



# Chronic Condition Management: The Best Prescription for Controlling Health Care Costs.

May 2017

*Insight into how this practice effectively manages the small percentage of members who drive the majority of an employer's health care spend.*

tria   
HEALTH

# EXECUTIVE SUMMARY

## 20% OF MEMBERS DRIVE 82% OF MEDICAL AND PRESCRIPTION HEALTH CARE COSTS<sup>1</sup>

Health care costs continue to skyrocket, increasing the need for innovative cost containment strategies. On average, 75% of an employers' medical spend is associated with chronic conditions. Focusing on this small percentage of the population who drive the majority of health care costs will have the most impact on lowering total health care costs.

Most people in this costly segment have chronic conditions such as diabetes, hypertension, cardiovascular disease, COPD, etc. Recently, specialty conditions (e.g. inflammatory, hepatitis, cancer, etc.) with low utilization, but high costs have taken a more prominent role.

*Abundant media coverage has increased awareness on rising drug costs, but not enough consideration has been given to the root cause of the problem - helping patients manage their costly condition(s) - which will reduce overall health care costs.*

People with chronic conditions have complex health needs and require more health services. These patients see multiple doctors, fill at multiple pharmacies and take multiple medications... all with unique instructions. Keeping track of relevant information is challenging. In fact, 50% of people don't take their medication as prescribed and as a result don't achieve the desired health outcome. This is called non-adherence<sup>2</sup>. When patients are non-adherent, they incur *avoidable* health care expenses such as increased hospitalizations, emergency room visits, urgent care visits, and more.

*For a typical mid-sized employer with \$10M in annual claims, poor adherence can generate avoidable health care spend of \$1M or 10% of total spend<sup>3</sup>.*

Since medication is required for effective condition management, a pharmacist is uniquely qualified to work with patients individually through one-on-one consultations; develop personalized care plans; and provide coordination of care to improve patient health and reduce costs. This solution is distinct from medication dispensing at the pharmacy or disease management which is a single condition approach.

*Chronic Condition Management (CCM) is pharmacy care centered on the patient, not just the disease, with a focus on increasing patient engagement and a goal of delivering measurable improved health outcomes.*

Improving health outcomes is the only way to prove financial effectiveness. However, demonstrating a return on investment can be challenging. Realizing cost savings from improved health outcomes takes time and data, one to two years and potentially multiple data sources. However, over time, a growing body of evidence from government run Medication Therapy Management (MTM) programs and companies like Tria Health's more advanced CCM programs have proven that effective condition management improves health for members and control costs for commercial employers and health plans.

## THE PROBLEM: HALF OF AMERICANS HAVE AT LEAST ONE CHRONIC CONDITION, 25% HAVE TWO OR MORE. HEALTH CARE SPENDING INCREASES EXPONENTIALLY WITH EACH CONDITION

A chronic condition is a disease that persists for a long period of time such as high blood pressure, high cholesterol, heart disease, arthritis, diabetes, asthma, cancer, COPD, HIV, depression, etc. According to Centers for Medicare & Medicaid Services (CMS), chronic diseases affect about half of all adults and are the leading cause of death in the US. And, a quarter of all adults have multiple chronic conditions. (See table 1)<sup>4</sup>

People with chronic conditions have complex health needs and require more health services. Not surprisingly, health care needs increase with the number of chronic conditions. Spending is twice as much for those with one chronic condition, six times more for those with three and thirteen and a half times for those with five or more. These high cost, high-risk patients strain the budgets of patients, their families, insurance plans and the health care system. (See table 2)<sup>5</sup>

Managing chronic conditions takes time and effort. Patients with chronic conditions typically see multiple doctors, manage multiple pharmacies and take multiple medications all with unique instructions. Keeping track of when to take medications; knowing if they will negatively interact with each other; if they are duplicative; or if they are achieving the desired outcome; among other things can be a challenge. On average patients with chronic conditions take an average of 10-12 medications including prescription, over the counter, vitamin supplements and more.<sup>6</sup>

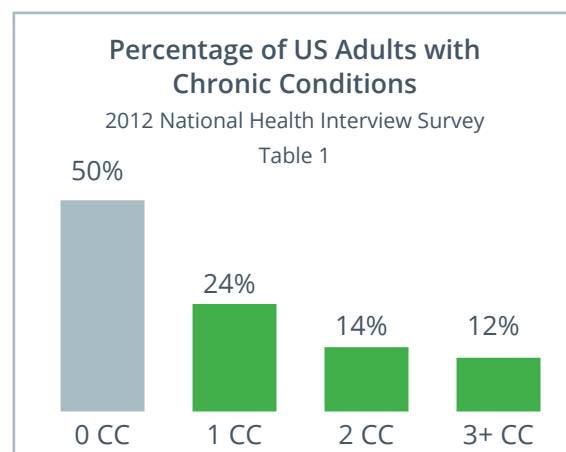


Table 1

**86%** of health care spend is for people with one or more chronic condition(s)

## MEDICATION IS CRITICAL TO CHRONIC CONDITION MANAGEMENT & HALF DON'T TAKE THEIR MEDICATION AS PRESCRIBED

Research studies have shown that when a person doesn't take their medication as prescribed - also known as non-adherence - avoidable health care expenses are incurred. These include increased outpatient care (i.e. urgent care, ER visits), hospitalizations, specialist visits and more. In addition, non-adherence has been attributed to 125,000 deaths annually and has been estimated to cost the US as much as \$290B annually in avoidable health care expense.<sup>7</sup>

*To put this in context, for a typical mid-sized employer with \$10M in claims, poor adherence may generate avoidable health care spending of \$1M, or 10% of total spend<sup>3</sup>.*

Chronic Condition Management (CCM) will reduce non-adherence and improve health outcomes, ultimately reducing overall total health care costs.

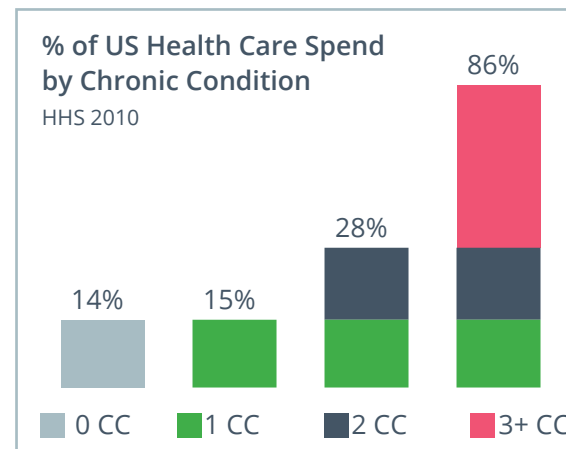


Table 2

## ONE SIZE DOES NOT FIT ALL... PATIENTS HAVE A VARIETY OF PERSONAL REASONS FOR NOT TAKING MEDICATION AS PRESCRIBED

There are many reasons why patients decide not to take their medication. The timing of non-adherence may vary across the course of treatment. Patients may decide not to fill their prescription at all; use more or less than the prescribed amount; and/or discontinue treatment prematurely. The reasons for deviating from a prescribed treatment plan are both intentional and unintentional.

Intentional non-adherence is a process whereby the patient actively decides not to follow the treatment recommendation. A patient weighs the pros and cons of the medication and, based on their knowledge, makes a conscious decision not to take the medication as prescribed. Some examples include not being able to afford a medication (increasingly important as consumers continue to bear more of the cost burden through high deductible health plans); unpleasant side effects; understanding long-term drug effectiveness; cultural and belief systems; misinformation; lack of symptoms; and/or difficulty navigating the health care system with multiple providers, pharmacies and medications.

Unintentional non-adherence is associated with unplanned behavior and is more passive. Typically, it is associated with the complexity of the medication regimen and the patient's memory. Some examples of unintentional non-adherence include forgetfulness and lack of education.

Because each patient is unique, understanding the reasons for non-adherence is important. The ability to develop a care plan that is clinically evidence-based as well as personalized for each patient, is critical to effective condition management. A specially trained pharmacist, as a medication expert, is in the best position to provide this consultation. The pharmacist can talk with the patient to understand all the medications used (prescription, over the counter, supplements), the patient's lifestyle attributes (diet, exercise, attitudes), as well as provide a coordination of care with other providers to establish a comprehensive patient-centered care plan that is clinically focused.

*"Each condition is unique and has its own therapeutic goals for clinical measurement of success. In addition, there are a multitude of reasons why a patient may or may not take medications as prescribed. Each patient is unique. The ability to create a personalized, clinically based care plan by patient is essential for effective condition management. This requires a patient centric approach.*

*At Tria Health, we spend an average of 42 minutes per patient engagement.... there just isn't that much time available in an office or pharmacy setting.*

*Our goal is to provide patient-centered care focused on outcomes....improving overall patient health which reduces costs for plans."*

*Jessica Lea, Pharm.D.*

*CEO, Tria Health*



## MANY TIMES HEALTH CARE PROVIDERS DON'T HAVE A COMPLETE PICTURE WHICH LIMITS THEIR ABILITY TO PREVENT MEDICATION RELATED PROBLEMS

As mentioned above, high cost patients (the 20% who drive 82% of spend) take multiple medications, see multiple doctors and fill prescriptions at more than one pharmacy. The average time a doctor spends with a patient is typically rushed. Research has shown that 40-80% of what a doctor tells a patient is forgotten after they leave the appointment. This recall is likely exacerbated when a patient is told they have a new chronic condition... one they will have to manage for the rest of their life. <sup>8,9</sup>

Since many patients fill at multiple pharmacies, the dispensing pharmacist lacks the necessary information to know if a patient is taking other drugs that may interact with the prescription being filled. In addition, having time to spend with the patient may be limited at some retail pharmacies putting the dispensing pharmacist at a disadvantage to provide patient-centered care.

These factors impede health care providers from identifying drug therapy problems and preventing non-adherence.

## PHARMACISTS ARE UNIQUELY POSITIONED TO OPTIMIZE MEDICATION REGIMENS AND PROVIDE PATIENT CENTRIC CARE FOR THOSE WITH CHRONIC CONDITIONS

In 2003, the Medicare Prescription Drug Improvement and Modernization Act (MMA) was passed to make prescription drugs more affordable. This prompted professional discussions around the idea of having pharmacists work with patients and their physicians to manage medication therapy in an effort to enhance a patient's understanding of appropriate drug use, increase adherence to medication therapy and reduce adverse drug events. A standard definition was established and then updated for the 2010 Affordable Care Act for Medication Therapy Management (MTM). The updated definition improved the care model and collaboration among pharmacists, physicians and other health care professionals to optimize medication use for improved outcomes.

The standard definition used by Medicare and Medicaid for MTM reimbursement includes five core elements: a medication therapy review, a personal medication record (PMR), medication related action plan (MAP) intervention and/or referral and documentation and follow up.<sup>10</sup> These are also the base elements used in CCM.

However, even with a common definition, there are still many versions of MTM available in the market for both the commercial market as well as Medicare/Medicaid patients. While there is substantial evidence that MTM is effective, being able to have flexibility to personalize an approach to increase engagement and focus on health outcomes is what drives increased cost savings long term. The graph and table below provides a high-level clarification of the types of services offered and the value they bring to the market.

Chronic Condition Management is distinct from medication dispensing. This comprehensive approach focuses on all of the patient's medications and conditions, rather than the individual product being filled or a single disease. CCM takes full advantage of the pharmacist's role as the 'medication expert' to improve health outcomes and reduce costs.

### 5 Core Elements of the Patient – Pharmacist Interaction

1. Medication Therapy Review
2. Personal Medication Record
3. Medication-related Action Plan/ Intervention
4. Referral Documentation
5. Follow Up

### You Get What You Pay For

*with Different Condition Management Solutions*





# DEFINING MEDICATION THERAPY & CHRONIC CONDITION MANAGEMENT SERVICES

## MEDICATION THERAPY MANAGEMENT (MTM)

### OVERVIEW

Provides 5 core MTM elements with Medicare & Medicaid reimbursement.

### KEY DIFFERENTIATORS

Low or no cost to plans. Minimal cost/effort spent by providers to outreach to patients resulting in low patient engagement. Limited to no outcomes reporting.

## ENHANCED MTM

### OVERVIEW

Tests beginning in 2017 by CMS to determine if additional payment incentives and regulatory flexibilities will improve outcomes for stand-alone Part D Prescription Drug Plans (PDPs) providing the ability to 'right-size' their investment in MTM.

### KEY DIFFERENTIATORS

Will provide eligible plans ability to vary intensity and types of MTM interventions to improve engagement and outcomes. Appears to be a test to support a move toward the Chronic Condition Management model defined below.

## CHRONIC CARE MANAGEMENT SERVICES

### OVERVIEW

Beginning in 2015 Medicare began paying for this service for patients with two or more chronic conditions that place the patient at risk of death, acute exacerbation/decompensation, or functional decline. One on one consultation provided by physician, physician assistants, nurse practitioners, clinical nurse specialists, certified nurse midwives.

### KEY DIFFERENTIATORS

The ability to have a comprehensive review with a medical professional and the requirement of providing a comprehensive care plan with educational resources. However, since medication is a critical component of chronic condition management, a pharmacist, as a medication expert, should be included on the care team, but it is not required in this model. The model is limited to high-risk patients with two or more chronic conditions. Additionally, it doesn't impact preventative care for at risk patients (i.e. pre-diabetes).

## CHRONIC CONDITION MANAGEMENT

### OVERVIEW

One-on-one pharmacy consultation utilizing the structure of the five core elements of MTM with enhanced lifestyle counseling. Available to patients with one or more chronic condition or those taking a high-cost specialty medication. Chronic condition management provides coordination of care between the pharmacists, patient and physician.

### KEY DIFFERENTIATORS

Consultation provides patient centered care, including medication management and quality of life measures such as diet and exercise. Includes a flexible incentive model to increase patient engagement with a focus on delivering and reporting health outcomes to ensure patients and employers obtain a return on their benefit investment.

## IMPROVING OUTCOMES IMPROVES THE HEALTH OF YOUR EMPLOYEES

Improving health outcomes means improving the health of patients, which, in turn, can lower total health care costs. Related to Chronic Condition Management (CCM), improving health outcomes does one or more of the following:

### **CURE A DISEASE**

For example, Hepatitis C can be cured with effective use of medication

### **ELIMINATE OR REDUCE A PATIENT'S SYMPTOMS**

For example, medications used for COPD can make patients feel better, but does not reverse lung damage for non-early stage diagnosis.

### **SLOW THE PROGRESSION OF A DISEASE**

For example, medications used to slow the risk of multiple sclerosis and other diseases.

### **PREVENT A DISEASE OR SYMPTOM**

For example, pre-diabetes screening can identify patients for intervention strategies, some heart medications can help prevent strokes or heart attacks.

The process of improving outcomes includes coordination of care between the patient, the physician, the pharmacist and other health care professionals to design, implement, and monitor a personalized care plan for a patient to achieve their therapeutic goals. As a result, a patient is more adherent to their medication which helps make the medication effective so the patient feels better, is less absent and more productive at work and in life.

## THE PROCESS:

### IDENTIFICATION, ENGAGEMENT, ON-GOING CONSULTATION, REPORTING

A common form of identifying appropriate patients for CCM services is through regular claims analysis to distinguish 'high-risk' patients. Identification includes analysis of prescription claims, but can be enhanced with the addition of medical claims, biometric or health risk assessment data. As with most data analyses - the more data, the better - in developing a high-risk patient profile.



## ENGAGING PATIENTS IS CRITICAL TO THE SUCCESS OF ANY CHRONIC CONDITION MANAGEMENT PROGRAM.

Once patients are identified, there are several options to contact a patient for engagement with a pharmacist. The initial contact is usually driven by the data and permissions available at the patient level. It can include outbound letters, telephone calls, emails, text messaging or any combination of those methods. In addition, pharmacists at retail settings can be notified of high-risk customers through their systems and try interventions at the retail counter. Adding patient incentives can increase member participation in CCM programs. Many programs in the market today lack the flexibility to offer incentives. Incentives should be customized to meet the needs of the employer's plan as well as the targeted group of patients. For example, a higher dollar incentive may be required to encourage a patient on a specialty medication to engage in the program since specialty medications are so much more expensive than traditional brand medications. Incentives can come in many forms including: copay discounts, cash rewards, health savings account rewards, etc.

Once engaged, there are multiple consultation methods including in-person and over the phone. With an in-person consultation, the pharmacist has the ability to read non-verbal cues provided by the patient. However, it is important to make sure the in-person consultation happens in a private location without the pressure of a 'retail line'. Over the phone consultations offer added privacy and convenience with the ability to direct the patient to 'open their medicine cabinet'. This method may alleviate any patient forgetfulness regarding over the counter medication or herbal remedies taken as part of a normal drug regimen. Over the counter medications and other supplements can cause adverse drug reactions or be unnecessary.

Once the initial consultation has occurred, pharmacists will continually collaborate with patients, physicians, caregivers, etc. throughout the process to ensure the medications are safe, affordable and effective. On-going patient contact is important because over time, medications can become less effective; lifestyle changes happen; other medications may be prescribed, etc.; all of which can impact the care plan.

Innovations in mobile health will continue to offer new ways to monitor and measure conditions automatically helping to reduce costs and improve health. Some applications include email/text and two-way communication to support medication adherence. There are apps to monitor disease progression and response to therapy. In addition, there are smart pill bottles/dispensing mechanisms that have the ability to automatically dispense in a controlled fashion, track medication use and support an electronic medical record. There are contacts that can measure blood glucose levels. These types of innovations will continue to grow and improve over time.





## MEASUREMENT REQUIRES CLINICAL CRITERIA TO DETERMINE IMPROVED HEALTH & FINANCIAL MEASURES FOR COST SAVINGS

Having measurement criteria that is clinically based, such as HEDIS® (Healthcare Effectiveness Data and Information Set) and quality of life metrics by condition is important to keep the patient and the care team disciplined and progressing in a positive fashion. Clinically based criteria is particularly important for very expensive specialty medications (i.e. medications to treat Hepatitis C where curative treatment can cost up to \$80,000 a year). These provide a basis of measurement for payers to know if patients are effectively managing treatment.

## CHRONIC CONDITION MANAGEMENT REDUCES OVERALL HEALTH CARE COSTS

For many years, any type of chronic condition management was a difficult decision for business owners and benefit decision makers because the savings are not immediate. The financial benefit comes from preventing urgent care visits, hospital visits, emergency room visits, etc. As a result, the financial and health benefits are not realized immediately. Measurement takes time... and data.

However, over time, a growing body of evidence supports the fact that even though increased adherence may increase prescription costs, chronic condition management reduces overall health care costs.

The government and others continue to expand and enhance their MTM solutions to become more like the Chronic Condition Management defined above. In the commercial space, Tria Health has proven, with objective third party verification, that chronic condition management reduces overall health care costs and is more effective than traditional MTM or disease management solutions.



## FINANCIAL OUTCOMES ARE MEASURED IN TERMS OF HEALTH CARE & COMPLIANCE SAVINGS THAT PROVIDE THE REAL RETURN ON INVESTMENT

The three categories for measuring financial savings with CCM are: Health Care Savings, Prescription Savings and Compliance Savings.



Health care savings measure the reduction in health care claims (incurred health care costs) due to patients who are effectively managing their condition through CCM. As a result, these patients have fewer emergency room visits, hospitalizations, out-patient clinic visits and more. The avoidance of these health care costs provide significant bottom line savings over time.



Prescription savings come from identifying lower cost, equally effective alternatives or the discontinuation of unnecessary medications. Savings in this bucket will typically cover the cost of the entire program. However, a primary goal of CCM is to increase adherence, which may increase prescription costs. Over time, the health care and compliance savings always outweigh the cost of increased medication adherence.



Compliance is proven financial savings measured by condition when a patient moves from a non-compliant status to compliant status. This is based on their medication adherence measurement which can include medication possession ratio or proportion of days covered.

The real measurement comes from comparing the medical and prescription claims costs over time of like 'high-risk' patients who engage in CCM versus those who don't to find the true ROI of a program.

## TRIA HEALTH CASE STUDY: A GOVERNMENT SAVES \$1,225 PER YEAR FOR ENGAGED MEMBERS AND A POSITIVE ROI OF 3.5:1

Medical, prescription and biometric data was studied from 1/1/2014 to 12/31/2015, 26% of members were identified as high-risk. These patients had an average of 2.24 chronic conditions and cost \$5,749 per year versus the non high-risk cohort which had .64 chronic condition and cost \$1,760 per year. In reviewing the claims data, it was found that high-risk members that engaged with Tria Health saved \$1,225 per year. This was accomplished through 11% increase in medication adherence, 26% reduction in ER visits, and 36% reduction in non-emergent ER visits.

Interestingly, when comparing chronic conditions year over year for engaged high-risk vs. non-engaged high-risk vs. non high-risk patients, chronic conditions increased for all patients. However, the increase was significantly less for those 'high-risk' engaged with Tria Health. Patients engaged with Tria Health who were educated on their condition(s), their medications and lifestyle impacts are managing their conditions better and getting fewer chronic conditions over time. This analysis should be alarming to plans that do not have a chronic condition management solution in place. Without a CCM program in place, chronic conditions will continue to rise and the costs to support those members, especially those with multiple conditions, will continue to increase exponentially more than members without chronic conditions.



*"Our partnership with Tria Health has been extremely successful. Our employees are stable and taking their medications properly. We've seen fewer office visits, hospitalizations and emergency room visits."*

Cameron Ahrens  
Health Care Manager,  
Johnson County

### CONCLUSION:

**Chronic condition management effectively manages the small percentage of patients who drive the majority of health care spend.**

- <sup>1</sup> <https://www.wsj.com/articles/health-cares-bipartisan-problem-the-sick-are-expensive-and-someone-has-to-pay-1484234963>. Source: 2013 Kaiser Family Foundation
- <sup>2</sup> Adherence to Drugs That Prevent Cardiovascular Disease: Meta-analysis on 376,162 Patients, Naderi, Sayed H. et al. The American Journal of Medicine , Volume 125 , Issue 9 , 882 - 887.e1
- <sup>3</sup> [http://adhereforhealth.org/wp-content/uploads/pdf/ThinkingOutsidethePillbox\\_OnePager.pdf](http://adhereforhealth.org/wp-content/uploads/pdf/ThinkingOutsidethePillbox_OnePager.pdf)
- <sup>4</sup> Ward BW, Schiller JS, Goodman RA. Multiple Chronic Conditions among US Adults: A 2012 Update. Prev Chronic Dis 2014;11:130389. DOI: [tp://dx.doi.org/10.5888/pcd11.130389](https://doi.org/10.5888/pcd11.130389)
- <sup>5</sup> Gerteis J, Izrael D, Deitz D, LeRoy L, Ricciardi R, Miller T, Basu J. Multiple Chronic Conditions Chartbook. AHRQ Publications No, Q14-0038. Rockville, MD: Agency for Healthcare Research and Quality. April 2014.
- <sup>6</sup> Tria Health Book of Business Results for 2015 & 2016, Engaged Patients
- <sup>7</sup> NEHI, Thinking Outside the Pillbox, NEHI Research Brief – Aug 2009
- <sup>8</sup> <http://www.usatoday.com/story/news/nation/2014/04/20/doctor-visits-time-crunch-health-care/7822161>
- <sup>9</sup> Kessels RPC. Patients' memory for medical information. J R Soc Med 2003;96:219-22
- <sup>10</sup> [http://www.pharmacist.com/sites/default/files/files/core\\_elements\\_of\\_an\\_mtm\\_practice.pdf](http://www.pharmacist.com/sites/default/files/files/core_elements_of_an_mtm_practice.pdf)



#### About Tria Health

Founded in 2009, Tria Health offers innovative chronic condition management solutions to help employers reduce costs and improve the health of high-risk, high cost patients with chronic conditions and/or taking specialty medications. Tria Health utilizes sophisticated analytics and technology to identify and engage high-risk patients; specially trained pharmacists to conduct one-on-one consultations and state-of-the art outcomes based reporting to delivery proven results. For more information go to [triahealth.com](http://triahealth.com).