



Delivering Nourishment.
Improving Health.

Food as Medicine

The Cost-Saving
Solution of Nutrition
in Health Care



The Power of
Food as Medicine



A message from **MANNA's CEO** Sue Daugherty, RDN, LDN

MANNA has been committed to caring for our seriously ill neighbors in the comfort and dignity of their own homes since 1990. Founded by seven members of the First Presbyterian Church in Philadelphia, our mission was to care for people in Philadelphia who were dying from HIV/AIDS during the height of societal stigma and ignorance. Our first volunteers took care of the sick the best way they knew — by providing home cooked meals to their neighbors in need. MANNA volunteers were one of the few sources of love and care for these patients when everyone else turned them away.



As treatments began to help people survive, they also generated significant side effects and we realized that our clients needed more than comfort food, they needed meals designed to address specific medical needs. With the addition of registered dietitians to its team, MANNA began pairing medically tailored meals with nutrition counseling, and the MANNA Model was born.

The MANNA Model delivers the complete nutrition that our clients need right to their doors every week—three meals a day, seven days a week. MANNA's professional chefs and registered dietitians craft delicious, medically nutritious menus that are enticing while meeting strict national dietary guidelines. We offer 12 diet modifications to meet each client's unique medical requirements and accommodate any co-conditions.

After seeing how our medically tailored meals helped improve outcomes for people with HIV/AIDS, we expanded our services to people in the Philadelphia region with other serious illnesses that impact nutrition, including cancer, renal disease, cardiac disease, and diabetes. Today, the MANNA Model has demonstrated its ability to improve health and reduce the cost of care for the people we serve.

While our model is based in science, I believe it is our spirit of love, generosity, and empathy that makes us great. Our meals are entirely prepared by our community of volunteers with the same love and care our founders had. I believe it is this pairing of compassion and science that helps our clients heal.

The MANNA Model

Currently, 75% of the country's annual health care dollars are spent on people with one or more chronic health conditions.¹ Additionally, 5% of the Medicaid population accounts for 50% of health care costs. The health care industry needs to address the social determinants of health, including nutrition, to enable patients to better manage chronic diseases and reduce costs. MANNA is at the forefront of this effort, providing affordable nourishment, health, and hope with kindness and care.

When they came to my door, I was just overwhelmed. It's just like having someone come to my house and hug me. The food is great, the love is better.

– Chris D.

For decades, we have witnessed how patients, prescribed a specialized diet, experience significant improvement in health outcomes when they find MANNA – the only true pharmacy for their much-needed nourishment. Through years of experience – and peer-reviewed research – MANNA knows that medically tailored, home-delivered meals and nutrition counseling services improve client outcomes and satisfaction while reducing health care costs.²

I wouldn't be here if it wasn't for this program.

– Caren L.

Healthcare is continuing to evolve. More states are transitioning Medicaid beneficiaries to managed care organizations (MCOs), and Medicare's provisions offer plans increased flexibility for members with chronic diseases. States now place greater priority on integrating physical and behavioral health, long-term services, and supports under the umbrella of managed care. In doing so, MCOs and Medicare plans are expected to increase their reporting on quality metrics, special quality initiatives, and performance improvement projects.³ MANNA can partner with your organization on these quality improvement initiatives.

I don't let my health conditions slow me down and MANNA is a big part of that.

– Shawn

MANNA's HIPAA-compliant program can help MCOs meet state Medicaid requirements, while providing better, more personalized care to patients covered under all forms of insurance. Policymakers and industry leaders can implement this model into the health care system as a cost-effective way to help people heal and stay healthy.

Dietary Considerations

MANNA offers 12 different dietary modifications to accommodate different diseases, and sometimes can adapt to personal or religious requirements.



1. (Cdc.gov. (2009). The Power of Prevention Chronic disease . . . the public health challenge of the 21st century. [online] Available at: <https://www.cdc.gov/chronicdisease/pdf/2009-Power-of-Prevention.pdf>.

2. Gurvey, J., Rand, K., Daugherty, S., Dinger, C., Schmeling, J., & Lavery, N. (2013). Examining Health Care Costs Among MANNA Clients and a Comparison Group. *Journal of Primary Care & Community Health*, 4(4), 311-317

3. Smith, PhD., V., Gifford, K., Ellis, E., Rudowitz, R., Snyder, L. and Hinton, E. (2015). Medicaid Reforms to Expand Coverage, Control Costs and Improve Care: Results from a 50-State Medicaid Budget Survey for State Fiscal Years 2015 and 2016. [online] kff.org. Available at: <http://files.kff.org/attachment/report-medicare-reforms-to-expand-coverage-control-costs-and-improve-care-results-from-a-50-state-medicare-budget-survey-for-state-fiscal-years-2015-and-2016>



MANNA's Pilot Research Study

Our 2013 pilot study proved what we had already known to be true for years—critically ill, nutritionally at-risk people served by MANNA incur lower health care costs than similar people who do not receive our service.²

Using three years of health care claims, researchers tracked average monthly health care expenditures of 65 MANNA clients for a full year: six months prior to receiving service and the six months after services began. Those costs were compared to a control group of 633 people with similar health issues and demographics who received coverage through a local MCO and had health claims during the same period.

The results were staggering and extremely positive. By providing comprehensive nutrition services, MANNA saved tens of thousands of dollars in health care costs.

MANNA clients' average monthly healthcare costs were

\$13,000

less after starting services - a 31% cost savings*

MANNA clients' rate of hospitalization was

50%

lower, and inpatient stays were 37% shorter*

MANNA clients were over

20%

more likely to be released from the hospital to home, rather than long term care*

The MANNA Model provided the following benefits to clients & MCO:

Average monthly health care costs fell 62% for three consecutive months after beginning service – a total drop of nearly \$30,000.**

Clients living with HIV/AIDS cost the MCO an average of \$20,000 less per month, and their health care costs fell more than 80% in the first three months.**

The costs of inpatient hospitalizations of MANNA clients were 40% lower. On average, the MCO paid out \$12,000 less per month for MANNA clients.

Monthly inpatient hospital costs of clients were 30% lower over the six months following initiation of services, as compared to the six months prior to starting MANNA.

* when compared to a matched control group

** unpublished internal analysis

MANNA's Partnership with Health Partners Plans

MANNA's partnership with Health Partners Plans (HPP), a Medicaid plan in Pennsylvania, is truly groundbreaking. HPP recognized that the MANNA Model greatly improves members' health outcomes while also producing significant cost savings.

In February 2015, MANNA began to operate as one of HPP's providers, and HPP adopted MANNA's nutritious meals and dietary counseling into its routine care management. Initially targeting only 200 HPP Medicaid diabetic members, the program expanded in early 2017 and has since served more than 3,516 clients including those with a broad range of nutrition-impacted diseases.

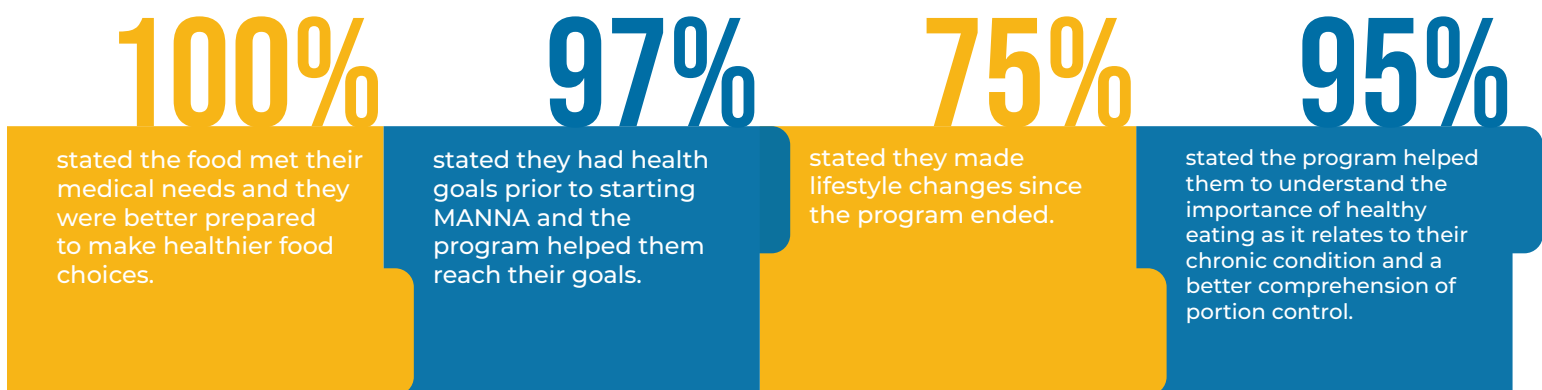
Just six months after starting MANNA's services, members had fewer inpatient admissions, and visits to the emergency room, primary care physicians and specialists were reduced. Diabetic members showed lower HbA1c. Most importantly, members reported tremendous satisfaction with the program and believed they could more aptly self-manage their health.⁵ Today, the partnership serves as an exemplary blueprint for how insurers, health care providers, and medical facilities can successfully incorporate medically tailored meal programs.

	Before	After	% Change
Admits	1,290	817	-36.37%
ER Visits	2,505	2,077	-17.09%

Per member per month medical costs fell by 26%

23% of members saw reductions in A1C scores

HPP 2017 Member Survey



5. healthpartnersplan.com. (2018). FOOD AS MEDICINE MODEL: A Framework for Improving Member Health Outcomes and Lowering Health Costs. [online] Available at: <https://www.healthpartnersplans.com/redirect/foodasmedicine.html>

Insurance Partner Case Studies

Keystone First®

Keystone First® launched its partnership with MANNA in August 2016 and enrolled a total of 369 members from inception to November 2018. Members enrolled in the Food as Medicine program included pregnant women and those with diagnoses including diabetes, hypertension, chronic obstructive pulmonary disease (COPD), heart disease, and cancer. To determine the effectiveness of the program, claims data from the six-month period following the conclusion of the program was compared to claims data from the six-month period prior to participation in the program.

An analysis of 179 members whose meal delivery start dates ranged from August 2016 to January 2018 found a 24.5% decrease in overall medical costs (including both inpatient and emergency room costs), a 30.9% decrease in inpatient visits, and a 20.2% decrease in emergency room visits. In follow-up satisfaction surveys, 97% of members reported they were satisfied with the overall program, 94% reported that the program helped them feel better, and 98% of participants reported that the program helped them to eat healthier.



My goal when I started the program was to lose weight and get off insulin. Even though I am not off of insulin yet, I lost a lot of weight. The program also helped me to change my eating habits – no more fried foods!

Aetna Better Health® of Pennsylvania

Aetna Better Health® of Pennsylvania launched its partnership with MANNA in October 2016. As part of their ongoing evaluation, healthcare utilization pre- and post- MANNA initiation was tracked. Analysis of a subset of members who were continuously enrolled in Aetna Better Health® of Pennsylvania for 12 months (6 months prior to receiving MANNA and for at least 6 months after receiving their first meal) found that members experienced significant decreases in inpatient, and emergency utilization in the first six months after initiation of the MANNA service.

12%

decrease in emergency department visits

27%

decrease in inpatient admissions

7 of 8

diabetes submeasures trending more favorable

Many prenatal and postpartum care measures along with many breast cancer screening measures also trended favorably for those MANNA participants.

In addition to healthcare utilization, Aetna Better Health® of Pennsylvania also tracked HEDIS adherence for Comprehensive Diabetes Care measures for qualifying members, comparing data for MANNA recipients to non-MANNA recipients. The analysis found that the MANNA recipients had more favorable HEDIS rates for 7 out of the 8 sub-measures compared to those members who did not receive MANNA. Most notably, all three HbA1c control sub-measures were more favorable for the MANNA recipients. Members receiving MANNA trended more favorably in other HEDIS measures as well including cancer screenings, dental visits, and prenatal and postpartum care.

Partnering with MANNA: Things to Consider

MANNA's goal is to be more than just another provider. We want to be a true partner in caring for your members. Here are some items to consider as you think through a potential partnership:

1 **Goals of the Program**

MANNA serves as a pharmacy for prescription diets. Our Medical Nutrition Therapy services and medically tailored, home-delivered meals address the specific nutritional risk factors that impact your members. We work to incorporate the goals and objectives of both the member and the plan to ensure positive outcomes. A data-sharing agreement allows all parties to share the goals as well as health outcomes and updates.

2 **Length of Time on the MANNA Program**

Different health goals require different strategies and levels of intervention. The goals ultimately drive the answers to specific timing questions that should be included in the scope such as 1) How long can members be covered for the program? 2) Can members be recertified for the program?

3 **Who Does What?**

The Scope of Services should outline the responsibilities of both the payer and MANNA. We supply a PDF of the referral form, which can be completed and faxed or emailed back to us so we can deliver the optimal nutritional support to meet each member's health concerns.

4 **Deliveries**

MANNA has a high reach rate and works with members to determine the best day of the week for personal home delivery. Each member (or someone in the household) must be home and available to receive the delivery. We call in advance to let clients know the driver will be arriving shortly.

We jumped at the chance to partner with MANNA, who for decades, like HPP, has been a force of positive change in the Greater Philadelphia community.
– **William S. George, CEO & President (retired), Health Partners Plans**

So much of your health is determined by factors other than what happens at a doctor's office. Factors like your diet, physical activity and your environment play a critical role that can be even more important than traditional health care. That's where the MANNA program fits in. It not only improves the health of the hardest-to-serve consumers, it does so at lower cost.
– **Ted Dallas, Former Secretary, Pennsylvania Department of Human Services**

MANNA's model is an effective medical intervention for the clients it serves and gives them the tools and education to practice good nutrition on their own.
– **Teresa Miller, Secretary, Pennsylvania Department of Human Services**

Why MANNA?

We understand that you have choices in providers and believe that MANNA adds extra value to all our partnerships. For example, MANNA can co-brand materials and include plan-supplied materials with deliveries. We can train your team on the program and will identify an internal point person for ongoing communications to ensure the partnership is functioning smoothly. **Our staff registered dietitians offer customized nutrition counseling and are freely available to clients.**

Item	MANNA	Others
Includes counseling by RDs	✓	✗
Medically tailored meals (MTMs)	✓	SOME
Ability to combine modifications	✓	✗
Menus designed by RDs/Chefs	✓	✓
Peer-reviewed research	✓	SOME
Meals meet national nutrition standards	✓	✓
HIPAA-compliant	✓	SOME
Trusted community-based partner	✓	✗
Volunteer-based organization	✓	✗
Weekly educational materials	✓	✗
Initial contact within 2 business days	✓	SOME
Meals reheated in microwave or oven	✓	SOME
Uses a cold chain process for safety	✓	SOME
Ability to co-brand	✓	✗
Ability to include plan-supplied materials	✓	✗
Dedicated point person for plan	✓	SOME

CALL TO ACTION

MANNA encourages state and federal governments to include medically tailored meals as a mandatory covered benefit in our Medicaid and Medicare programs

As shown in MANNA's 2013 peer-reviewed study, medically tailored meals (MTMs) lower costs and improve health for individuals facing serious illnesses. Although MANNA continues to demonstrate that MTMs are an effective healthcare intervention, there is no dedicated funding stream or mandate for the provision of these services. Including MTMs as a standard covered benefit in Medicaid and Medicare programs would dramatically increase the availability of these services and bring about improved health for individuals who otherwise could not access the diet they need to heal. Including MTMs as a required benefit would also allow plans to bill these services as a medical cost instead of identifying alternate funding mechanisms. MANNA welcomes all of our health care partners to join us in conversations with our policymakers as we continue pushing for expanded coverage.

MANNA recommends that current and potential health care partners engage in rigorous evaluation of patient health outcomes and care utilization resulting from MANNA's services

Mounting evidence suggests that members across our current health care partnerships are experiencing improved health and reduced care utilization. While MANNA's research remains the most widely cited in the field, we need continued research and evaluation to deepen the evidence base and replicate our initial findings. If health plans and community-based organizations like ourselves can aggregate more data that highlight the effectiveness of MTMs, we can bring about policy change that makes it easier for health plans to offer these benefits to members. We encourage our health coverage partners to engage in research projects with us that seek to deepen our understanding of MTM interventions.

Continuum of Nutrition Services





**Delivering Nourishment.
Improving Health.**





**Delivering Nourishment.
Improving Health.**

420 North 20th Street
Philadelphia, PA 19130
T: 215.496.2662

www.mannapa.org