

DIRECT PRIMARY CARE

A Simple Health Care Model Designed to Help Patients With Chronic Disease and Disabilities

> John Locke FOUNDATION POLICY REPORT

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"Hey, what do you want from me? As a primary care physician, ALL I DO is prescribe drugs and refer you to specialists."

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Abstract

For the nation's health care system to slow the growth of health care spending and better manage the prevalence of chronic disease and its association with disabilities, patients need better access to health care. In turn, providers need the flexibility to spend more time with their patients. Direct Primary Care (DPC) is a health care delivery model that has proven to strengthen the physician-patient relationship, provides health care in a transparent and cost-effective manner, and benefits patients with complex conditions. Extending Direct Primary Care as a benefit option for the most costly and complex Medicaid patients can help slow rising health care costs and improve overall chronic care management. Better chronic care management can therefore reduce the incidence or severity of disabilities.

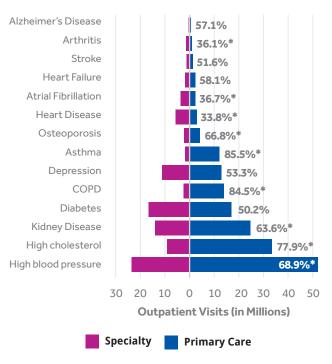
Section I. Introduction

Health coverage and health care are often used as interchangeable terms, but they, in fact, are two different concepts. Having health coverage does not guarantee timely access to health care. The existing barriers to health care, notably at the primary care level, are problematic for many patients and severely impact those with chronic illnesses.¹

While there are many definitions of chronic diseases the U.S. Department of Health and Human Services defines a chronic illness as a condition that lasts a year or more and requires ongoing medical attention and limits activities of daily living. As one half of U.S adults are diagnosed with at least one chronic disease, approximately 25 percent are comorbid, or suffer from multiple conditions. Treating chronic disease is a major cost driver in the U.S. health care system because complex patients require more medical attention, use more medical resources, and face a higher risk of developing disabilities and other medical complications. 4

Fortunately, primary care physicians are tremendous assets in helping manage chronic care, as they can treat over 80 percent of patients' needs. In fact, the graph on this page shows that patients are more likely to seek

Number and Percentage of Outpatient Chronic Condition Visits by Physician Type



* P < 0.05 significant test done by SAS Procedure Surveyfreq Roa-Scott x2 test.

SOURCE: The Journal of the American Board of Family Medicine, 2008 National Ambulatory Medical Care Survey

treatment from a primary care physician for a majority of the 14 highest-cost diseases compared to seeking care from a specialist.⁵ It is also proven that a higher supply of primary care physicians per capita in various geographic regions yields lower mortality rates, better quality care, and less per-capita spending, compared to a greater presence of specialist care and fewer primary care physicians.⁶ Ultimately, they serve as gatekeepers for their patients, taking on full responsibility for care coordination and continuity.

However, the U.S. health care system's ever-evolving regulatory environment and primary care physician shortage makes it increasingly difficult for the primary care work force to thoroughly manage chronic disease and associated disabilities.⁷ As a result, patients have limited interaction with their primary care provider, and may face longer wait times for in-office treatment.

Section II. Access

One of the main challenges for patients with chronic conditions, including those who are likely to develop disabilities, is the difficulty to access a primary care physician. As this report will later explain, Direct Primary Care is an effective health care delivery model that addresses this problem.

Time to be seen by a primary care physician

Despite many metropolitan areas having a *higher* physician-population ratio compared to the U.S. average, the average time to be seen by a family physician is 19.5 days. Merritt Hawkins, a physician-recruiting firm, arrived at this conclusion after surveying 15 different cities in the United States.⁸

Many factors contribute to varying patient wait times. The authors cite seasonality as a major factor, such as provider vacation time or demand for certain services. Differing practice management models are another factor. Traditionally, practices try to control their already saturated schedules by pushing non-urgent appointments further out during the calendar year and double-book their days with visits that require immediate attention. Others resort to carve-out models, in which part of a provider's schedule sets aside a defined amount of appointment slots for certain types of "predictable" services. This, too, also leads to delays in care for patients whose needs don't "fit" into carve-out slots.

Another factor in the access problem is economic incentives. Compared to Medicare patients and patients with private coverage, Medicaid patients often wait longer to see a medical provider. In large part, this is due to the fact that the state-federal health insurance program reimburses providers well below market rates. ¹⁰ The Urban Institute reports that average Medicaid payments to primary care physicians are equivalent to 58 percent of all Medicare payments. ¹¹ Payment disparities across public and private health insurance carriers indicate why new-patient Medicaid acceptance rates for family practices are 45.7 percent compared to 77.3 percent for Medicare services. ¹² Moreover, chronically

Cumulative Average Wait Time In Days For Family Practice

20.3

19.5

2009

2013

Minimum and Maximum Wait Time For Family Practice

5 days

66 days

Minimum (Dallas)

Maximum (Boston)

Source: Merritt Hawkins 2014 Survey: Physician Appointment Wait Times and Medicaid and Medicare Acceptance Rates

Percentage of Patients Whose Chronic Disease is Uncontrolled

50% of people with <u>hypertension</u>

60% of people with <u>hyperlipidemia</u>

43% of people with diabetes

Source: Annals of Family Medicine. Vol. 10. No 5. Sept/Oct 2012

ill Medicaid children are six to 14 times more likely to be denied an appointment compared to privately insured children.¹³

The Patient Protection and Affordable Care Act (ACA) attempted to improve Medicaid patients' access to basic health care services by temporarily increasing primary care provider rates equivalent to Medicare levels throughout 2013 and 2014. Higher reimbursement did correlate with higher acceptance for this patient population. However, there were minimal changes in wait times. ¹⁴

Time spent with a primary care physician

As the nation's health care system has evolved, the economic and administrative pressures as well as an increase in demand for patient care has stretched the primary care work force thin.

The advent of managed care in the early 1990s brought the time constraint issue to a head. In efforts to

contain rising health care costs, insurance companies developed narrow provider networks and negotiated lower reimbursement rates with physicians in exchange for a higher volume of patients. 15, 16

The resulting aftermath left many patients feeling rushed through their appointments. Primary care providers needed to make up for a reduction in third-party payment by treating more patients per day to keep up with their practice's overhead expenses. Declining reimbursement patterns across private and public payers persist today. 17

Dr. Steven S. Schimpff, an internist and former CEO of the University of Maryland Medical Center, recommends that the nation's prevailing fee-for-service payment structure should no longer pay solely on the volume of services provided, but instead pay physicians to restore their bond with patients:

Insurers should look to new approaches that pay the PCP to actually spend time with the patient – time to listen, time to prevent, time to treat, time to coordinate chronic care, time to think and time to interact with their colleagues, especially regarding more difficult situations. 18

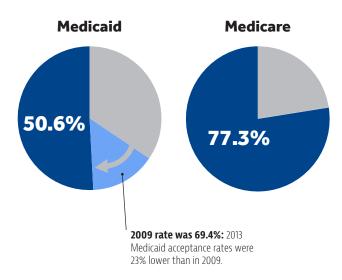
Frustration among providers and patients is further induced by other bureaucratic complexities. According to the American Medical Association (AMA), doctor offices can spend up to 20 hours per week obtaining prior approval by third-party payers when ordering tests and prescriptions for their patients.¹⁹ Physician reimbursement is also increasingly tied to reporting metrics and entering patient data into personal electronic health records (EHR). Studies show that 43 percent of physicians spend more than one-third of their day on these tasks. Although process and health outcome metrics are used to generate universal health care quality indicators, 87 percent of surveyed physicians feel professional burnout due to the inefficiencies of these administrative demands.²⁰

Section III. Chronic Diseases

There are simply not enough hours in a day for a solo family practitioner to care for patients who require a significant amount of medical attention. Today, a physician is responsible for an average 2,300 patients in an insurance-based practice setting.²¹ Assuming a patient panel is representative of the U.S. population, treating those who are diagnosed with the 10 most common chronic illnesses alone would consume 10.6 hours per day, exceeding the average number of hours a physician works in one year by 27 percent.²²

The human and economic costs of patients with com-

2013 Cumulative Average **Acceptance Rates For Family Practice**



Source: Merritt Hawkins 2014 Survey: Physician Appointment Wait Times and Medicaid and Medicare Acceptance Rates

10 Common Chronic Diseases

- High cholesterol
- Arthritis
- High blood pressure
- Anxiety

- Depression
- Lung disease
- Asthma
- Heart disease
- Diabetes
- Osteoporosis

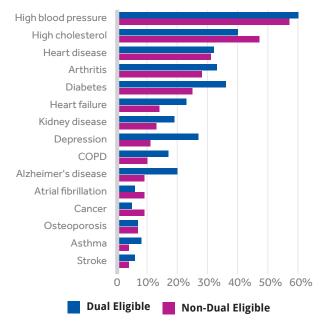
plex conditions are very real. In 2010, 86 percent of health care spending was attributed to Americans with just one chronic disease, while 71 percent of spending went towards patients with multiple. 23, 24

A Center for Medicare and Medicaid Services (CMS) analysis of claims data from a sampling of 31 million Medicare patients reveals that disease prevalence, comorbidities, and per-capita spending is often higher for low-income Medicare patients who qualify for long-term care support services through Medicaid, otherwise known as "dual eligibles."25

For more information on disease prevalence and co-

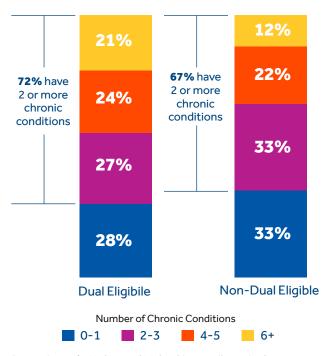


Percentage of Medicare Beneficiaries With Chronic Conditions



Source: Centers for Medicare and Medicaid Services. Chronic Conditions among Medicare Beneficiaries Chart Book 2012 Edition. Baltimore, Maryland 2012.

Percentage of Medicare Beneficiaries By Number of Chronic Conditions



Source: Centers for Medicare and Medicaid Services. Chronic Conditions among Medicare Beneficiaries Chart Book 2012 Edition. Baltimore, Maryland 2012.

morbity spending comparisons between dual eligibles and Medicare patients ages 65 and older in North Carolina and the Southeast, see Appendices 1 and 2.²⁶

Dual eligibles make up just 14 percent of Medicaid enrollees nationwide, yet they consume over one-third of Medicaid spending.²⁷ Much of dual-eligible spending pays for nursing homes and personal care services, but Medicaid also pays for these patients' out-of-pocket expenses for the following services covered under Medicare: inpatient hospital services, outpatient treatment, and prescription drugs.²⁸

The strong associations between poverty and disease explain why 72 percent of dual eligibles have two or more chronic illnesses. Higher spending levels also account for the cost of disabilities that develop from chronic disease complications. For example, arthritis and diabetes are leading causes of limited mobility, while asthma is a common cause of physical disability for children. Across the U.S., 40 percent of dual eligibles alone suffer from disabilities.²⁹

Aside from the dual-eligible population, over 10 million children and adults on Medicaid are burdened with disabilities.³⁰

Section IV. Direct Primary Care

The U.S. health care system continues to investigate ways in which physicians can improve chronic care. Many clinicians are resorting to primary care medical home models (PCMH)³¹ in which certain components of patient care are led by nurses, pharmacists, health coaches, and care managers.³² Evidence supports that team-based care has helped reduce average length of hospital stays, hospital readmission rates, and emergency room usage.³³ The federal government has encouraged more providers to care for chronically ill Medicaid patients under this model by offering to pay for a larger share of operating costs over a two-year period.³⁴

Another emerging health care delivery model that is appealing for patients and physicians is Direct Primary Care (DPC). The available qualitative and quantitative data make a compelling case that chronically ill patients value DPC from a quality and cost perspective. A nationwide sampling of 7,000 Direct Primary Care patients above the age of 18 shows that 71 percent are diagnosed with at least one chronic disease (See Appendix 3).

Direct Primary Care is a simplified health care business model that removes insurance companies from basic primary care.³⁵ In exchange for an average monthly fee of around \$75, patients have unrestricted access to their physician and unlimited access to a defined package of services.³⁶ In most cases, primary care physicians are

Aside from the dual-eligible population, over 10 million children and adults on Medicaid are burdened with disabilities.

available around the clock, in person, by phone, text, or by e-mail.

DPC has been around for 20 years, but this model has become more popular in recent years. As of 2014, over 4,400 doctors in the U.S. had transitioned to Direct Primary Care delivery. While this represents less than 2 percent of family doctors in the U.S., it is a significant increase from just 146 in 2005.³⁷ Physicians are attracted to DPC because these practices do not have to spend 40 percent

or more of their revenue on overhead costs and personnel responsible for filing insurance claims.³⁸

Opting out of insurance contracts, therefore, allows smaller practices to break even on as little as four patients per day, rather than an average of 32 in today's typical practice setting.³⁹ According to an article published in *Health Affairs*, DPC doctors can treat roughly one-third the number of patients normally seen in a medical office that accepts insurance and still bring in comparable prac-

Patient Story: Massachusetts



"People ask me what it is that brings patients into my office? I call it 'the catalyst', says a Massachusetts direct care physician. "It can be anything

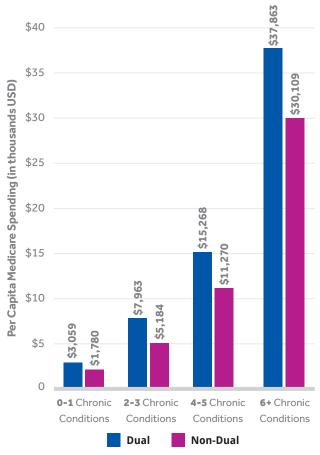
from having to wait two weeks for an appointment to getting to their appointment and being told the wait would be an hour. It can be anything that small to what happened with one of my current patients who used to be seen at my former practice. His wife ended up signing him and their whole family up with me six months after his physician diagnosed him with the flu and overlooked other medical issues."

When initially told to go home and rest, the patient's condition was getting worse over the next five days. His wife called the physician's office and was directed to go to the emergency room.

"What they didn't do was they didn't look at his legs which have chronic venous insufficiency and he's had a history of recurrent cellulitis. He was not started on antibiotics. It was two months later when he was discharged from the intensive care unit from sepsis, he was coded three times from heart block from an infection that spread from the cellulitis from dialysis because his kidneys shut down," he explains. He hones in on the importance of access and time and how direct care grants providers more flexibility to holistically assess patient needs. "Maybe I wouldn't have prevented these series of events, maybe I would have. How much money did the system just spend for taking care of something that could have been completely prevented?"

Source: Patient Interview (October, 2016)

Per Capita Spending For Medicare Beneficiaries - 2010



Source: Centers for Medicare and Medicaid Services. Chronic Conditions among Medicare Beneficiaries Chart Book 2012 Edition. Baltimore, Maryland 2012.

Proliferation of Direct Primary Care Facilities in North Carolina



tice revenues.⁴⁰ More importantly, DPC heightens providers' professional satisfaction because they can practice with more autonomy and fewer administrative demands.

Because DPC practices do not accept insurance, it may seem counterintuitive that these physicians have sustainable practices under the ACA's individual and employer health insurance mandates. Interestingly, Section 10104 of the federal health law *endorses* DPC if it is accompanied by catastrophic health coverage that includes benefits outside of primary care. Theoretically, if patients purchase a "wraparound" plan and seek care through a DPC practice, the individual mandate to have government-approved health insurance fulfills the individual mandate.

However, insurers have not taken the initiative to offer these types of plans in the individual policyholder market. The Department of Health and Human Services (DHHS) Secretary, Tom Price, M.D., has yet to clarify what benefits must be included for these products to be deemed as "qualified." ⁴² In the meantime, patients who subscribe to Direct Primary Care are advised by practitioners to purchase a high-deductible health plan for medical emergencies.

Benefits to patients

DPC is relatively inexpensive to administer. Industry-wide data show that average monthly memberships vary from \$25 to \$85.43 In return, patients are entitled to around-the-clock care that may include services such as comprehensive annual physicals, EKG testing, joint injections, laceration repairs, and skin biopsies. Many practices also dispense prescription drugs in-house at wholesale cost and provide discounted imaging and lab work.44 The chart on page 9 provides a representative snapshot of what a patient would typically pay for labs and medications through a direct care physician com-

Patient Story: Idaho

Direct Primary Care benefits some of the most vulnerable users of the health care system. "This is a real person, a real medication list and a REAL amount that a person was paying for generic

medications through a national pharmacy's "discount" program. He is now my patient," says a direct care physician who practices in Idaho. She clicks on his chart and rattles off the number of chronic illnesses...diabetes, sleep apnea, thyroid disease, gout, high blood pressure, coronary artery disease, and depression.

His medication cost before joining her direct care practice was \$868 every 3 months. Since joining, he pays \$154 every three months for the same medications. When including the patient's \$60 monthly membership fee, his total out of pocket costs amounts to \$1,336. "That's over \$2,000 saved on prescriptions alone or money in his pocket for better things," the doctor says.

She further remarks that labs are another story to talk about. "People are getting killed with out of pocket costs for labs. With insurance, he would be paying \$300-\$400 a year for lab costs that track and monitor his chronic conditions, versus maybe \$60 a year for the same type of labs through our practice." She proceeds to itemize the cost of her practice's labs they offer to patients at a wholesale discount price. "Disease control defines the number of tests and lab frequency. Routine testing takes place two to four times per year. For his needs, we provide a cholesterol panel for \$3, a metabolic panel for \$4 for kidney function, a diabetes baseline measurement lab (A1c) for \$4.50, and a thyroid test for \$4."

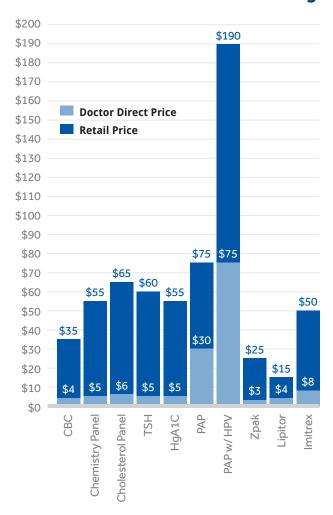
Source: Patient Interview (October, 2016)

pared to average local retail prices. (Note: These charges are in addition to membership fees.)

Since the ACA's individual mandate requires everyone to purchase health insurance that includes preventative health care services, many perceive that direct care patients are paying twice for health care. But Americans with insurance are already committing to two payments for health care – monthly premiums plus co-pays and/or co-insurance.

Despite limited data on direct care, the existing research literature concludes that patients enjoy improved health outcomes and can save on overall health expenditures, compared to those navigating the traditional health insurance system.⁴⁵ This is, in large part, because

Discounted Lab and Medicine Pricing



Source: www.doctordirectmd.com

physicians afford more time to their patients at the primary care level.

For example, a study conducted by the University of North Carolina School of Medicine and North Carolina State University MBA students found that patients seeking treatment from a direct care physician's practice in Apex, North Carolina, enjoyed an average of 35 minutes per visit compared to 8 minutes in a non-direct care practice setting, while spending 85 percent less money. 46

Benefits to employers

While a majority of direct care takes place in a small practice setting, there are a growing number of DPC establishments that specialize in contracting with large employers in the private and public sectors.

Patient Story: North Carolina



A practice located in North Carolina provides an example of how DPC provides fast access

to care for patients who need lots of medical attention. One of the practice's current patients, a 50-year old male, initially scheduled a visit with an insurance-based primary care practice to be seen for complaints of blurry vision and was referred to an ophthalmologist. He left his specialist appointment without a diagnosis.

Dissatisfied, the patient decided to see what the direct care practice had to offer. At his initial assessment, he was diagnosed with diabetes for the first time in his life. His blood sugars read above 500. "It's pivotal moments like these where DPC doctors can get back to the heart of doctoring," says one of the practice's physicians.

The practice coordinated prescriptions for a glucometer, diabetic testing devices, and insulin. That same evening, the patient and his wife picked up these supplies at a nearby pharmacy after work and proceeded to spend two hours learning about effective diabetes management in his Direct Primary Care doctor's office; everything from administering insulin to checking blood sugar levels.

"For the first two weeks, we were in daily communication with him, either by phone or our electronic portal. As he improved, we were able to space out our communications. Now a few months into treatment, he is doing exceptionally well and we're excited to anticipate the improvement in his quarterly labs for glucose control," says the physician.

When asked about how DPC compares to the conventional health care system regarding access to care and treatment for medically needy patients, he expressed that the conventional system's insurance demands and limited patient interaction make it difficult for physicians to practice to their full capabilities.

"I don't want this to be a matter of 'oh, we're better diagnosticians or anything. It goes beyond that. We're talking about a system of care. The processes of care in most conventional practices are unwieldy and make it difficult to allot the kind of high-touch and timely care that we were able to provide in this case."

Source: Patient Interview (October, 2016)



Cost By Chronic Conditions

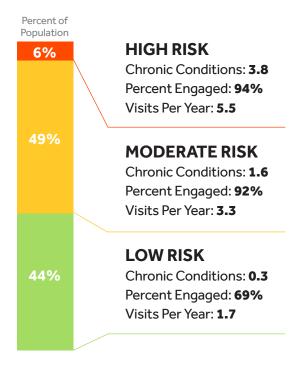
Direct Primary Care members with one or more chronic conditions cost an average 28% less than the traditional group.



Note: The descriptive data does not determine selection bias

Health Status of Direct Primary Care Members

Members with higher risk profiles had higher engagement and utilized the clinic five times per year.



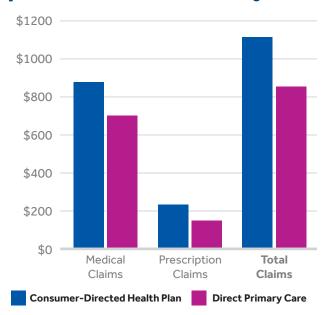
Note: Engagement is defined as having at least one face-to-face visit. Population risk based on individuals with a valid ACG Risk Score (96% of the member population)

Union County, which is near Charlotte, North Carolina, has piloted an innovative program that both lowers the cost of providing health care to its employees and improves access to that care. In April 2015, Union County took additional steps to optimize its self-funded high-deductible health plan by offering county workers a direct-care-benefit option. They were the first county in the state to offer such a plan, and their experience offers valuable lessons to other government entities. Within one year, Union County's contract with a large-scale direct care organization has saved the health care system and taxpayers over \$1.28 million in health care claims.

Available Union County data suggest that the added benefit option for employees helps patients with chronic illnesses. To be clear, the information is limited, and more empirical research would be needed to adequately compare the demographics between the county's DPC enrollees and enrollees in the traditional health plan.⁴⁷

- 59 percent of DPC members have at least one chronic illness, while 35 percent are diagnosed with multiple chronic illnesses.
 The most common diseases are high blood pressure and hyperlipidemia.⁴⁸
- Of the 55 percent of DPC members in Union County who have moderate-to-severe chronic conditions, over 90 percent are heavily engaged with their health care. Patients with more than three chronic conditions averaged more than five visits in one year, while those with more than one chronic illness averaged over three visits. 49

Claims Expenses per Employee per Month in Union County, N.C.



Patient Story: Pennsylvania

A married couple living in Pennsylvania has enjoyed greater out-of-pocket cost savings and better health care access since their family physician of more than 10 years decided to open up her own direct care practice. "She is a wonderful doctor to us, and is very professional and compassionate. When she had her town meeting last December to talk to us about her new office, we were both excited about the possibility and we both qot on board," they said.

"It's more convenient, more cost effective," says the wife. "You can go in as often as you need to, and that's comforting to know. You know, we are seniors now. We can go in and talk about several complaints in one office, not that we do, but it's a nice security blanket."

Ninety percent of their medications are now purchased through their direct care doctor, since the practice dispenses prescriptions at wholesale cost. In many cases, they pay less for medicine that helps manage the husband's Parkinson's disease compared to what he would otherwise pay through their Medicare coverage.

| Prescriptions for | Medicare | Nat. Wholesaler | | |
|--------------------------------|-------------------|-------------------|--|--|
| Low blood pressure | \$30.80 (30 days) | \$29.66 (30 days) | | |
| High blood pressure/Chest pain | \$6.50 (30 days) | \$1.89 (30 days) | | |
| Parkinson's disease | \$96.66 (30 days) | \$18.36 (30 days) | | |

Source: Patient Interview (November, 2016)

• DPC members with more than one chronic condition cost, on average, 28 percent less than those enrolled in Union County's traditional insurance plan.⁵⁰

Total savings of \$1.28 million is calculated by comparing the average per-employee, per-month (PEPM) cost of both medical and prescription claims incurred by employees who subscribe only to Union County's consumer-driven health plan versus those who use DPC. The table on this page illustrates an average PEPM savings of over \$260 for the 44 percent of Union County's employees who have chosen DPC. ⁵¹

According to Union County officials, DPC participants:

- incur 23 percent less in medical expenses than CDHP participants, yielding annual savings of \$1.28 million
- incur 36 percent less in prescription expenses compared to CDHP participants, yielding annual savings of \$239,000
- spend 46 percent less out-of-pocket for prescription and medical expenses than CDHP patients, a \$333,639 annual savings
- report significant improvement in their overall health since electing the DPC option by a nearly 3-to-1 margin⁵²

The clinic is located near government offices, making appointments convenient. Annual employee membership fees are fully covered by Union County. Patients are also not subject to co-pays, which further removes barriers to care and possible self-rationing for otherwise necessary medical attention.

Under Union County's traditional insurance plan, employees are responsible for co-pays for routine medical expenses of up to \$750 until the employer matches that same amount through an employee's health reimbursement account (HRA). But that money now remains in the pockets of employees who choose direct care. In return, patients are entitled to a variety of services, such as chronic disease management, fitness and nutritional coaching, vision and hearing screening, well-child visits, basic splinting, wound care, stitches, skin cyst removal, basic labs, and a variety of immunizations.

Union County was able to implement DPC while also saving money. They did so by redirecting the \$750 they were previously putting into a health reimbursement account (HRA) and using it instead to pay for a portion

Traditional Plan



Because Union County selfinsures, the employer pays 100% of all expenses once the employee has reached the \$2,000 maximum out of pocket

Direct Primary Care



Because Union County selfinsures, the employer pays 100% of all expenses once the employee has reached the \$2,000 maximum out of pocket

of the employees' DPC memberships. This, along with claims savings, allows Union County to extend an added benefit to its employees at lower cost.

Benefits to the state

Union County has approximately 1,000 employees. There are more than 66,000 county government employees across North Carolina. If other counties added a DPC option, had similar employee participation rates, and accrued similar per employee savings, statewide savings could easily amount to nearly \$75 million within the first year. ⁵³ If employee participation were to increase or counties yielded larger per-employee savings, then accumulated savings would be even higher. While each county will face a unique set of circumstances, the potential savings are significant enough that local governments should consider whether DPC might be a viable option for their employees.

For county and statewide governments that continue to operate tight budgets and multiple demands on limited resources, DPC offers a unique opportunity to save millions of dollars while maintaining and even improving the quality of employee health care. These are funds that could be returned to taxpayers in the form of lower property taxes or allocated to other projects that governments wish to fund.

Response to Direct Primary Care concerns

Despite the transparency in pricing, convenience, affordability, and luxury of time Direct Primary Care offers to its members, critics contend that, if membership medicine were adopted as a national model, this would exacerbate the projected physician shortage because there is not an adequate supply of primary care providers to care for fewer than 800 patients in one panel.⁵⁴ Many people would then be left without equitable access.

However, DPC providers have expressed that while traditional primary care has lost its professional appeal, productivity levels have worsened due to inefficiencies that compromise interactive patient care.⁵⁵ If the amount of non-value-added time were redirected toward the physician-patient relationship and medical school curriculums invested time in educating students and residents about the DPC practice model, the industry-wide shortage has the potential to lessen in severity.⁵⁶

Recommendations for North Carolina

The following policy recommendations for North Carolina lawmakers to consider could encourage more physicians to practice DPC and provide an opportunity for

As health care costs continue to rise faster than the rate of general inflation, state and local governments must necessarily consider new and innovative ideas.

Medicaid patients, specifically those with chronic conditions and disabilities, to choose a DPC physician as their primary care provider.

1. Pass Clarifying Legislation

While DPC in North Carolina faces minimal regulatory hurdles at the state level, it would be wise for policymakers to pass legislation that simply states that direct care providers do not act as a risk-bearing entity, so that patients' monthly DPC membership fees are not classified as an insurance premium. Legislation that clearly defines DPC as not being an insurance product will save this health care delivery method from being subject to regulations under the North Carolina Department of Insurance (DOI). To date, 17 states have enacted legislation that specifically defines DPC not acting as insurance.⁵⁷

Passing clarifying legislation would likely lead to a stronger DPC presence in North Carolina. It would also assist in rekindling the appeal of the primary care profession⁵⁸, which is critically important.

2. Maintain DPC's Physician-Patient Relationship and Extend DPC as a Choice For Medicaid Patients

The raison d'etre for Direct Primary Care doctors is their ability to provide high-quality, low-cost health care without government interference. Extending DPC to Medicaid patients will involve government intrusion.

A voucher model recommended for North Carolina's Medicaid program may solve the issue (See Appendix 4). Medicaid would deposit money into a patient's account and the patient could spend that money on any Medicaid approved expense – inclusive of direct care membership fees. All documentation and

interaction with Medicaid would be the patient's responsibility. The Direct Primary Care physician would not have any interaction with Medicaid, and would still maintain authority over how much he/she charges for patient membership fees and out-of-pocket costs for labs and prescription medications.

Michigan attempted to pass a pilot program in 2015 that would offer Medicaid patients the choice to seek primary care through a direct care physician. The state proposal would deposit an average monthly fee of \$70 into a Medicaid patient's Healthy Michigan account, similar to a health savings account. Although direct care physicians would have to abide by the government's rate setting, they wouldn't be required to submit process metrics or other data that Medicaid managed care organizations are subject to as specified in their own contracts. Rather, the pilot program's effectiveness would have been tested by the amount of total savings accrued when comparing the severity and number of health care claims incurred between the DPC Medicaid population and the traditional Medicaid managed care population.⁵⁹

In efforts to slow the growth of rising health care costs and improve chronic patient care, DPC can be expanded at the state level to better serve the most vulnerable Medicaid patients. North Carolina's 316,000 dual eligibles account for just 17 percent of the state's Medicaid enrollees yet consume 32 percent of the program's total costs. Sixty-four percent of the state's low-income seniors are disabled. 1

As health care costs continue to rise faster than the rate of general inflation, state and local governments must necessarily consider new and innovative ideas. The DPC model has the potential to go beyond *reforming* our nation's health care system to effectively *transforming* it. This will reduce the likelihood of chronically ill patients developing disabilities.

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APPENDIX 1 - PREVALENCE COMPARISONS

Diabetes Prevalence: Percent Of Dual Eligibles (65+)

| STATE/REGION | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | % CHANGE |
|-------------------|------|------|-------|-------|-------|-------|-------|-------|----------|
| NATIONAL | 38.6 | 39.8 | 40.7 | 41.15 | 41.67 | 42.08 | 42.2 | 41.83 | 8% |
| ALABAMA | 36.5 | 37.7 | 39.02 | 39.53 | 40.43 | 41.19 | 40.96 | 40.97 | 12% |
| FLORIDA | 40.8 | 42.5 | 43.39 | 43.46 | 44.02 | 44.54 | 45.23 | 45.19 | 11% |
| GEORGIA | 37.6 | 38.8 | 39.47 | 39.24 | 39.34 | 39.36 | 39.87 | 39.85 | 6% |
| KENTUCKY | 37.1 | 38.1 | 38.97 | 39.27 | 40.02 | 40.67 | 41.02 | 40.96 | 10% |
| LOUISIANA | 39.7 | 40.4 | 41.28 | 41.57 | 42 | 42.59 | 42.92 | 43.12 | 9% |
| MISSISSIPPI | 38.5 | 39.5 | 40.43 | 40.81 | 41.41 | 41.75 | 41.87 | 41.86 | 9% |
| NORTH CAROLINA | 39.1 | 40.2 | 40.88 | 41.37 | 42 | 42.58 | 42.66 | 42.8 | 9% |
| SOUTH CAROLINA | 39.0 | 39.8 | 40.27 | 39.31 | 38.98 | 39.23 | 39.77 | 39.7 | 2% |
| TENNESSEE | 37.0 | 38.2 | 39.19 | 39.46 | 40 | 40.24 | 40.08 | 39.98 | 8% |
| TEXAS | 42.2 | 44.1 | 45.57 | 46.1 | 46.53 | 46.74 | 47.29 | 47.46 | 13% |
| VIRGINIA | 39.4 | 40.1 | 40.56 | 40.74 | 41.5 | 42.23 | 42.49 | 42.28 | 7% |
| SOUTHEAST AVERAGE | 38.8 | 40.0 | 40.8 | 41.0 | 41.5 | 41.9 | 42.2 | 42.2 | 9% |

Hypertension Prevalence: Percent Of Dual Eligibles (65+)

| STATE/REGION | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | % CHANGE |
|-------------------|------|------|------|------|------|------|------|------|----------|
| NATIONAL | 68.8 | 70.2 | 71.6 | 72.2 | 72.6 | 72.5 | 72.5 | 71.7 | 4% |
| ALABAMA | 72.8 | 74.4 | 75.5 | 75.8 | 76.3 | 77.3 | 77.4 | 77.3 | 6% |
| FLORIDA | 72.5 | 74.2 | 75.6 | 76.2 | 76.6 | 76.7 | 76.7 | 76.2 | 5% |
| GEORGIA | 73.7 | 75.6 | 76.5 | 76.8 | 76.9 | 76.8 | 77.0 | 76.3 | 4% |
| KENTUCKY | 70.3 | 71.0 | 72.3 | 73.1 | 74.7 | 75.4 | 76.1 | 75.6 | 7% |
| LOUISIANA | 75.8 | 77.2 | 78.8 | 79.3 | 79.4 | 79.6 | 79.9 | 79.7 | 5% |
| MISSISSIPPI | 74.1 | 75.2 | 76.7 | 77.1 | 77.8 | 78.0 | 78.1 | 78.1 | 5% |
| NORTH CAROLINA | 70.0 | 71.7 | 73.3 | 74.1 | 74.6 | 74.7 | 74.9 | 75.1 | 7% |
| SOUTH CAROLINA | 74.0 | 75.6 | 76.9 | 77.0 | 76.5 | 76.2 | 76.1 | 76.1 | 3% |
| TENNESSEE | 70.8 | 72.2 | 73.7 | 74.1 | 74.4 | 74.7 | 74.6 | 74.5 | 5% |
| TEXAS | 72.1 | 74.0 | 75.5 | 76.3 | 76.6 | 76.5 | 76.4 | 76.3 | 6% |
| VIRGINIA | 71.0 | 72.2 | 73.6 | 74.0 | 74.8 | 75.2 | 75.3 | 74.7 | 5% |
| SOUTHEAST AVERAGE | 72.5 | 73.9 | 75.3 | 75.8 | 76.2 | 76.5 | 76.6 | 76.4 | 5% |

Hyperlipidemia Prevalence: Percent Of Dual Eligibles (65+)

| STATE/REGION | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | % CHANGE |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
| NATIONAL | 38.52 | 40.83 | 43.26 | 45.05 | 47.81 | 48.62 | 49.19 | 48.91 | 27% |
| ALABAMA | 35.14 | 37.2 | 39.75 | 40.71 | 43.96 | 45.77 | 47.27 | 48.14 | 37% |
| FLORIDA | 45.55 | 48.2 | 50.33 | 51.93 | 54.56 | 55.22 | 55.56 | 55.47 | 22% |
| GEORGIA | 36.26 | 39.4 | 42.47 | 44.35 | 47.31 | 48.43 | 49.08 | 49.28 | 36% |
| KENTUCKY | 41.01 | 42.3 | 44.63 | 46.04 | 49.83 | 51.29 | 52.96 | 53.14 | 30% |
| LOUISIANA | 37.43 | 39.7 | 42.84 | 44.58 | 47.46 | 48.89 | 50.05 | 50.99 | 36% |
| MISSISSIPPI | 29.86 | 32.24 | 34.68 | 36.28 | 39.94 | 41.65 | 43.07 | 44.16 | 48% |
| NORTH CAROLINA | 36.84 | 39.65 | 42.39 | 44.9 | 48.13 | 49.07 | 49.73 | 50.26 | 36% |
| SOUTH CAROLINA | 37.31 | 40.01 | 42.19 | 43.48 | 46.12 | 47.26 | 47.9 | 48.47 | 30% |
| TENNESSEE | 36.94 | 39.41 | 41.34 | 42.4 | 44.87 | 45.74 | 46.42 | 46.51 | 26% |
| TEXAS | 41.85 | 44.86 | 47.57 | 49.44 | 52.2 | 53.09 | 53.94 | 54.43 | 30% |
| VIRGINIA | 38.11 | 41.04 | 43.36 | 45.33 | 49.04 | 50.65 | 51.19 | 51.88 | 36% |
| SOUTHEAST AVERAGE | 37.8 | 40.4 | 42.9 | 44.5 | 47.6 | 48.8 | 49.7 | 50.2 | 33% |

Arthritis Prevalence: Percent Of Dual Eligibles (65+)

| STATE/REGION | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | % CHANGE |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
| NATIONAL | 36.48 | 37.4 | 38.54 | 39.09 | 39.94 | 40.51 | 40.46 | 39.98 | 10% |
| ALABAMA | 38.79 | 39.86 | 41.11 | 41.47 | 42.26 | 43.5 | 43.46 | 44.19 | 14% |
| FLORIDA | 42.71 | 44.73 | 46.4 | 46.58 | 47.01 | 47.66 | 47.82 | 46.91 | 10% |
| GEORGIA | 35.62 | 36.41 | 37.42 | 37.29 | 38.34 | 39 | 38.76 | 38.41 | 8% |
| KENTUCKY | 35.82 | 36.67 | 37.99 | 38.66 | 40.63 | 41.84 | 43.32 | 43.31 | 21% |
| LOUISIANA | 40.25 | 40.91 | 42.62 | 43.59 | 44.59 | 45.23 | 45.18 | 45.06 | 12% |
| MISSISSIPPI | 37.41 | 39.15 | 40.48 | 40.68 | 42.03 | 42.73 | 43.01 | 43.85 | 17% |
| NORTH CAROLINA | 30.29 | 31.29 | 32.62 | 33.87 | 35.29 | 36.46 | 36.47 | 36.52 | 21% |
| SOUTH CAROLINA | 33.26 | 34.44 | 35.37 | 34.83 | 35.31 | 35.91 | 36.13 | 36.01 | 8% |
| TENNESSEE | 37.03 | 38.43 | 39.73 | 40.69 | 41.36 | 41.9 | 42.02 | 42.16 | 14% |
| TEXAS | 39.62 | 41.94 | 43.93 | 45.55 | 46.66 | 46.88 | 46.85 | 46.54 | 17% |
| VIRGINIA | 31.44 | 32.43 | 33.65 | 34.13 | 35.12 | 36.19 | 35.96 | 35.81 | 14% |
| SOUTHEAST AVERAGE | 36.6 | 37.8 | 39.2 | 39.8 | 40.8 | 41.6 | 41.7 | 41.7 | 14% |

Heart Disease Prevalence: Percent Of Dual Eligibles (65+)

| STATE/REGION | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | % CHANGE |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
| NATIONAL | 42.94 | 43.01 | 42.89 | 42.26 | 41.78 | 41.12 | 40.16 | 39.05 | -9% |
| ALABAMA | 38.15 | 38.77 | 38.98 | 38.74 | 38.71 | 38.93 | 38.52 | 38.09 | 0% |
| FLORIDA | 52.88 | 53.24 | 52.83 | 52.25 | 51.42 | 50.67 | 49.56 | 48.3 | -9% |
| GEORGIA | 36.26 | 36.66 | 36.47 | 35.68 | 35.43 | 35.3 | 34.94 | 34.4 | -5% |
| KENTUCKY | 45.33 | 46.38 | 46.33 | 45.89 | 45.94 | 45.29 | 45.01 | 44.25 | -2% |
| LOUISIANA | 42.13 | 42.53 | 43.06 | 42.88 | 42.59 | 42.81 | 42.58 | 42.01 | 0% |
| MISSISSIPPI | 35.17 | 35.48 | 36.01 | 35.7 | 35.98 | 35.91 | 36.02 | 35.79 | 2% |
| NORTH CAROLINA | 35.9 | 35.89 | 35.75 | 35.33 | 35.36 | 35.13 | 34.46 | 33.88 | -6% |
| SOUTH CAROLINA | 35.97 | 36.19 | 36.33 | 35.27 | 35.08 | 34.99 | 34.69 | 34.19 | -5% |
| TENNESSEE | 42.58 | 43.15 | 43.51 | 42.95 | 42.66 | 42.13 | 40.9 | 40.07 | -6% |
| TEXAS | 44.93 | 45.84 | 46.25 | 46.04 | 45.48 | 44.54 | 43.74 | 42.73 | -5% |
| VIRGINIA | 36.32 | 36.61 | 36.49 | 35.72 | 35.74 | 35.64 | 34.96 | 35.13 | -3% |
| SOUTHEAST AVERAGE | 40.5 | 41.0 | 41.1 | 40.6 | 40.4 | 40.1 | 39.6 | 39.0 | -4% |

Asthma Prevalence: Percent Of Dual Eligibles (65+)

| STATE/REGION | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | % CHANGE |
|-------------------|------|------|------|------|------|------|------|------|----------|
| NATIONAL | 5.62 | 5.92 | 6.13 | 6.29 | 6.68 | 6.77 | 6.97 | 6.95 | 24% |
| ALABAMA | 4.43 | 4.79 | 4.95 | 5.17 | 5.36 | 5.68 | 5.92 | 6.04 | 36% |
| FLORIDA | 6.32 | 6.58 | 6.94 | 7.32 | 7.57 | 7.7 | 7.94 | 7.89 | 25% |
| GEORGIA | 4.65 | 4.95 | 5.27 | 5.17 | 5.58 | 5.57 | 5.75 | 5.85 | 26% |
| KENTUCKY | 5.19 | 5.17 | 5.29 | 5.29 | 5.7 | 6.07 | 6.11 | 6.27 | 21% |
| LOUISIANA | 5.21 | 5.93 | 5.95 | 6 | 6.21 | 6.31 | 6.31 | 6.47 | 24% |
| MISSISSIPPI | 4.34 | 4.76 | 4.87 | 4.96 | 5.28 | 5.45 | 5.56 | 5.53 | 27% |
| NORTH CAROLINA | 5.04 | 5.28 | 5.44 | 5.57 | 6.03 | 6.25 | 6.48 | 6.8 | 35% |
| SOUTH CAROLINA | 5.01 | 5.38 | 5.58 | 5.69 | 5.95 | 5.93 | 5.75 | 6.05 | 21% |
| TENNESSEE | 5.31 | 5.71 | 5.75 | 5.43 | 5.72 | 5.71 | 5.76 | 5.63 | 6% |
| TEXAS | 5.22 | 5.88 | 6.26 | 6.54 | 6.85 | 6.94 | 7.01 | 6.97 | 34% |
| VIRGINIA | 5.89 | 5.99 | 6.17 | 6.2 | 6.82 | 6.72 | 7.02 | 6.9 | 17% |
| SOUTHEAST AVERAGE | 5.1 | 5.5 | 5.7 | 5.8 | 6.1 | 6.2 | 6.3 | 6.4 | 24% |

Depression Prevalence: Percent Of Dual Eligibles (65+)

| STATE/REGION | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | % CHANGE |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
| NATIONAL | 19.63 | 20.67 | 21.58 | 22.09 | 23.67 | 24.4 | 25.05 | 25.77 | 31% |
| ALABAMA | 13.22 | 14.05 | 14.51 | 14.72 | 16.69 | 17.53 | 18.82 | 19.95 | 51% |
| FLORIDA | 26.26 | 28.63 | 29.97 | 30.36 | 31.19 | 31.92 | 32.85 | 33.54 | 28% |
| GEORGIA | 15.74 | 16.34 | 17.56 | 18.49 | 20.09 | 20.59 | 21.36 | 22.45 | 43% |
| KENTUCKY | 19.63 | 20.29 | 21.08 | 21.76 | 24.7 | 25.39 | 26.76 | 27.54 | 40% |
| LOUISIANA | 17.07 | 19.68 | 21.03 | 20.85 | 22.06 | 22.61 | 23.55 | 23.87 | 40% |
| MISSISSIPPI | 15.57 | 17.19 | 17.99 | 18.04 | 19.62 | 20.39 | 21 | 21.73 | 40% |
| NORTH CAROLINA | 16.48 | 17.43 | 18.3 | 19.17 | 21.45 | 22.37 | 22.98 | 23.93 | 45% |
| SOUTH CAROLINA | 14.76 | 15.66 | 16.65 | 17.36 | 19.53 | 19.92 | 20.95 | 22.09 | 50% |
| TENNESSEE | 20.3 | 22.13 | 23.36 | 24.54 | 26.4 | 26.88 | 27.3 | 28.24 | 39% |
| TEXAS | 19.37 | 21.61 | 23.27 | 24.11 | 25.21 | 26.12 | 26.63 | 27.45 | 42% |
| VIRGINIA | 18.22 | 19.04 | 19.82 | 20.43 | 22.12 | 23.01 | 23.36 | 23.66 | 30% |
| SOUTHEAST AVERAGE | 17.9 | 19.3 | 20.3 | 20.9 | 22.6 | 23.3 | 24.1 | 25.0 | 40% |

Diabetes Prevalence: Percent Of Medicare Non-Duals (65+)

| STATE/REGION | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | % CHANGE |
|-------------------|------|------|------|------|------|------|------|------|----------|
| NATIONAL | 23.4 | 23.9 | 24.4 | 24.8 | 25.0 | 25.0 | 24.9 | 24.8 | 6% |
| ALABAMA | 25.1 | 25.9 | 26.5 | 27.0 | 27.5 | 27.8 | 27.9 | 27.9 | 11% |
| FLORIDA | 24.4 | 25.2 | 25.8 | 26.4 | 26.6 | 26.5 | 26.3 | 26.1 | 7% |
| GEORGIA | 24.1 | 24.8 | 25.3 | 25.5 | 25.7 | 25.9 | 25.9 | 25.8 | 7% |
| KENTUCKY | 24.4 | 25.2 | 25.8 | 26.3 | 26.7 | 27.0 | 26.7 | 26.7 | 9% |
| LOUISIANA | 24.0 | 24.6 | 25.1 | 25.8 | 26.1 | 26.5 | 26.8 | 26.9 | 12% |
| MISSISSIPPI | 22.6 | 23.4 | 24.1 | 24.7 | 25.2 | 25.5 | 25.9 | 26.1 | 16% |
| NORTH CAROLINA | 23.8 | 24.4 | 25.0 | 25.4 | 25.9 | 26.1 | 26.2 | 26.1 | 9% |
| SOUTH CAROLINA | 24.3 | 24.9 | 25.5 | 25.8 | 25.9 | 26.1 | 26.1 | 26.1 | 7% |
| TENNESSEE | 23.1 | 23.7 | 24.3 | 24.9 | 25.2 | 25.5 | 25.6 | 25.6 | 11% |
| TEXAS | 22.4 | 23.1 | 23.8 | 24.4 | 24.8 | 24.9 | 25.0 | 25.2 | 12% |
| VIRGINIA | 23.9 | 24.3 | 24.7 | 24.9 | 25.2 | 25.4 | 25.4 | 25.4 | 6% |
| SOUTHEAST AVERAGE | 23.8 | 24.5 | 25.0 | 25.5 | 25.8 | 26.0 | 26.0 | 26.0 | 10% |

Hypertension Prevalence: Percent Of Medicare Non-Duals (65+)

| STATE/REGION | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | % CHANGE |
|-------------------|------|------|------|------|------|------|------|------|----------|
| NATIONAL | 54.9 | 56.0 | 56.9 | 57.4 | 57.2 | 57.0 | 56.9 | 56.4 | 3% |
| ALABAMA | 59.6 | 60.8 | 62.0 | 62.7 | 62.6 | 62.9 | 63.7 | 63.8 | 7% |
| FLORIDA | 58.3 | 60.0 | 61.3 | 62.0 | 61.9 | 61.8 | 61.9 | 61.5 | 6% |
| GEORGIA | 58.6 | 60.0 | 61.0 | 60.9 | 60.6 | 60.5 | 60.8 | 60.3 | 3% |
| KENTUCKY | 58.1 | 59.6 | 60.7 | 61.4 | 61.9 | 62.1 | 62.1 | 61.6 | 6% |
| LOUISIANA | 58.6 | 59.9 | 61.0 | 62.1 | 62.2 | 62.4 | 62.9 | 63.0 | 7% |
| MISSISSIPPI | 54.8 | 56.3 | 57.3 | 58.5 | 58.8 | 59.7 | 60.7 | 60.4 | 10% |
| NORTH CAROLINA | 54.5 | 55.8 | 57.4 | 58.2 | 58.4 | 58.4 | 58.5 | 58.3 | 7% |
| SOUTH CAROLINA | 58.9 | 60.1 | 61.1 | 61.7 | 61.4 | 61.6 | 61.6 | 61.6 | 4% |
| TENNESSEE | 55.8 | 57.1 | 58.4 | 59.0 | 59.0 | 59.1 | 59.5 | 59.6 | 7% |
| TEXAS | 53.9 | 55.2 | 56.6 | 57.6 | 57.4 | 57.5 | 57.5 | 57.5 | 7% |
| VIRGINIA | 56.1 | 57.5 | 58.1 | 58.6 | 58.5 | 58.4 | 58.4 | 58.3 | 4% |
| SOUTHEAST AVERAGE | 56.8 | 58.2 | 59.3 | 60.0 | 60.0 | 60.1 | 60.4 | 60.2 | 6% |

Hyperlipidemia Prevalence: Percent Of Medicare Non-Duals (65+)

| STATE/REGION | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | % CHANGE |
|-------------------|------|------|------|------|------|------|------|------|----------|
| NATIONAL | 43.5 | 44.9 | 46.3 | 47.3 | 48.0 | 48.1 | 48.2 | 47.7 | 10% |
| ALABAMA | 43.9 | 45.6 | 47.1 | 48.1 | 49.3 | 50.0 | 51.3 | 51.7 | 18% |
| FLORIDA | 54.5 | 56.3 | 58.0 | 59.0 | 59.4 | 59.3 | 59.4 | 59.0 | 8% |
| GEORGIA | 44.5 | 46.5 | 48.3 | 49.1 | 49.9 | 50.1 | 50.2 | 49.8 | 12% |
| KENTUCKY | 43.9 | 45.6 | 46.9 | 47.9 | 49.3 | 50.1 | 50.3 | 50.1 | 14% |
| LOUISIANA | 41.8 | 43.5 | 45.4 | 46.6 | 47.6 | 48.1 | 49.0 | 49.4 | 18% |
| MISSISSIPPI | 33.9 | 35.6 | 37.4 | 38.9 | 40.8 | 42.1 | 43.2 | 43.3 | 27% |
| NORTH CAROLINA | 42.6 | 44.5 | 46.6 | 48.1 | 49.3 | 49.6 | 49.8 | 49.5 | 16% |
| SOUTH CAROLINA | 46.5 | 48.4 | 50.2 | 51.4 | 52.2 | 52.9 | 53.4 | 53.5 | 15% |
| TENNESSEE | 40.3 | 42.1 | 44.0 | 45.2 | 46.1 | 46.6 | 46.9 | 46.9 | 16% |
| TEXAS | 41.8 | 43.2 | 44.9 | 46.1 | 46.9 | 47.2 | 47.4 | 47.8 | 14% |
| VIRGINIA | 44.1 | 46.1 | 47.5 | 48.8 | 49.9 | 50.2 | 50.3 | 50.4 | 14% |
| SOUTHEAST AVERAGE | 43.4 | 45.2 | 46.9 | 48.0 | 49.0 | 49.5 | 49.9 | 49.9 | 15% |

Arthritis Prevalence: Percent Of Medicare Non-Duals (65+)

| STATE/REGION | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | % CHANGE |
|-------------------|------|------|------|------|------|------|------|------|----------|
| NATIONAL | 26.4 | 26.8 | 27.5 | 27.9 | 28.4 | 28.8 | 29.1 | 29.3 | 11% |
| ALABAMA | 28.3 | 29.0 | 30.0 | 30.3 | 31.0 | 31.7 | 32.3 | 33.2 | 17% |
| FLORIDA | 28.8 | 29.8 | 31.0 | 31.6 | 32.0 | 32.7 | 33.4 | 33.6 | 17% |
| GEORGIA | 25.5 | 26.1 | 26.9 | 27.0 | 27.5 | 28.1 | 28.5 | 28.8 | 13% |
| KENTUCKY | 27.6 | 28.1 | 28.9 | 29.4 | 30.3 | 31.2 | 31.5 | 31.6 | 15% |
| LOUISIANA | 27.3 | 27.9 | 28.8 | 29.9 | 30.4 | 30.8 | 31.1 | 31.2 | 14% |
| MISSISSIPPI | 25.3 | 26.5 | 27.5 | 28.1 | 28.7 | 29.4 | 30.0 | 30.4 | 20% |
| NORTH CAROLINA | 22.9 | 23.4 | 24.4 | 25.2 | 26.0 | 26.8 | 27.3 | 27.7 | 21% |
| SOUTH CAROLINA | 25.7 | 26.4 | 27.2 | 27.9 | 28.4 | 29.1 | 29.4 | 29.6 | 15% |
| TENNESSEE | 25.8 | 26.5 | 27.5 | 28.3 | 28.6 | 29.3 | 29.6 | 29.8 | 16% |
| TEXAS | 25.8 | 26.5 | 27.4 | 28.1 | 28.7 | 29.2 | 29.6 | 30.0 | 16% |
| VIRGINIA | 25.3 | 25.9 | 26.6 | 27.2 | 27.5 | 27.9 | 28.1 | 28.7 | 14% |
| SOUTHEAST AVERAGE | 26.2 | 26.9 | 27.8 | 28.4 | 28.9 | 29.6 | 30.0 | 30.3 | 16% |

Heart Disease Prevalence: Percent Of Medicare Non-Duals (65+)

| STATE/REGION | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | % CHANGE |
|-------------------|------|------|------|------|------|------|------|------|----------|
| NATIONAL | 32.0 | 31.8 | 31.5 | 31.0 | 30.3 | 29.5 | 28.6 | 27.8 | -13% |
| ALABAMA | 32.0 | 32.2 | 32.4 | 32.1 | 31.9 | 31.7 | 31.2 | 30.7 | -4% |
| FLORIDA | 40.2 | 40.2 | 40.1 | 39.5 | 38.5 | 37.6 | 36.5 | 35.3 | -12% |
| GEORGIA | 29.0 | 29.0 | 28.9 | 28.7 | 28.3 | 27.8 | 27.2 | 26.6 | -8% |
| KENTUCKY | 33.3 | 33.5 | 33.4 | 33.0 | 32.7 | 32.2 | 31.3 | 30.4 | -9% |
| LOUISIANA | 34.3 | 34.5 | 34.7 | 34.7 | 34.2 | 34.1 | 33.6 | 33.1 | -4% |
| MISSISSIPPI | 28.3 | 28.8 | 29.1 | 29.3 | 29.0 | 29.1 | 29.0 | 28.5 | 1% |
| NORTH CAROLINA | 26.7 | 26.6 | 26.4 | 26.1 | 25.7 | 25.3 | 24.8 | 24.8 | -7% |
| SOUTH CAROLINA | 28.5 | 28.7 | 28.8 | 28.6 | 28.0 | 27.5 | 27.0 | 26.5 | -7% |
| TENNESSEE | 30.4 | 30.5 | 30.7 | 30.7 | 30.1 | 29.6 | 28.9 | 28.2 | -7% |
| TEXAS | 32.6 | 32.7 | 32.8 | 32.6 | 31.7 | 30.9 | 30.2 | 29.4 | -10% |
| VIRGINIA | 27.4 | 27.1 | 26.9 | 26.5 | 26.0 | 25.4 | 24.6 | 24.0 | -12% |
| SOUTHEAST AVERAGE | 31.2 | 31.3 | 31.3 | 31.1 | 30.5 | 30.1 | 29.4 | 28.8 | -8% |

Asthma Prevalence: Percent Of Medicare Non-Duals (65+)

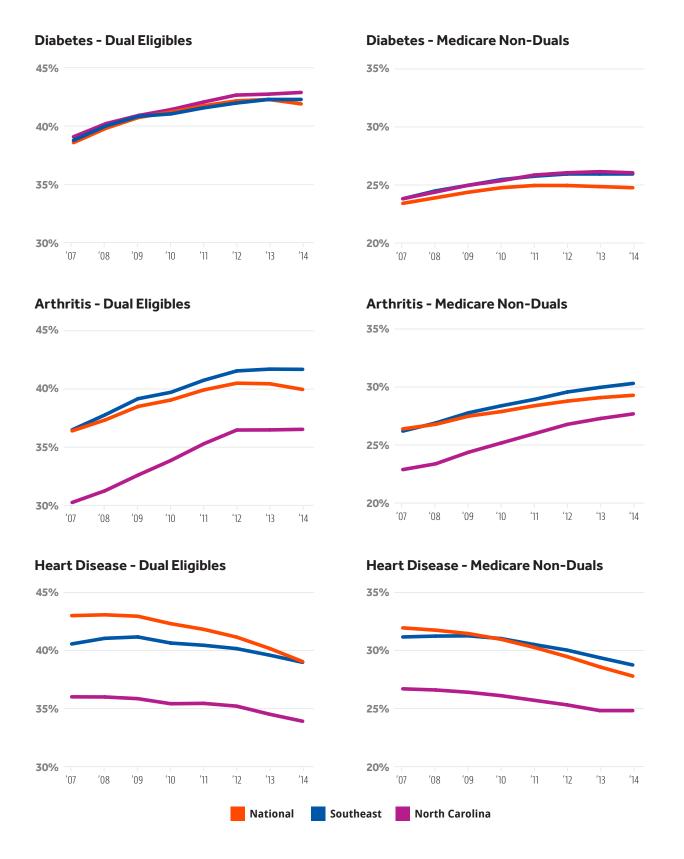
| STATE/REGION | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | % CHANGE |
|-------------------|------|------|------|------|------|------|------|------|----------|
| NATIONAL | 3.4 | 3.54 | 3.6 | 3.68 | 3.82 | 4.03 | 4.03 | 4.1 | 20% |
| ALABAMA | 3.4 | 3.48 | 3.54 | 3.65 | 3.76 | 4.09 | 4.09 | 4.24 | 27% |
| FLORIDA | 3.6 | 3.75 | 3.83 | 3.95 | 4.08 | 4.42 | 4.42 | 4.53 | 26% |
| GEORGIA | 3.1 | 3.26 | 3.38 | 3.35 | 3.48 | 3.71 | 3.71 | 3.79 | 23% |
| KENTUCKY | 3.5 | 3.61 | 3.59 | 3.57 | 3.78 | 3.98 | 3.98 | 4.05 | 17% |
| LOUISIANA | 3.0 | 3.12 | 3.19 | 3.25 | 3.3 | 3.5 | 3.5 | 3.54 | 20% |
| MISSISSIPPI | 2.4 | 2.67 | 2.76 | 2.8 | 2.9 | 3.14 | 3.14 | 3.12 | 28% |
| NORTH CAROLINA | 3.0 | 3.05 | 3.14 | 3.18 | 3.38 | 3.64 | 3.64 | 3.72 | 25% |
| SOUTH CAROLINA | 3.3 | 3.43 | 3.43 | 3.51 | 3.62 | 3.81 | 3.81 | 3.94 | 20% |
| TENNESSEE | 3.1 | 3.3 | 3.3 | 3.25 | 3.44 | 3.59 | 3.59 | 3.58 | 16% |
| TEXAS | 3.4 | 3.62 | 3.74 | 3.91 | 4.01 | 4.19 | 4.19 | 4.25 | 24% |
| VIRGINIA | 3.5 | 3.69 | 3.72 | 3.78 | 3.99 | 4.15 | 4.15 | 4.39 | 25% |
| SOUTHEAST AVERAGE | 3.2 | 3.4 | 3.4 | 3.5 | 3.6 | 3.9 | 3.9 | 3.9 | 23% |

Depression Prevalence: Percent Of Medicare Non-Duals (65+)

| STATE/REGION | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | % CHANGE |
|-------------------|------|------|------|-------|-------|-------|-------|-------|----------|
| NATIONAL | 8.22 | 8.71 | 9.09 | 9.49 | 10.35 | 10.8 | 11.21 | 11.68 | 42% |
| ALABAMA | 6.6 | 7.07 | 7.41 | 7.76 | 8.82 | 9.63 | 10.27 | 11.09 | 68% |
| FLORIDA | 8.49 | 9.23 | 9.76 | 10.23 | 11.09 | 11.7 | 12.17 | 12.68 | 49% |
| GEORGIA | 8.14 | 8.59 | 9.07 | 9.41 | 10.21 | 10.77 | 11.03 | 11.53 | 42% |
| KENTUCKY | 8.88 | 9.41 | 9.72 | 10.14 | 11.28 | 11.99 | 12.64 | 13.42 | 51% |
| LOUISIANA | 7.81 | 9.01 | 9.54 | 9.59 | 10.24 | 10.77 | 11.27 | 11.77 | 51% |
| MISSISSIPPI | 7.01 | 7.82 | 8.39 | 8.54 | 9.29 | 9.77 | 10.16 | 10.86 | 55% |
| NORTH CAROLINA | 7.62 | 8.08 | 8.6 | 9.03 | 10.06 | 10.89 | 11.33 | 11.97 | 57% |
| SOUTH CAROLINA | 7.45 | 7.97 | 8.38 | 8.99 | 10.07 | 10.75 | 11.26 | 11.8 | 58% |
| TENNESSEE | 8.25 | 8.8 | 9.46 | 9.85 | 10.78 | 11.33 | 11.78 | 12.51 | 52% |
| TEXAS | 8.39 | 9.29 | 9.85 | 10.36 | 11.12 | 11.53 | 11.89 | 12.42 | 48% |
| VIRGINIA | 8.35 | 8.86 | 9.22 | 9.52 | 10.45 | 10.76 | 11.14 | 11.65 | 40% |
| SOUTHEAST AVERAGE | 7.9 | 8.6 | 9.0 | 9.4 | 10.3 | 10.9 | 11.3 | 11.9 | 51% |

Note: The data has been extracted from the CMS Chronic Condition Data Warehouse: State Level Chronic Conditions Table; Prevalence, Medicare Utilization, and Spending. www.ccwdata.org

Selected Prevalence Comparisons by Geographic Area



APPENDIX 2 - COMORBITY SPENDING COMPARISON

Per-Capita Spending Dual Eligibles - 2007

| STATE | 0TO1 | 2 TO 3 | 4 TO 5 | 6+ |
|----------------|------------|------------|-------------|-------------|
| NATIONAL | \$1,951.01 | \$5,864.24 | \$12,408.38 | \$32,598.16 |
| ALABAMA | \$2,257.11 | \$5,741.86 | \$12,372.66 | \$28,077.56 |
| FLORIDA | \$2,210.69 | \$6,821.31 | \$13,882.45 | \$37,240.69 |
| GEORGIA | \$2,042.51 | \$5,694.90 | \$12,153.40 | \$28,679.65 |
| KENTUCKY | \$1,585.81 | \$4,987.63 | \$11,162.41 | \$29,385.13 |
| LOUISIANA | \$1,985.46 | \$6,576.79 | \$14,583.79 | \$36,454.93 |
| MISSISSIPPI | \$2,340.65 | \$6,717.77 | \$14,563.75 | \$32,968.32 |
| NORTH CAROLINA | \$2,212.56 | \$5,752.96 | \$12,772.57 | \$29,592.89 |
| SOUTH CAROLINA | \$2,290.59 | \$6,137.43 | \$12,969.76 | \$30,931.18 |
| TENNESSEE | \$1,763.89 | \$5,574.77 | \$11,872.63 | \$29,112.49 |
| TEXAS | \$1,934.38 | \$6,561.11 | \$13,703.19 | \$34,892.25 |
| VIRGINIA | \$1,884.88 | \$5,107.36 | \$11,258.27 | \$28,150.07 |
| SOUTHEAST | \$2,046.23 | \$5,970.35 | \$12,844.99 | \$31,407.74 |

Per-Capita Spending Dual Eligibles - 2008

| STATE | 0 TO 1 | 2 TO 3 | 4 TO 5 | 6+ |
|----------------|------------|------------|-------------|-------------|
| NATIONAL | \$2,012.15 | \$6,019.84 | \$12,756.96 | \$34,068.19 |
| ALABAMA | \$2,217.63 | \$5,808.34 | \$12,351.75 | \$29,394.90 |
| FLORIDA | \$2,339.85 | \$7,059.95 | \$14,389.11 | \$39,073.64 |
| GEORGIA | \$1,995.96 | \$5,796.35 | \$12,335.69 | \$29,650.91 |
| KENTUCKY | \$1,800.35 | \$5,253.79 | \$11,214.51 | \$30,005.46 |
| LOUISIANA | \$1,988.73 | \$6,669.72 | \$15,023.28 | \$37,418.53 |
| MISSISSIPPI | \$2,379.26 | \$6,620.98 | \$15,056.13 | \$34,365.97 |
| NORTH CAROLINA | \$2,134.83 | \$5,822.76 | \$12,736.43 | \$30,448.63 |
| SOUTH CAROLINA | \$2,421.45 | \$6,228.10 | \$13,098.44 | \$31,051.08 |
| TENNESSEE | \$1,769.93 | \$5,618.04 | \$12,060.74 | \$30,345.32 |
| TEXAS | \$1,893.62 | \$6,423.31 | \$13,675.03 | \$35,460.14 |
| VIRGINIA | \$1,944.97 | \$5,353.38 | \$11,704.93 | \$30,349.81 |
| SOUTHEAST | \$2,080.60 | \$6,059.52 | \$13,058.73 | \$32,505.85 |

Per-Capita Spending Dual Eligibles - 2009

| STATE | 0TO1 | 2 TO 3 | 4 TO 5 | 6+ |
|----------------|------------|------------|-------------|-------------|
| NATIONAL | \$2,006.51 | \$6,145.97 | \$13,010.66 | \$35,574.76 |
| ALABAMA | \$2,196.87 | \$5,830.35 | \$12,211.88 | \$29,990.41 |
| FLORIDA | \$2,318.34 | \$7,194.59 | \$14,737.71 | \$40,258.68 |
| GEORGIA | \$2,103.94 | \$5,922.14 | \$12,405.09 | \$31,333.55 |
| KENTUCKY | \$1,723.28 | \$5,300.86 | \$11,639.08 | \$31,217.22 |
| LOUISIANA | \$2,013.31 | \$6,615.66 | \$14,907.45 | \$38,273.24 |
| MISSISSIPPI | \$2,228.87 | \$6,718.67 | \$15,246.13 | \$35,743.55 |
| NORTH CAROLINA | \$2,170.60 | \$5,881.19 | \$12,824.65 | \$31,584.69 |
| SOUTH CAROLINA | \$2,318.61 | \$6,186.42 | \$13,493.61 | \$32,923.79 |
| TENNESSEE | \$1,756.73 | \$5,639.70 | \$12,144.81 | \$31,724.77 |
| TEXAS | \$1,816.97 | \$6,609.62 | \$13,858.52 | \$36,989.27 |
| VIRGINIA | \$1,974.27 | \$5,433.30 | \$11,893.49 | \$31,118.49 |
| SOUTHEAST | \$2,056.53 | \$6,121.14 | \$13,214.77 | \$33,741.61 |

Per-Capita Spending Dual Eligibles - 2010

| STATE | 0 TO 1 | 2 TO 3 | 4 TO 5 | 6+ |
|----------------|------------|------------|-------------|-------------|
| NATIONAL | \$2,021.41 | \$6,180.57 | \$12,957.23 | \$35,380.80 |
| ALABAMA | \$2,114.70 | \$5,779.90 | \$12,423.32 | \$30,033.20 |
| FLORIDA | \$2,284.61 | \$7,093.99 | \$13,777.74 | \$36,564.40 |
| GEORGIA | \$2,117.50 | \$5,990.25 | \$12,738.11 | \$32,378.43 |
| KENTUCKY | \$1,751.37 | \$5,121.13 | \$11,266.92 | \$31,314.94 |
| LOUISIANA | \$1,929.17 | \$6,658.17 | \$15,367.18 | \$39,337.37 |
| MISSISSIPPI | \$2,126.75 | \$6,751.53 | \$15,259.54 | \$36,390.69 |
| NORTH CAROLINA | \$2,180.61 | \$5,980.63 | \$12,736.24 | \$31,988.97 |
| SOUTH CAROLINA | \$2,386.31 | \$6,164.66 | \$13,818.92 | \$33,844.66 |
| TENNESSEE | \$1,896.49 | \$6,022.57 | \$12,307.33 | \$32,346.91 |
| TEXAS | \$1,880.46 | \$6,579.39 | \$13,716.90 | \$36,931.81 |
| VIRGINIA | \$1,904.33 | \$5,546.27 | \$11,849.37 | \$31,658.22 |
| SOUTHEAST | \$2,052.03 | \$6,153.50 | \$13,205.60 | \$33,889.96 |

Per-Capita Spending Dual Eligibles - 2011

| STATE | 0 TO 1 | 2 TO 3 | 4 TO 5 | 6+ |
|----------------|------------|------------|-------------|-------------|
| NATIONAL | \$1,947.52 | \$5,923.85 | \$12,300.11 | \$35,683.01 |
| ALABAMA | \$1,978.26 | \$5,467.26 | \$11,485.86 | \$30,050.98 |
| FLORIDA | \$2,093.01 | \$6,971.01 | \$13,153.68 | \$36,519.37 |
| GEORGIA | \$2,156.59 | \$5,785.04 | \$12,059.53 | \$32,536.33 |
| KENTUCKY | \$1,685.97 | \$5,134.48 | \$10,799.82 | \$31,857.10 |
| LOUISIANA | \$1,905.93 | \$6,412.78 | \$14,087.19 | \$39,139.24 |
| MISSISSIPPI | \$2,000.68 | \$6,297.85 | \$14,082.21 | \$36,293.34 |
| NORTH CAROLINA | \$2,043.84 | \$5,578.61 | \$11,882.21 | \$32,021.24 |
| SOUTH CAROLINA | \$2,259.31 | \$5,911.25 | \$12,821.02 | \$34,065.63 |
| TENNESSEE | \$1,738.69 | \$5,416.23 | \$11,827.29 | \$32,511.68 |
| TEXAS | \$1,787.63 | \$6,114.14 | \$12,730.97 | \$36,422.43 |
| VIRGINIA | \$1,982.08 | \$5,265.67 | \$11,443.74 | \$32,244.30 |
| SOUTHEAST | \$1,966.55 | \$5,850.39 | \$12,397.59 | \$33,969.24 |

Per-Capita Spending Dual Eligibles - 2012

| STATE | 0 TO 1 | 2 TO 3 | 4 TO 5 | 6+ |
|----------------|------------|------------|-------------|-------------|
| NATIONAL | \$1,998.49 | \$5,945.26 | \$12,042.92 | \$34,815.47 |
| ALABAMA | \$2,081.90 | \$5,489.06 | \$10,974.06 | \$28,786.67 |
| FLORIDA | \$2,139.22 | \$6,916.89 | \$12,959.05 | \$35,198.37 |
| GEORGIA | \$2,194.27 | \$5,710.26 | \$11,616.54 | \$31,872.76 |
| KENTUCKY | \$1,661.26 | \$4,884.81 | \$10,209.34 | \$30,363.04 |
| LOUISIANA | \$1,909.62 | \$6,160.30 | \$13,023.66 | \$37,360.75 |
| MISSISSIPPI | \$2,075.79 | \$6,070.57 | \$13,647.65 | \$34,856.99 |
| NORTH CAROLINA | \$1,954.46 | \$5,442.61 | \$11,308.60 | \$30,621.60 |
| SOUTH CAROLINA | \$2,373.48 | \$5,865.90 | \$12,419.90 | \$33,427.19 |
| TENNESSEE | \$1,832.43 | \$5,522.11 | \$11,401.61 | \$31,644.13 |
| TEXAS | \$1,751.97 | \$6,025.40 | \$12,457.79 | \$35,561.31 |
| VIRGINIA | \$1,942.94 | \$5,223.26 | \$11,108.79 | \$32,053.83 |
| SOUTHEAST | \$1,992.49 | \$5,755.56 | \$11,920.63 | \$32,886.06 |

Per-Capita Spending Dual Eligibles - 2013

| STATE | 0TO1 | 2 TO 3 | 4 TO 5 | 6+ |
|----------------|------------|------------|-------------|-------------|
| NATIONAL | \$1,952.52 | \$5,924.38 | \$11,940.02 | \$34,496.58 |
| ALABAMA | \$1,996.28 | \$5,260.38 | \$10,687.15 | \$28,148.86 |
| FLORIDA | \$2,080.97 | \$6,882.10 | \$12,679.74 | \$34,869.36 |
| GEORGIA | \$2,093.92 | \$5,798.51 | \$11,580.59 | \$31,641.82 |
| KENTUCKY | \$1,592.83 | \$4,708.83 | \$9,707.62 | \$29,791.33 |
| LOUISIANA | \$1,892.34 | \$5,742.16 | \$12,465.01 | \$36,146.99 |
| MISSISSIPPI | \$1,953.52 | \$5,856.62 | \$12,922.84 | \$34,050.05 |
| NORTH CAROLINA | \$1,951.52 | \$5,387.44 | \$11,075.75 | \$30,228.99 |
| SOUTH CAROLINA | \$2,262.54 | \$6,061.73 | \$12,309.04 | \$32,963.27 |
| TENNESSEE | \$1,775.86 | \$5,399.38 | \$11,150.80 | \$30,848.29 |
| TEXAS | \$1,788.53 | \$5,912.47 | \$12,174.17 | \$35,168.51 |
| VIRGINIA | \$1,872.74 | \$5,169.10 | \$11,141.42 | \$31,881.76 |
| SOUTHEAST | \$1,932.82 | \$5,652.61 | \$11,626.74 | \$32,339.93 |

Per-Capita Spending Dual Eligibles - 2014

| STATE | 0TO1 | 2 TO 3 | 4 TO 5 | 6+ |
|----------------|------------|------------|-------------|-------------|
| SIAIL | | | 4105 | 6+ |
| NATIONAL | \$1,969.88 | \$6,070.18 | \$12,067.99 | \$34,705.65 |
| ALABAMA | \$1,959.20 | \$5,308.23 | \$10,511.95 | \$27,964.23 |
| FLORIDA | \$2,156.62 | \$6,941.58 | \$12,784.80 | \$34,948.81 |
| GEORGIA | \$2,151.61 | \$5,758.59 | \$11,514.18 | \$31,490.66 |
| KENTUCKY | \$1,547.81 | \$4,586.39 | \$9,440.96 | \$29,750.63 |
| LOUISIANA | \$1,775.72 | \$5,897.75 | \$12,368.66 | \$35,826.93 |
| MISSISSIPPI | \$1,969.78 | \$5,806.27 | \$12,779.97 | \$34,247.88 |
| NORTH CAROLINA | \$1,977.80 | \$5,309.33 | \$10,985.02 | \$30,229.26 |
| SOUTH CAROLINA | \$2,282.68 | \$6,077.71 | \$12,052.47 | \$33,249.75 |
| TENNESSEE | \$1,876.01 | \$5,595.73 | \$11,010.15 | \$30,721.38 |
| TEXAS | \$1,802.49 | \$6,009.13 | \$12,530.59 | \$35,760.98 |
| VIRGINIA | \$2,063.30 | \$5,505.16 | \$11,386.39 | \$32,504.37 |
| SOUTHEAST | \$1,960.27 | \$5,708.71 | \$11,578.65 | \$32,426.81 |

Per-Capita Spending Medicare - 2007

| STATE | 0 TO 1 | 2 TO 3 | 4 TO 5 | 6+ |
|----------------|------------|------------|-------------|-------------|
| NATIONAL | \$1,546.11 | \$4,663.29 | \$10,519.25 | \$27,620.93 |
| | . , | | | |
| ALABAMA | \$1,654.43 | \$4,518.09 | \$10,094.28 | \$25,205.32 |
| FLORIDA | \$1,798.62 | \$4,775.11 | \$10,110.94 | \$26,197.98 |
| GEORGIA | \$1,584.99 | \$4,469.25 | \$9,949.39 | \$25,354.16 |
| KENTUCKY | \$1,370.66 | \$4,117.13 | \$9,644.51 | \$25,344.31 |
| LOUISIANA | \$1,465.67 | \$4,676.23 | \$10,785.49 | \$28,728.80 |
| MISSISSIPPI | \$1,601.83 | \$4,937.62 | \$11,371.21 | \$27,782.74 |
| NORTH CAROLINA | \$1,621.83 | \$4,588.20 | \$10,686.00 | \$26,267.25 |
| SOUTH CAROLINA | \$1,626.98 | \$4,416.85 | \$10,182.33 | \$25,531.81 |
| TENNESSEE | \$1,465.23 | \$4,440.63 | \$10,224.04 | \$26,470.78 |
| TEXAS | \$1,473.32 | \$4,874.62 | \$11,240.96 | \$30,047.35 |
| VIRGINIA | \$1,451.71 | \$4,131.18 | \$9,511.03 | \$24,605.19 |
| SOUTHEAST | \$1,555.93 | \$4,540.45 | \$10,345.47 | \$26,503.24 |

Per-Capita Spending Medicare - 2008

| STATE | 0TO1 | 2 TO 3 | 2 TO 3 4 TO 5 | |
|----------------|------------|------------|---------------|-------------|
| NATIONAL | \$1,574.51 | \$4,776.43 | \$10,732.21 | \$28,653.50 |
| ALABAMA | \$1,670.51 | \$4,555.90 | \$10,139.11 | \$25,932.36 |
| FLORIDA | \$1,829.92 | \$4,951.45 | \$10,333.17 | \$27,307.22 |
| GEORGIA | \$1,609.64 | \$4,507.93 | \$10,068.76 | \$26,202.11 |
| KENTUCKY | \$1,362.39 | \$4,204.14 | \$9,698.56 | \$26,518.11 |
| LOUISIANA | \$1,472.63 | \$4,647.43 | \$10,760.06 | \$28,971.83 |
| MISSISSIPPI | \$1,585.18 | \$5,001.98 | \$11,698.91 | \$28,558.47 |
| NORTH CAROLINA | \$1,637.70 | \$4,589.88 | \$10,652.65 | \$26,860.53 |
| SOUTH CAROLINA | \$1,686.01 | \$4,539.91 | \$10,347.80 | \$26,234.54 |
| TENNESSEE | \$1,471.44 | \$4,367.98 | \$10,169.54 | \$27,183.10 |
| TEXAS | \$1,473.28 | \$4,870.87 | \$11,307.05 | \$30,950.37 |
| VIRGINIA | \$1,477.43 | \$4,241.57 | \$9,675.19 | \$25,647.42 |
| SOUTHEAST | \$1,570.56 | \$4,589.00 | \$10,440.98 | \$27,306.01 |

Per-Capita Spending Medicare - 2009

| STATE | 0 TO 1 | 2 TO 3 | 4 TO 5 | 6+ |
|----------------|------------|------------|-------------|-------------|
| NATIONAL | \$1,609.01 | \$4,882.09 | \$10,918.78 | \$29,623.66 |
| ALABAMA | \$1,670.68 | \$4,616.07 | \$10,163.96 | \$26,501.31 |
| FLORIDA | \$1,879.86 | \$5,055.66 | \$10,497.43 | \$28,064.23 |
| GEORGIA | \$1,641.19 | \$4,609.58 | \$10,177.99 | \$27,076.31 |
| KENTUCKY | \$1,379.14 | \$4,273.31 | \$9,884.43 | \$27,382.60 |
| LOUISIANA | \$1,496.66 | \$4,668.91 | \$10,859.67 | \$29,682.56 |
| MISSISSIPPI | \$1,608.11 | \$5,059.94 | \$11,581.18 | \$29,526.58 |
| NORTH CAROLINA | \$1,674.65 | \$4,696.95 | \$10,793.52 | \$27,778.93 |
| SOUTH CAROLINA | \$1,729.15 | \$4,607.69 | \$10,566.99 | \$27,125.45 |
| TENNESSEE | \$1,496.43 | \$4,463.06 | \$10,296.55 | \$27,789.65 |
| TEXAS | \$1,481.53 | \$4,929.52 | \$11,402.45 | \$31,731.21 |
| VIRGINIA | \$1,514.30 | \$4,363.77 | \$10,054.08 | \$27,054.87 |
| SOUTHEAST | \$1,597.43 | \$4,667.68 | \$10,570.75 | \$28,155.79 |

Per-Capita Spending Medicare - 2010

| STATE | 0 TO 1 | 2 TO 3 | 4 TO 5 | 6+ |
|----------------|------------|------------|-------------|-------------|
| NATIONAL | \$1,646.33 | \$4,975.59 | \$10,995.53 | \$29,945.76 |
| ALABAMA | \$1,741.05 | \$4,648.11 | \$10,299.89 | \$26,604.40 |
| FLORIDA | \$1,924.22 | \$5,144.76 | \$10,512.04 | \$28,208.61 |
| GEORGIA | \$1,693.13 | \$4,704.94 | \$10,247.08 | \$27,136.60 |
| KENTUCKY | \$1,429.98 | \$4,374.37 | \$9,903.32 | \$27,775.86 |
| LOUISIANA | \$1,523.28 | \$4,708.42 | \$10,814.80 | \$29,954.95 |
| MISSISSIPPI | \$1,653.61 | \$5,024.61 | \$11,706.84 | \$30,057.57 |
| NORTH CAROLINA | \$1,703.54 | \$4,728.75 | \$10,833.35 | \$27,964.38 |
| SOUTH CAROLINA | \$1,733.37 | \$4,714.95 | \$10,595.26 | \$27,447.35 |
| TENNESSEE | \$1,545.94 | \$4,550.99 | \$10,255.10 | \$27,894.26 |
| TEXAS | \$1,504.71 | \$4,982.51 | \$11,403.27 | \$31,882.94 |
| VIRGINIA | \$1,531.88 | \$4,461.28 | \$10,076.54 | \$27,519.62 |
| SOUTHEAST | \$1,634.97 | \$4,731.24 | \$10,604.32 | \$28,404.23 |

Per-Capita Spending Medicare - 2011

| STATE | 0 TO 1 | 2 TO 3 | 4 TO 5 | 6+ |
|----------------|------------|------------|-------------|-------------|
| NATIONAL | \$1,631.44 | \$4,930.31 | \$10,629.99 | \$30,305.27 |
| ALABAMA | \$1,668.65 | \$4,579.84 | \$9,752.49 | \$26,613.86 |
| FLORIDA | \$1,901.41 | \$5,133.74 | \$10,215.79 | \$28,428.38 |
| GEORGIA | \$1,673.29 | \$4,653.63 | \$9,864.52 | \$27,184.69 |
| KENTUCKY | \$1,374.43 | \$4,213.68 | \$9,373.51 | \$27,659.17 |
| LOUISIANA | \$1,477.49 | \$4,574.39 | \$10,233.66 | \$30,016.93 |
| MISSISSIPPI | \$1,582.84 | \$4,902.31 | \$11,044.82 | \$29,579.55 |
| NORTH CAROLINA | \$1,676.62 | \$4,647.70 | \$10,384.65 | \$28,148.73 |
| SOUTH CAROLINA | \$1,702.15 | \$4,646.24 | \$9,989.06 | \$28,100.40 |
| TENNESSEE | \$1,524.58 | \$4,464.94 | \$9,796.18 | \$27,942.59 |
| TEXAS | \$1,482.51 | \$4,853.48 | \$10,792.99 | \$31,982.83 |
| VIRGINIA | \$1,576.20 | \$4,463.69 | \$9,873.21 | \$28,221.71 |
| SOUTHEAST | \$1,603.65 | \$4,648.51 | \$10,120.08 | \$28,534.44 |

Per-Capita Spending Medicare - 2012

| STATE | 0 TO 1 | 2 TO 3 4 TO 5 | | 6+ |
|----------------|------------|---------------|------------------------|-------------|
| NATIONAL | \$1,670.31 | \$4,997.32 | \$4,997.32 \$10,592.39 | |
| ALABAMA | \$1,697.61 | \$4,550.38 | \$9,650.52 | \$26,197.92 |
| FLORIDA | \$1,913.23 | \$5,155.02 | \$10,153.48 | \$27,940.96 |
| GEORGIA | \$1,731.38 | \$4,725.77 | \$9,780.79 | \$27,157.17 |
| KENTUCKY | \$1,370.66 | \$4,231.37 | \$9,119.85 | \$26,866.03 |
| LOUISIANA | \$1,470.47 | \$4,540.87 | \$9,848.52 | \$28,756.15 |
| MISSISSIPPI | \$1,618.21 | \$4,856.81 | \$10,693.81 | \$29,151.48 |
| NORTH CAROLINA | \$1,711.47 | \$4,614.14 | \$10,175.14 | \$27,365.61 |
| SOUTH CAROLINA | \$1,755.41 | \$4,668.73 | \$10,002.28 | \$27,329.11 |
| TENNESSEE | \$1,551.56 | \$4,490.80 | \$9,710.38 | \$27,130.23 |
| TEXAS | \$1,507.87 | \$4,894.15 | \$10,636.71 | \$31,580.06 |
| VIRGINIA | \$1,629.42 | \$4,575.29 | \$9,962.90 | \$28,094.92 |
| SOUTHEAST | \$1,632.48 | \$4,663.94 | \$9,975.85 | \$27,960.88 |

Per-Capita Spending Medicare - 2013

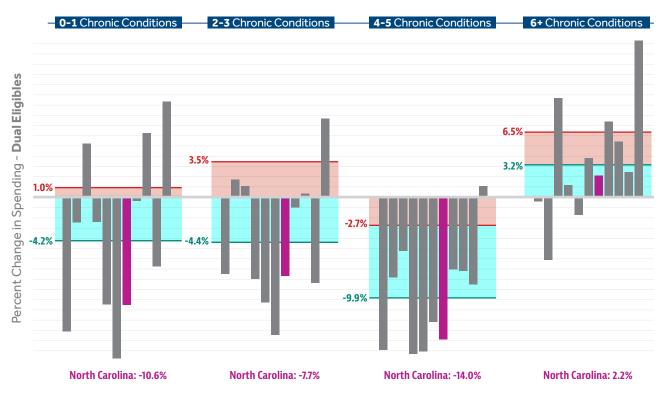
| STATE | 0TO1 | 2 TO 3 | 4 TO 5 | 6+ |
|----------------|------------|------------------------|------------------------|-------------|
| NATIONAL | \$1,664.33 | \$5,019.49 | \$5,019.49 \$10,575.14 | |
| ALABAMA | \$1,648.59 | \$4,471.24 | \$9,345.54 | \$25,427.14 |
| FLORIDA | \$1,866.10 | \$5,130.97 | \$10,013.12 | \$27,759.12 |
| GEORGIA | \$1,730.09 | \$4,715.89 | \$9,770.21 | \$26,608.84 |
| KENTUCKY | \$1,346.45 | \$4,220.16 | \$9,090.63 | \$26,409.40 |
| LOUISIANA | \$1,472.05 | \$4,565.88 | \$9,617.63 | \$28,432.76 |
| MISSISSIPPI | \$1,574.49 | \$4,701.74 | \$10,370.40 | \$28,339.52 |
| NORTH CAROLINA | \$1,689.30 | \$4,636.72 | \$10,152.09 | \$27,248.34 |
| SOUTH CAROLINA | \$1,745.37 | \$4,645.89 | \$9,955.32 | \$27,493.10 |
| TENNESSEE | \$1,560.38 | \$4,441.74 | \$9,336.37 | \$26,374.04 |
| TEXAS | \$1,470.22 | \$4,870.35 \$10,576.66 | | \$31,138.37 |
| VIRGINIA | \$1,640.71 | \$4,620.54 \$10,136.27 | | \$28,535.76 |
| SOUTHEAST | \$1,613.07 | \$4,638.28 | \$9,851.29 | \$27,615.13 |

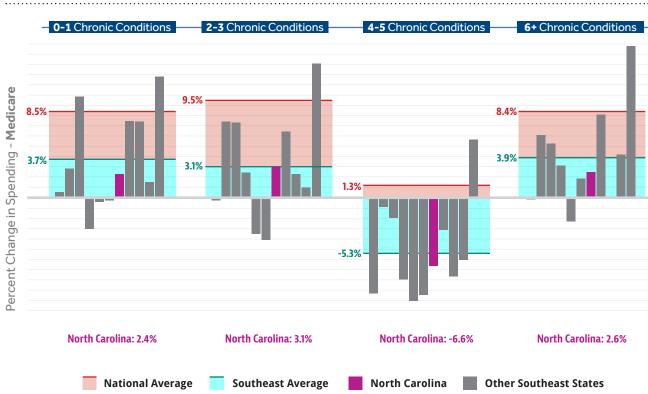
Per-Capita Spending Medicare - 2014

| STATE | 0TO1 | 2 TO 3 | 4 TO 5 | 6+ |
|----------------|------------|------------|-------------|-------------|
| NATIONAL | \$1,677.11 | \$5,104.08 | \$10,655.50 | \$29,933.57 |
| ALABAMA | \$1,664.92 | \$4,508.47 | \$9,162.38 | \$25,179.43 |
| FLORIDA | \$1,850.65 | \$5,130.66 | \$10,025.77 | \$27,812.45 |
| GEORGIA | \$1,741.42 | \$4,798.75 | \$9,761.58 | \$26,710.72 |
| KENTUCKY | \$1,329.75 | \$4,221.21 | \$8,887.85 | \$26,157.90 |
| LOUISIANA | \$1,460.45 | \$4,515.12 | \$9,711.75 | \$28,081.92 |
| MISSISSIPPI | \$1,598.95 | \$4,738.93 | \$10,308.63 | \$28,314.94 |
| NORTH CAROLINA | \$1,660.36 | \$4,729.59 | \$9,984.69 | \$26,941.85 |
| SOUTH CAROLINA | \$1,749.05 | \$4,704.40 | \$9,870.91 | \$27,611.20 |
| TENNESSEE | \$1,574.65 | \$4,546.05 | \$9,452.16 | \$26,480.77 |
| TEXAS | \$1,496.64 | \$4,926.44 | \$10,570.58 | \$31,329.17 |
| VIRGINIA | \$1,623.11 | \$4,671.46 | \$10,052.94 | \$28,246.63 |
| SOUTHEAST | \$1,613.63 | \$4,681.01 | \$9,799.02 | \$27,533.36 |

Note: The data has been extracted from the CMS Chronic Condition Data Warehouse: State Level Mutliple Chronic Conditions (MCC) table; Prevalence, Medicare Utilization, and Spending. www.ccwdata.org

Percent Change in Comorbitity Spending, 2007-2014





Note: Southeastern states on charts (left to right): Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Virginia

APPENDIX 3

Percentage of Direct Primary Care Patients Who Have Chronic Ilnesses

| REGION | SELF REPORTING % | # PATIENTS | # PANEL | # PROVIDERS PER REGION | REPRESENTATIVE STATES |
|--------------|------------------|------------|---------|------------------------|------------------------|
| NORTHEAST | 76% | 1,276 | 1,684 | 9 | ME, NY, CT, NH, RI, MA |
| MID ATLANTIC | 71% | 803 | 1,129 | 5 | PA, NJ |
| SOUTHEAST | 60% | 973 | 1,615 | 7 | GA, VA, NC |
| MID WEST | 70% | 611 | 877 | 4 | KS |
| WEST | 75% | 1385 | 1,852 | 5 | CO, WA, ID |
| NATIONWIDE | 71% | 5,048 | 7,157 | 30 | |

Note: The above information is self-reported data submitted by 26 Direct Primary Care physicians from the representative states mentioned.

APPENDIX 4

Resolution - DPC HSA Benefit Option With Medicaid

DPC Medicaid Pilot Resolution provided by Phil Eskew, D.O., J.D., M.B.A. December, 2016

Assumption: Changes in the Trump administration resulted in Medicaid block grants to the states

North Carolina Example:

WHEREAS average Medicaid spending per adult patient in North Carolina is [\$] per year and average Medicaid spending per pediatric patient is [\$] per year and these costs are growing at an unsustainable rate, and

WHEREAS out-of-pocket costs and deductibles are at an amount too low to generate patient concern about the total cost of care, and

WHEREAS providers are compensated in a fee-for-service manner that incentivizes overutilization of care and billing in an inefficient itemized format, and

WHEREAS providers have historically been prohibited from signing up with Medicaid and privately contracting for covered services, so

BE IT RESOLVED, that each Medicaid patient shall be provided with a health savings account and health savings card. This card shall be credited with a set number of dollars (example \$2,000) to spend per-calendar-year at a number to be determined by the State Medicaid Director. If the recipient does not spend the entire amount on the card in one year, the amount remaining on the card will be split between the patient and the patient's designated primary physician, and

BE IT RESOLVED, that each Medicaid patient shall be encouraged to find a suitable Direct Primary Care practice. For patients that are members of a Direct Primary Care practice, the State shall contribute an additional monthly stipend (example \$40) in an amount to be determined by the State Medicaid Director, and

BE IT RESOLVED that a Medicaid provider may now privately contract for covered services so long as Medicaid is not also billed on a fee-for-service basis for the same bundle of services.

APPENDIX 5 - MORE PATIENT STORIES

Idaho

An uninsured patient who joined a DPC practice in Idaho suffers from depression, kidney disease, high cholesterol, and diabetes. The patient is also a heavy smoker. When first joining the practice two years ago, she was unable to afford any medications for her diabetes. Insulin and medication for peripheral neuropathy would have cost her \$600 a month. As DPC's mission is to keep patient health care costs as transparent and low-cost as possible, the practice was able to get diabetes medication at no cost through a pharmaceutical patient assistance program, while her other four prescriptions totaled less than \$10.53 a month simply because the practice has a contract with a wholesale pharmacy. Compare that to \$71 a month at local retail pharmacies. In time, the Idaho physician was able to control her patient's blood pressure and better manage her diabetes.

Despite providing continuous wound care on her foot, she suffered an injury that caused an infection to spread. "We worked, and worked and worked and things were looking 'almost' healed," the physician explains. "And then they weren't. So we told her that she must go to wound care. Go to the ER. We needed to send her to someone else to address this problem." However, the patient refused to go out of fear of facing financial ruin from inflated hospital charges. Unfortunately, her foot needed amputation.

Following this trauma, the clinical staff at the hospital's outpatient orthopedic clinic informed her that she had the wrong post-op shoe, and that they could provide a walking boot for her for \$300. Unable to afford it, the patient followed up with her direct care practice the day after her initial wound care visit. "We loaned her our clinic walker, which is free, and found the same new walking boot from a low-cost medical supplier in town for \$48," she says.

"We weren't able to solve this patient's financial situation, nor all of her complications as a result of diabetes. But we did everything we could to provide better access to care for her in the most transparent and cost-effective manner. The harsh reality of modern health care is people cannot get what they need, when they need it for a transparent cost. And there are VERY real consequences of these complexities."

Pennsylvania

"Our health care system is so screwed up. I hope this Administration puts the care back with the patient and

the doctor, not Congress and insurance companies," says a retired nurse who resides on her farm in Pennsylvania. This patient, who has struggled with congestive heart failure and now has a Pacemaker, values her direct care practice for its commitment to restoring the physician-patient relationship and care continuity.

"You go to the other doctors, and they allow you about fifteen minutes. Sometimes a doctor has to talk to patient for a while just to get them to open up," she says. "With her, I can spend fifteen minutes or an hour...time is so meaningful."

"You can see the doctor the whole time, at one time. I like seeing the same person all the time. It's better than going to a larger group and seeing someone different every time." She also expressed dissatisfaction for having medications changed periodically when being seen by a different medical provider within the same group practice.

Massachusetts

A direct care physician in Massachusetts talks about how patients seek out direct care for transparency and a more intimate physician-patient relationship. "I think the issue that we are dealing with in the current system is that you have the only business in the country where the supplier and the consumer of a service have no idea of what anything costs at the point of service. How can I take care of somebody who may be uninsured or underinsured and diagnose them with type-two diabetes or a testicular mass...and not look at costs as part of their treatment plans, their prognosis, and their outcome?"

He recounts one of his patients with a testicular mass who put off getting treatment. "He had this thing for months and months and he was uninsured and I think he was just completely terrified of going to the ER and feeling ashamed by somebody of why he waited this long or worried about the cost, whatever the issue may be." The patient found the direct care practice online and enrolled within five days when he saw that it was a way to get access to care for \$50 a month.

"That same day we had our insurance broker leave his office to come into our office to get him on Medicaid. We just knew that there was no way he was going to be able to go through what he was going to go through without assistance and insurance. And we took care of that for him within 20 minutes."

The rules of narrow insurance networks, however, made referrals to certain providers more difficult. "The

only impediment to getting him the correct care that day was the third party payment system saying he needed an in-network PCP to order a CT scan because a specialist can't order one or I can't because I'm not part of their network. It all ended up working out because we played the game and we found him and in —network PCP and got the CT scan scheduled and he was operated on within two days after that. But, that just shouldn't happen."

The physician further explained that, had the patient decided to go to the emergency room or an urgent care, quicker access to care isn't always a guarantee. "The question is what would the process have been like for him in an ER with 50 other patients sitting around waiting five hours to be seen because it's not an emergent situation – although an urgent situation? Maybe he would have been signed up for Medicaid by their social worker, their billing department, or financial assistance, or had gotten his scans done. But would he have built a relationship with somebody where he felt he could pick up the phone and call and be like, 'what's going on?' when told he had a recurrence last week after being cleared of disease for 3-6 months? The answer is no. He wouldn't."

Kansas

A physician in Kansas who recently converted to direct care refers to patient care within the traditional insurance-based health care system as "inside" mainstream medicine and Direct Primary Care as "outside" of the status quo. "The current system is broken," he says. "When someone has a chronic illness, inside the system, you don't really have the opportunity sometimes to take care of them at the time they need to be taken care of. Let's say you've got a guy with bad heart failure. He's starting to have some trouble breathing, but not really that bad. On the inside, you're so busy, that when that patient needs your help, you're booked up. You've got a full day. You've got 20-plus people on your schedule. The patient calls and talks to some of your staff and is told that since he's not that bad, it's going to be a week or two to be seen. He doesn't get the care he may need that day. So he stays home, getting progressively worse, until a week later, when he shows up to the ER (via an expensive ambulance ride) on the verge of death. Now he's so sick he has to get admitted and might be in the hospital for a week, where he racks up a huge bill for the taxpayer. All of that could have been easily prevented a week earlier with a quick check-up and a medication adjustment. I would also note, that since I have no office visit

charges, this kind of thing is prevented because patients who need chronic care check-ups don't avoid coming in to save money, a sad trend I often saw on the inside."

"On the inside, chronic illnesses can easily become more acute, because the doctor has to take care of too much for too many. I was not able to deal with mild problems to prevent them from becoming severe. Direct care lets me practice medicine where I can put fires out when they're still small. Out here, access to care isn't delayed--you can attend to chronic illness in real time and you aren't forced to put something off that later becomes a blazing inferno. Direct Primary Care can and does save the system a massive amount of money."

Massachusetts

One of the first members at a local direct care practice in Massachusetts talks about the value he sees in this alternative health care model. "It's so easy, and it should be easy," says the patient. "I feel very confident about it. I've tried to convince my wife to jump on board with direct care, but she has a long-term connection with her PCP."

The patient was originally an established patient at his direct care physician's former employer. "The reason I found him was because I hadn't been to the doctor in many years, hadn't had checkups, and I thought I was healthy," he says. "However, at that time, I started having trouble sleeping. I had to sleep partially sitting up. It felt like I couldn't breathe. When he first saw me, it turned out that I had the most unbelievable heart murmur he had ever heard in his life."

After having successful heart surgery, he was then diagnosed with squamous cell carcinoma of the head and neck. His physician helped him coordinate treatment for skin cancer.

"Everything is okay now, pretty much," the patient says. He then went on to point out key differences between the traditional health care practice he used to be seen at and his physician's current direct care office.

"When I saw him at his old practice, he was in a frenzy all the time. He maybe had five minutes to talk to me, although I knew he was genuinely concerned. But, now, he has time to be concerned...it's unbelievable how he watches over me every step of the way. When I see him, he sees me. He speaks with me on the phone. He checks in all the time. If it's the weekend and I need a prescription to be refilled, I text him and he takes care of it. I would never get that from a regular doctor."

Keeping a physician on retainer in exchange for a monthly fee is also reassuring for the patient. "I travel maybe 5 days a week to business all over the country. So I'm gone a lot. I like the comfort that I can call him wherever I am, or I am able to see him in office if I have a small window when I'm at home."

Florida

"My husband and I dropped our health insurance after Obamacare more that tripled our plan costs, raised our deductibles to outrageous amounts and reduced coverage in many important areas. We couldn't even afford to see a doctor after paying for our plan, let alone ever meeting the deductibles. So the search began. I had read articles about a local direct care physician online and was excited at the possibilities of actually having true health care coverage without any hassles. The practice has saved us over \$15,000 and counting so far this year. We receive excellent care from our doctor and his team. Massive discounts for lab work and imaging, over \$2000 savings today alone (which has spurred this review) excellent advice for savings on prescriptions (He saved me \$900 on an anti viral generic last week). We are no longer worried and confused about whether or not our visit will be paid for on this day or that day. Whether or not we're going to have to pay up front and wait for insurance company to finally pay us back. The confusion has ended. I no longer feel like I need to hire an attorney and an accountant just to guide me through my policy plan. This is one of the best financial decisions we've ever made. If you're sick of the nonsense and want a better way to manage your health care without the headaches and also want an awesome doctor/ patient relationship you can't go wrong joining a direct care practice. This idea needs to go nationwide because Americans are starving for simple health care solutions. I can not thank them enough for all that they do for us."

A direct care patient once said, "I am not going to pay a doctor \$60 a month. He's not that special." But, for that patient, better access to care and cost savings on labs and meds has paid dividends for her and her husband. "After one full year as a direct care patient, total savings is \$17,143 so far. I now carry his business cards around in my wallet."

She raves on about many benefits her monthly membership offers. "Sometimes I see him three times a month, sometimes I don't see him for two or three months. But, for \$60 a month, I have unlimited care."

"When I woke up and realized I had a massive eye problem two weeks ago, I called my direct care physician and he told me to come to the office right away. It turns out I had 30 percent vision left in my eye. After examining me, he picked up the phone and sent me over to an ophthalmologist. The specialist's office was closing in 15 minutes, but he still spent an hour and a half with me running many tests on my eye," she says. Because of Direct Primary Care, the ability to negotiate cash discounts with specialists can be beneficial for patients in need of immediate care.

"To get a second opinion, I was sent to another specialist the next day. I sat in the waiting room for 20 minutes and then spent six hours that day in the office. It turns out my optical nerve was under attack because of a virus. I had eight labs done that day. I've never had so many tests done in my life. And I'm still not done. When I walked out, the staff asked me, 'You're with the direct care practice, right?' Because I'm a member, the specialist office only charged me \$120 for 6 hours worth of tests."

"I was overwhelmed by it all because I knew that if I was with a certain insurance provider, I would most likely go in to see some doctor who doesn't even know me. If he did, he probably wouldn't remember by name, and recommend me to see a specialist which at that point I would have to wait three weeks to be seen."

Since her diagnosis, she has no more pain, and her vision continues to improve. "My time is very valuable," she emphasizes. I am running all day long, and I don't want to spend all my time making sure I'm okay. I want to relax at night."

Note: All patient and physician interviews were conducted with the author between September and December of 2016.

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