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Pharmacist Interventions Remove Health Care Gaps in Members with Chronic Conditions

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Telehealth Consults with a Pharmacist Improves Chronic Condition Management

Several clinical studies have assessed the impact pharmacists have managing a single condition. These studies show that integrating a pharmacist into a health care team positively impacts health outcomes. This study investigated the potential impact of Tria Health's comprehensive approach on healthcare outcomes across a variety of chronic conditions.¹

Tria Health's model utilizes the expertise of clinical pharmacists to conduct telehealth consultations to help people with chronic conditions understand their medications, conditions, and attain their health goals. Each individual has a pre-scheduled appointment time and a dedicated clinical pharmacist for their consultation. During these appointments, pharmacists provide a comprehensive review of medications with condition-related education and health resources, and answer questions the member has about their health and medications. When appropriate, Tria Health pharmacists will outreach to the patient's health care providers to advocate on behalf of the patient. Pharmacists also leverage established insurance formularies to identify cost savings opportunities for both the employee and employer.

Pharmacists speak with individuals for an average of 33 minutes per consultation, then provide action plans including a summary of recommendations to both the individual and their physician(s). Follow-up appointments are scheduled at mutually agreed upon times with consideration given to problem severity, and personalized health goals. Individuals are also encouraged to call any time for additional questions.

By helping individuals reach their health goals, Tria Health improves health literacy while reducing total healthcare costs for the employee and the employer.

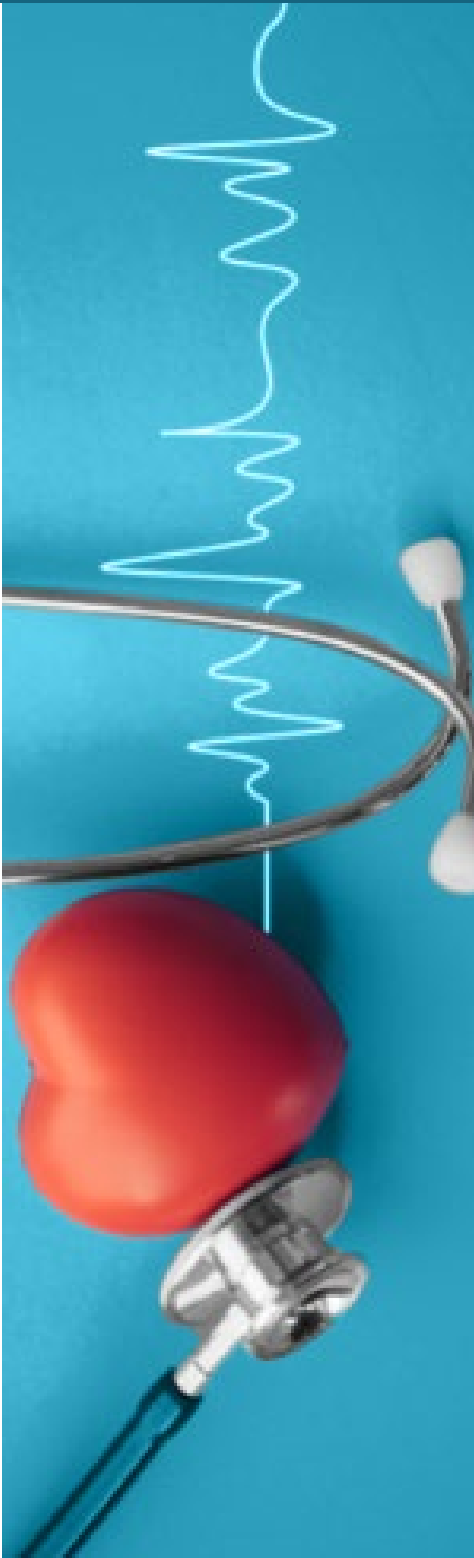
All with the ultimate goal in mind: improving the individual's quality of life.



Medications are The Most Common Treatment for Chronic Conditions, so it is Important to Optimize Medications

Six out of 10 adults in the United States have been diagnosed with a chronic health condition, while 40% suffer from two or more. Individuals with multiple chronic diseases are at a higher risk of long-term complications and poor health outcomes. Chronic conditions, such as heart disease, diabetes and lung disease, continue to be the leading causes of increased health care costs, disability, and death.²

Members with chronic conditions typically require multiple medications for condition management. Complex medication regimens need a qualified health professional to ensure effectiveness, safety, and member compliance.^{1,3} Clinical pharmacists are the best resource to support standard of care treatment strategies and aid in the management of medications and health optimization.



Methodology

Participants in the study included members of self-funded employer sponsored health plans. In this retrospective, pre-post study design, these individuals serve as their own control group because the effectiveness of condition management was measured prior to a pharmacist consultation and then again after the pharmacist consultation. During each consultation, the Tria Health pharmacist uses proprietary, condition-specific care plans based on clinical guideline-directed recommendations that allow for assessment and documentation of an individual's current health status. These care plans identify clinical care gaps and track changes in their health status while under Tria Health's management.

Proper management of chronic conditions requires a multi-faceted approach. Condition management involves utilization of evidence-based treatments, adherence to monitoring parameters and recommended screenings, and achievement of important treatment targets such as blood pressure levels and hemoglobin A1c. When one or more of these parameters are not met, it is described as a clinical care gap.

The study evaluated the proportion of open and closed clinical care gaps within specific chronic health conditions upon initial consultation with a Tria Health clinical pharmacist and compared the open and closed care gaps on the most recent follow-up appointment. These clinical care gaps within each condition-specific care plan were predetermined assessments based on HEDIS® measures, T-MEDSM - clinical practice guideline recommendations, and established evidence-based assessments. Examples include laboratory values and vital signs (e.g., hemoglobin A1c, blood pressure readings), preventative screenings (e.g., retinal eye exams, age-appropriate colonoscopies) and guideline-based recommendations (e.g., appropriate statin use in diabetes).

Each care gap assessment status is designated "open" or "closed" during each consultation. Using these care gap statuses, the study compared the proportion of statuses that were open or closed at an individual's first consultation to the proportion after completing 3 or more consultations with a Tria Health pharmacist, allowing for pre-post analysis for each individual.

What is a Retrospective, Pre-post Study?

In this study design, individuals served as their own case control.

The study consists of analyzing a person's care gap status before engagement with a Tria Health pharmacist and then again after 3 or more consultations over a 5 year period.

Proper management of chronic conditions requires a multi-faceted approach.

1. Are you following evidence-based treatments?
2. Are you adhering to preventative care guidelines?
3. Are you achieving important treatment goals (e.g. blood pressure levels, A1C and more)?

When one of these parameters are not met, it is described as a **clinical care gap**.

Table 1: Characteristics of Members at Baseline (Before Pharmacist Consult)

Condition	Number of care gap assessments per condition	Number of Members	Average age in years	Average number of medications	Average number of chronic conditions
Hypertension	4	3,805	58.9	13.7	3.5
Hyperlipidemia	6	3,350	58.6	14.0	3.7
CAD	7	726	63.0	15.4	3.9
Asthma	9	1,101	46.8	14.4	3.3
COPD	9	162	62.5	16.7	4.6
Diabetes	12	5,299	56.7	13.5	3.6
Preventative Measures	16	7,681	58.7	12.7	3.1

To be included in the study, individuals must have completed at least three consultations with a Tria Health pharmacist between January 2016 and December 2020. Any specific care gap measure with less than two documented clinical notations was excluded due to inability to identify a change in status.

While pharmacists review all medications and conditions during consultations, this study was designed to analyze a specific set of seven different chronic health conditions: hypertension, hyperlipidemia, coronary artery disease (CAD), asthma, chronic obstructive pulmonary disease (COPD), diabetes, and preventative measures (consisting of condition and age-appropriate cancer screenings and immunizations). Within each of these conditions, predetermined assessment measurements range between four to 16 potential identifiable care gaps to be assessed during each consultation.

All data was analyzed using a McNemar test to identify if there was a statistically significant difference between pre- and post-consult data for each individual's health condition(s).

The Average Profile of a Tria Health Patient

- 58 Years Old
- 3-4 Chronic Conditions
- 14 Medications (including prescriptions, vitamins and/or supplements) (Table 1)



Results

Tria Health's Pharmacist Intervention Assisted in Closing Over 50% of Open Care Gaps Across Multiple Chronic Conditions

Among the seven different chronic conditions, 66,646 care gaps assessments were analyzed and determined to be "open" or "closed". Upon initial consultations, pharmacists identified 9,057 (13.6%) assessments as open care gaps among the conditions analyzed.

Presenting the highest intervention opportunity, was identified in the preventative measures assessments (4,092 open care gaps), followed by diabetes (3,148) and hyperlipidemia (687). The condition with the least number of open care gaps was COPD (50). (Table 2)

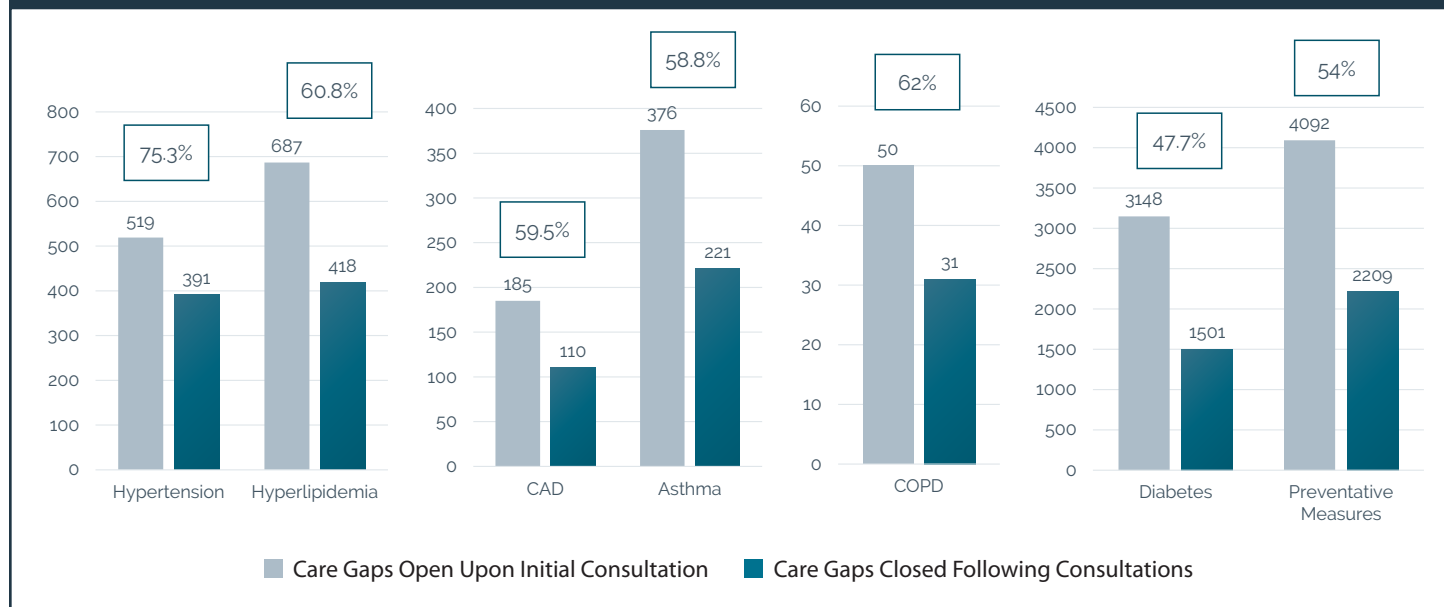
Table 2: Number of Patients and Total Care Gap Assessments Analyzed

Condition	Number of Members	Care Gap Assessments	Care Gaps Open on Initial Consult (#)
Hypertension	3,805	9,372	519
Hyperlipidemia	3,350	10,285	687
CAD	726	2,602	185
Asthma	1,101	4,705	376
COPD	162	322	50
Diabetes	5,299	20,517	3,148
Preventative Measures	7,681	18,843	4,092



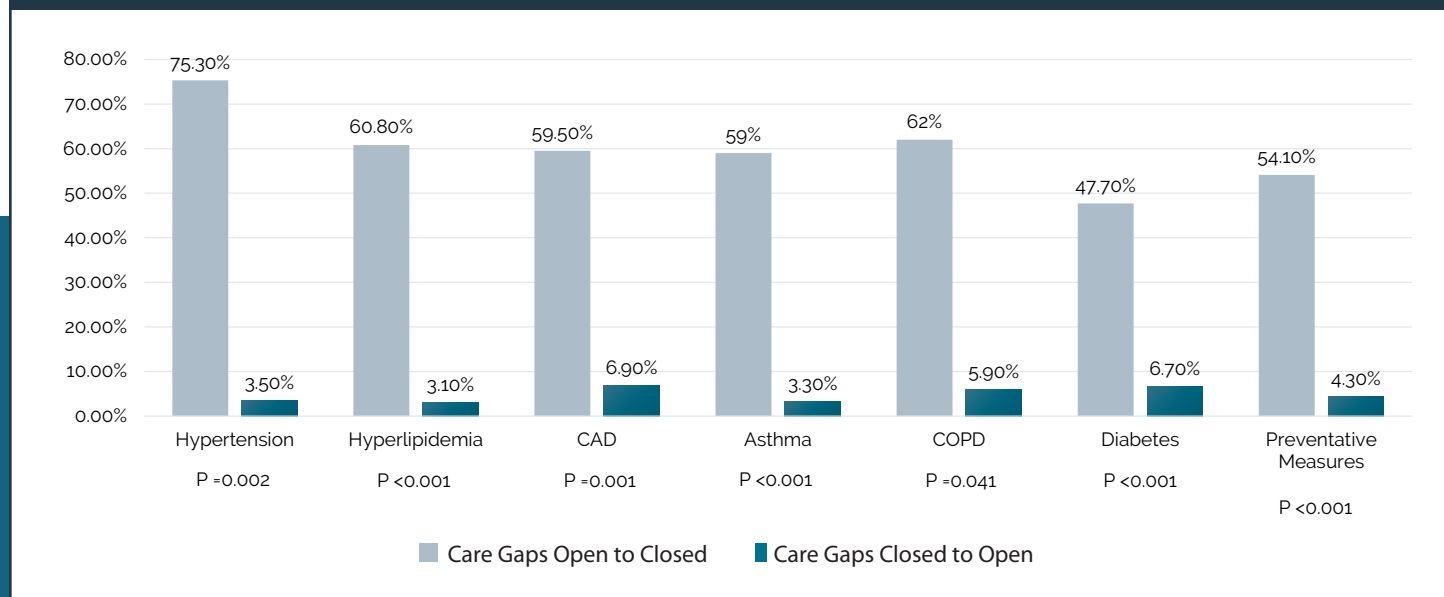
Of the 9,057 open care gaps identified during initial consultations, a total of 4,881 (53.9%) were closed following the completion of three or more clinical pharmacist interventions when added to standards of care treatment. With the inclusion of Tria Health’s pharmacist consultations, a higher percentage of the identified open care gaps were closed across all 7 chronic conditions analyzed. (Figure 1)

Figure 1: Percent of Care Gaps Closed After Three Consultations



The primary outcome of this study focused on the proportion of open care gaps that were closed from the time of an individual’s initial consultation to their most recent follow-up. A McNemar test was used to determine if there was a statistically significant difference ($P < 0.05$) in the proportion of closed vs opened care gaps pre- and post-intervention with a pharmacist. A significantly larger proportion (59.8%) of clinical care gaps were open to closed, compared to those that closed to opened (4.8%), among all seven chronic health conditions analyzed. (Figure 2)

Figure 2: Percent of Open to Closed vs. Close to Open



Conclusion

Telemedicine and pharmacist collaboration are growing fields that have both been associated with improved health outcomes.

There are a standard set of clinical criteria used to measure whether or not a person is effectively managing their chronic condition. Each chronic condition has its own set of criteria for measurement. Care gaps occur when a person is not meeting a particular standard of care (i.e. there is a gap between what is considered a clinically effective measurement and the current measurement). The fewer care gaps that exist, the better the condition is being managed.

Results of this 5-year retrospective study illustrate the inclusion of Tria Health pharmacist consultations assisted in closing over 50% of the open clinical care gaps across the chronic conditions investigated. Telemedicine and pharmacist collaboration are growing fields that have both been associated with improved health outcomes.^{1,4,5} This study supports using both strategies together will lead to a positive impact in chronic health outcomes by closing clinical care gaps across a variety of conditions.

Citations

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