the Centers for Medicare and Medicaid Direct Contracting initiative announced in April of 2019. Second, through U.S. President Donald Trump's executive order in June 2019 regarding pricing transparency, better establishing the Internal Revenue Service's classification of DPC. We believe this national model has grown so rapidly for five primary reasons:

1. Improved patient access to care
2. Improved quality of care
3. Improved provider satisfaction
4. Improved patient satisfaction
5. Significant reduction in cost of care

Here at KPI Ninja, we have built a team of experienced professionals in clinical knowledge, public health, healthcare analytics, data modeling, academic research, and software development to help study the DPC model and tell its story through data. Specifically, this analysis explores Anderson County historical claims data with high level electronic patient health record and telehealth data from the most recent full-year performance period, January 1, 2019 – December 31, 2019. We allowed for a standard industry practice of 3-6 months claims run off.

A list of our publicly available case studies can be found at: https://www.kpininja.com/case-studies.html

Analysis Exclusions

We excluded the following populations from our analysis:

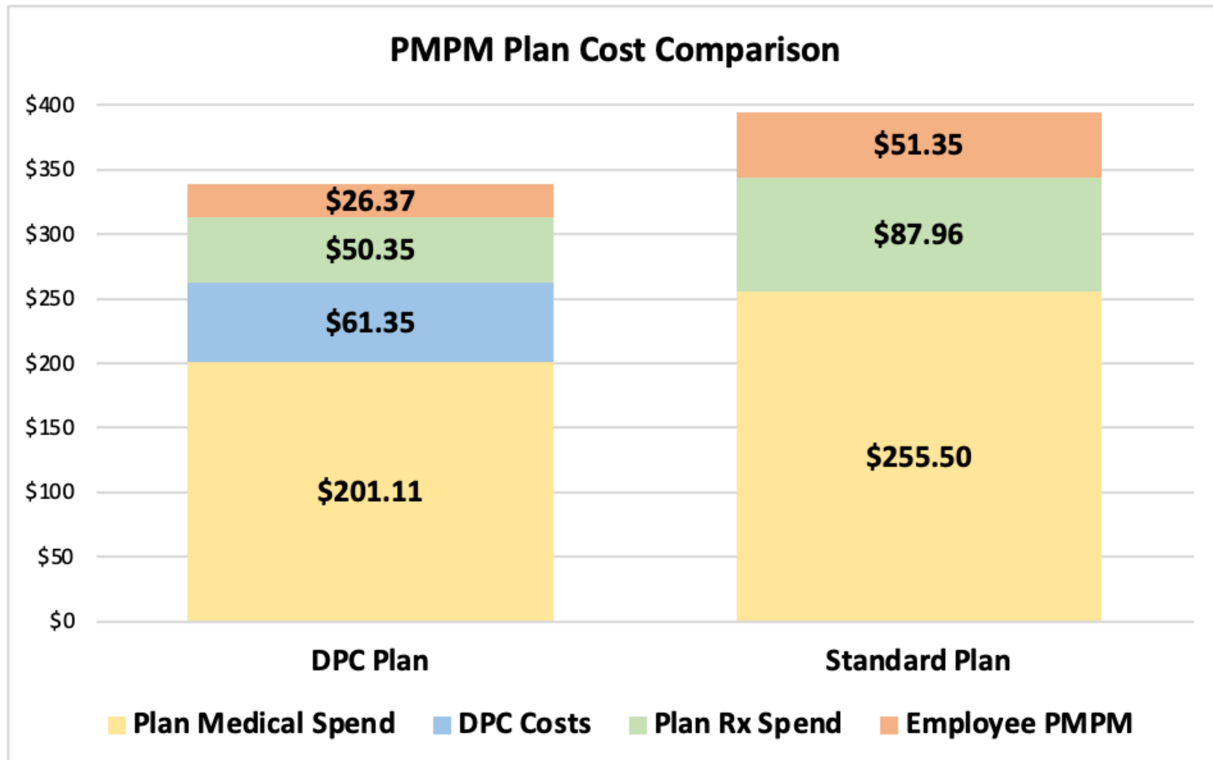
1. Retirees:
    a. We at KPI Ninja are not familiar with what percentage, if any, the plan pays for Retirees.
    b. This population skews older which correlates to higher costs and more utilization. Removing these patients better normalizes the data between the 2 cohorts of DPC Plan members versus Standard Plan members.
2. COBRA members:
    a. We could not distinguish which health plan these members were on or for how long.
3. Patients not found in the eligibility files:
    a. We only had a snapshot of enrollment, so there were a handful of patients in the medical files who may have been enrolled at one time but were not in our data source.
    b. It's possible that some of these missing patients are 2018 or 2020 members but were not enrolled in 2019.
    c. Because of the uncertainty and because we could not attribute these patients to a particular plan, they were removed.

Direct Access MD

Health Plan Cost Metrics

Plan	Plan Medical PMPM	Plan Rx PMPM	Employee PMPM	Total PMPM
DPC	$262.46	$50.35	$26.37	$339.18
Standard	$255.50	$87.96	$51.35	$394.81
Cost Difference	**$(6.96) PMPM**	**$37.61 PMPM**	**$24.98 PMPM**	**$55.63 PMPM**

- Direct savings can not be calculated due to potential multi-causal factors and data limitations of not having population risk measurement, EMR diagnosis data, or pre-DPC historical claims data.



Healthcare Utilization

Telehealth Utilization:

The first access point to primary care for Direct Access MD members is via unlimited access to telehealth services. DPC members are able to interact with care teams and clinicians via text, photo messaging, e-mail, phone calls and video chat. All of which is included in the membership subscription at no additional cost. This allows patients to communicate and access medical guidance on their terms; when they need it. Examples of how this telehealth application is used include:

- Communicating with patients with urgent symptoms including fever or ankle sprain, and sending appropriate prescriptions to nearby pharmacy;
- Directing patients to appropriate level of care for emergent needs;
- Continuous disease management, for example, by routine check ins for blood pressure, blood glucose monitoring, lifestyle habits and care plan adherence;
- For follow-up care related to serious health events performed from surgeries, ED visits and hospital admissions.

It's also important to note that telehealth provides DPC patients with extended virtual care access outside of normal clinical hours. The following chart details the percentage breakdown of communications happening inside of business (Monday-Friday 8am-5pm) compared to outside of business hours (Monday-Friday 5pm-8am and weeekends).

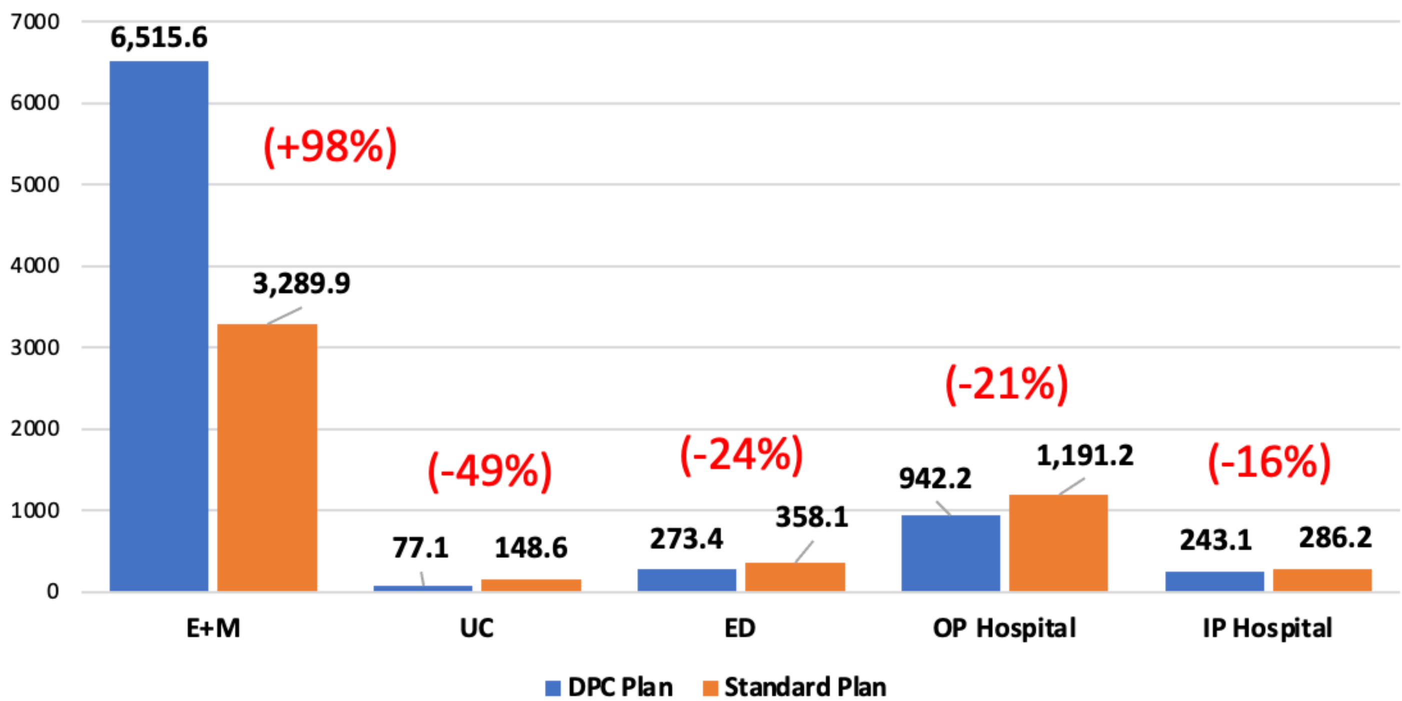
	Business Hours	Non-Business Hours
Text Usage	81%	19%
Voice Usage	77%	23%

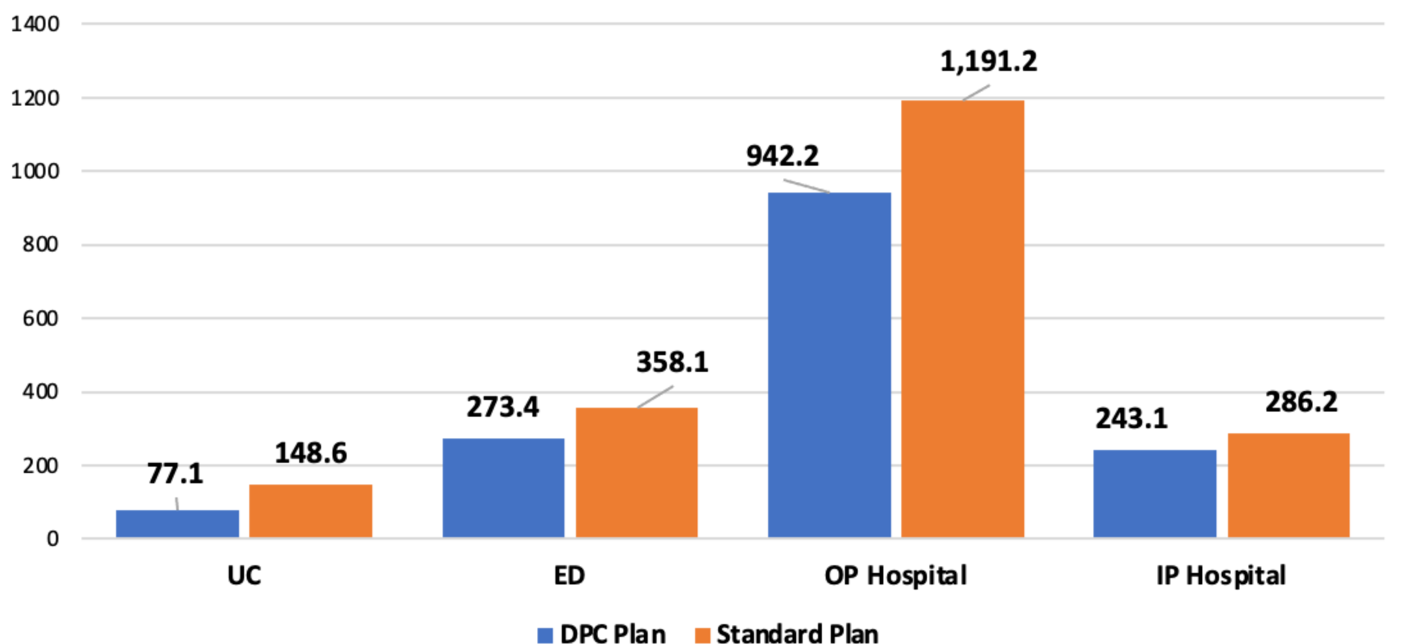
Medical Utilization:

Plan	E + M Visits per 1k	Urgent Care Visits per 1k	Emergency Visits per 1k	Outpatient Hospital Claims per 1k	Inpatient Hospital Claims per 1k
DPC	6,515.6*	77.1	273.4	942.2	243.1
Standard	3,289.9	148.6	358.1	1191.2	286.2
Difference	3,225.7	71.5	84.7	249.0	43.1

*E + M Visits include all Direct Access MD, Varity Primary Health and Gold Standard Pediactrics primary care visits plus any potential outside PCP or specialist Evaluation and Management visits.

Direct Access MD

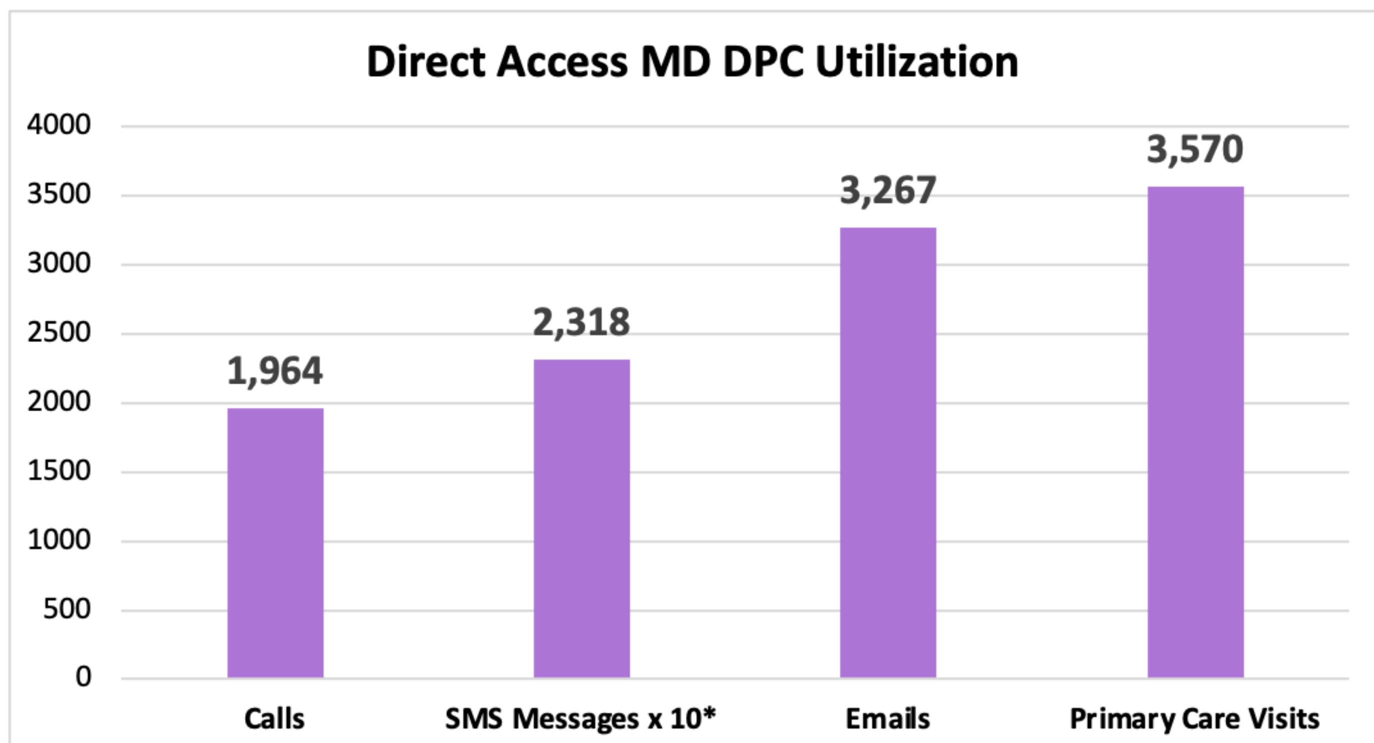




Direct Primary Care Utilization Summary: *

Category	Anderson County	Library	Solicitor's Office	TOTAL
Total patients	755	58	28	841
Total appointments	3231	197	142	3570
Total prescriptions	4922	229	224	5375
Patients with at least 1 appointment	690	54	28	772
In-house dispensed prescriptions	3087	133	149	3369
Lab requests	1063	90	44	1197
Lab results	1909	154	70	2133
SMS Messages	20935	1493	750	23178
Emails	3045	118	104	3267
Phone calls	1804	122	38	1964
SMS Messages (outside office hours)	4079	242	105	4426
Emails (outside office hours)	680	35	13	728
Phone calls (outside office hours)	410	28	14	452
Saved on medication ($)	$48,546	$2,116	$2,636	$53,298
Varity Primary Care 2019 Appointments				327
Gold Standard Peds 2019 Appointments				604

*From Direct Access MD



General Summary

Analysis Overview:

A primary purpose of DPC services is to prevent a claim from happening in the first place. 41.3% of DPC members did not have a claim. Conversely, 44.5% of Standard members did not have a claim. This suggests DPC may be keeping members from utilizing higher cost downstream services. Meanwhile, it should be noted that the 41.3% of DPC members still had access to primary care and preventative services (we are unable to determine how many of this 41.3% utilized DPC, only that these members had access, as the data sources do not share a unique patient ID). Conversely, the 44.5% of Standard plan members without a claim received no care at all. From a public health perspective, the danger here is that these 44.5% of members may be delaying or avoiding needed care. Delaying care can turn small health concerns into large, expensive health concerns. Common reasons for delaying or avoiding care in the United States include: patient financial concerns, inadequate transportation, reluctance to take time away from work from either lost wages or busy work schedules, or unaccomodating clinical office hours.

Case Study Data Limitations

1. We did not have access to the EMR database.
    a. Without access to all the EMR databases, we are unable to measure population health and compare risk across both cohorts. This means these two populations may not be apples to apples. So we are unable to definitively say if the DPC plan is superior.
    b. Without full access to EMR systems, we are unable to assess impact on health outcomes. What was the impact on weight, blood pressure, A1c levels, etc.
    c. Without EMR data, we are unable to easily determine of which patients who did not have claims did in fact receive care at a DPC clinic.