



EVALUATING FOOD PANTRY INTERVENTIONS ISSUE BRIEF

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EXECUTIVE SUMMARY

Food insecurity is a persistent issue in the United States, with approximately 10.2 percent of Americans lacking reliable access to safe and nutritious food.¹ Despite the presence of a large charitable network consisting of food banks and pantries, the prevalence of food insecurity has not significantly improved over time. Traditional metrics of success, such as pounds of food distributed and the number of people served, fail to capture the full impact of food insecurity interventions and do not address the root causes of the issue. More Than Food Consulting, a consulting firm focused on food banks and pantries, advances organizational and systems change in the charitable food network to ensure people have economic and nutrition security. This issue brief summarizes a policy analysis report evaluating interventions to address food insecurity at food pantries. It examines the current charitable food landscape, traditional models of success, and existing research on addressing food insecurity. It includes a policy-level comparison and cost-effective analysis of five different interventions at the pantry level, ultimately recommending the implementation of long-term coaching with motivational interviewing as a promising approach.



BACKGROUND

As of 2021, the US Department of Agriculture (USDA) estimates that 34 million Americans are food insecure - lacking reliable access to enough safe and nutritious food.² A large charitable network exists to address this problem. Over 370 food banks and more than 60,000 food pantries and meal programs operate across the country, distributing billions of pounds of food each year to individuals and families.³ Since the opening of the first food bank in 1967, these organizations have become an established institution in the United States in an effort to eradicate hunger. Canned food drives, company-wide fundraisers for local food banks, walks for hunger, and other community service projects have become integral to the fabric of American society.

Despite an increase in the amount of food and resources aimed at fighting food insecurity, the prevalence of food insecurity has remained relatively unchanged over time.⁴ Traditional food bank and pantry models measure success by outputs of pounds of food distributed and the number of people served, many of whom they see on a week-to-week, year-to-year basis.

While pounds of food and amount of people served are the most accessible outputs to measure (and important considerations for donors and strategic planning), such metrics may not do a good job telling the whole story and unfortunately, have potential to do more harm than good. For example, a food bank or pantry may appear successful because it distributes a lot of food to a lot of people, but the food may be in the form of low-nutrient calories (soda weighs a lot, kale doesn't). Furthermore, traditional metrics of success do little to address the root cause of food insecurity - namely, income and economic inequality. Identifying new metrics to measure lasting change can be tricky, particularly for resource-strapped nonprofit organizations. Still, many charitable food organizations are increasingly realizing that it takes more than food to end hunger and are looking to capture more robust measures of their work.

More Than Food Consulting, LLC is named after this conclusion and is positioned to propose interventions or solutions to food insecurity beyond food. More Than Food Consulting advances organizational and systems change in the charitable food network to ensure people have economic and nutrition security. The following issue brief summarizes a policy analysis report that aims to inform best practices for More Than Food Consulting and the broader food pantry landscape. It explores the current charitable food landscape in the US, traditional models of success at food banks and pantries, and what existing research tells us about how to best address food insecurity. It then offers a policy-level comparison, including a cost-effective analysis, of five interventions to food insecurity at the pantry level, including:

1. Status Quo (Traditional Pantry Model - Just Food)
2. Client Choice
3. Warm Referrals
4. Short-Term Coaching
5. Long-Term Coaching

The final recommendation is for option five: implement long-term coaching with motivational interviewing.

EVALUATING INTERVENTION OPTIONS

Effectiveness: Effectiveness is the extent to which intervention options achieve the benefits they are supposed to achieve. For this analysis, effectiveness evaluates the likelihood of the intervention option to successfully reduce food insecurity.

Cost: Cost refers to the financial investment associated with implementing a particular intervention option aimed at reducing food insecurity. Costs are calculated based on market prices of resources required for each option and are substantiated by interviews with pantry organizations and author assumptions. In the context of this analysis, cost is a pivotal factor that contributes to evaluating the overall viability of each intervention option. Cost plays a significant role in shaping decisions related to intervention strategies, as it provides a clear understanding of the financial commitment required for each approach.

Cost-effectiveness: Cost-effectiveness compares relative costs to food insecurity outcomes for each option. Costs are then divided by the reduction of food insecurity which is a measurement taken by subtracting the percentage of those experiencing food insecurity *because* of the intervention option from the traditional model baseline percentage. By incorporating cost-effectiveness analysis, stakeholders can make informed choices by weighing the financial inputs against the anticipated benefits in terms of reduced food insecurity.

Administrative Feasibility: Administrative feasibility is a qualitative criterion that assesses the practicality and ease of implementing the proposed intervention option for a food pantry. Administrative feasibility takes into account organizational resources, capacity, funding, technology, and other internal processes necessary for the successful implementation and management of each option.

Spillover Effects: While food insecurity outcomes are most directly relevant to the problem, each option has the capacity to impact other positive outcomes, including social determinants of health, financial well-being, and self-efficacy. For this analysis, spillover effects are considered quantitatively as ripple effects in the life of a pantry guest interacting with any given intervention option. This criterion offers a helpful way to think about the long-term sustained change of each option.

The projected outcomes of these criteria are determined by the extent to which an intervention option addresses the problem. Criteria are quantified where possible, and for criteria where qualitative metrics are most relevant, the option is ranked on a given scale. A description of each criterion and the methodology for scoring is defined below. By using a standardized approach, it allows for a more objective and transparent assessment of the effectiveness of different interventions. A more detailed description of scoring methodology and cost assumptions can be found in the full thesis report.

FOOD PANTRY INTERVENTIONS

Option #1: Traditional Pantry Model - Just Food

Traditional food pantries are considered as serving *just* food to guests, likely via pre-packaged or standard bags of groceries. This option is considered the status quo or baseline by which to compare other options. There is no food insecurity reduction at baseline or cost-effectiveness determination. Costs for each alternative are based on a one-year implementation. Under the assumption of a program size of 500 pantry guests, the analysis finds that a status quo pantry costs \$222.52 per person. Because a traditional food pantry model is assumed to be the status quo, this option is given a score of “High” for administrative feasibility. In other words, it’s easy to implement because it’s been implemented *traditionally*. Since the problem statement is situated within the status quo, this option is given a score of “Low” for spillover effects.

	Effectiveness (FI Reduction)	Cost Per Person	Cost Effectiveness	Administrative Feasibility	Spillover Effects
#1: Traditional Model	0	\$222.52	N/A	High	Low

Option #2: Client Choice

Client choice is a food pantry model that allows pantry guests to select their own food instead of receiving a prepackaged or standard bag of groceries. Although client choice models are becoming increasingly implemented at food pantries, research is lacking on impacts on food insecurity. However, it’s likely that client choice models reduce costs and waste for food pantries because clients are more likely to choose food items they prefer and are familiar with, as opposed to a pre-packaged food box. Having the option to choose their own foods also allows clients to save money on other basic needs like medicine, rent, or childcare. While a quantitative measure of food insecurity outcomes is missing in the literature, this analysis estimates marginal food insecurity reduction and is expected to cost upwards of \$250 per person per year, assuming a pantry can continue to serve its baseline 500 guests.

Transitioning from a traditional pantry model with prepackaged food to a client choice model involves buy-in from organization board, staff, and volunteers to shift their inventory and day-to-day processes and is therefore given a rank of “Low-Medium” on administrative feasibility. This option is also given a rank of “Medium” on spillover effects since client choice models have been shown to reduce leftover, unused food items and are associated with healthier food choices.⁵⁶

	Effectiveness (FI Reduction)	Cost Per Person	Cost Effectiveness	Administrative Feasibility	Spillover Effects
#2: Client Choice	Marginal	\$250	N/A	Low-Medium	Medium

Option #3: Warm Referrals

Warm referrals are introductions or recommendations to pantry guests from pantry staff and volunteers ideally, someone they know and trust. Referrals might occur in the form of on-site enrollment for programs and community services or comprehensive wrap-around services in which pantry staff and volunteers are trained to provide individualized support, connections, and some limited follow-up. Referrals might include SNAP or other welfare benefits application support, health or child care referrals, or other community services. This option has a likelihood of reducing food insecurity by 5.2 percentage points, costs about \$80 per person, and is estimated to cost roughly \$15 per percentage point reduction in food insecurity for a pantry serving 500 guests.

This option is a low-lift, low-cost option for pantries and can be implemented immediately and overtime as more resources are available. However, warm referrals are rooted in relationships, trust, and staff familiarity with community connections which may take time to develop. Therefore, this option is given a score of “Medium” for administrative feasibility. It is ranked “Medium” for spillover effects because it has the potential to increase pantry guest’s awareness of community resources, build trust, and improve outcomes based on the success of referral connections to resources like SNAP, WIC, healthcare, childcare, or education support, but follow up is often uncertain.

	Effectiveness (FI Reduction)	Cost Per Person	Cost Effectiveness	Administrative Feasibility	Spillover Effects
#3: Warm Referrals	5.2	\$80	\$15.35	Medium	Medium

Option #4 & 5: Short- & Long-Term Coaching with Motivational Interviewing

Coaching with motivational interviewing is a client-centered approach, similar to case management, where a coach helps a client explore behavior change by asking open-ended questions, affirming their strengths and abilities, reflecting on their feelings, and summarizing their statements. The coach's role is to create a safe and supportive environment that encourages clients to express their desires, values, and reasons for change, rather than imposing their own agenda or advice. Through active listening and empathetic responses, the coach aims to increase the client's motivation and self-efficacy for making positive changes while also identifying and resolving potential barriers or resistance. The ultimate goal of one-to-one coaching with motivational interviewing is to empower the client to take ownership of their own goals and create a sustainable plan for achieving them.

Existing literature provides strong evidence that one-to-one coaching with motivational interviewing in pantry settings positively affects individuals' food security, diet quality, self-sufficiency, financial well-being, and perceived social support.^{7,8} Martin and Sanderson's findings from an initial sample size of 484 showed that using coaching with motivational interviewing decreased the likelihood of being food insecure from 70.2% to 25.3% over nine months.^{7,8} This analysis supplements that research to show that long-term coaching is likely to decrease food

insecurity by almost 45 percentage points compared to traditional food pantry models. In addition, a cost-effectiveness analysis is applied which finds that long-term coaching costs about \$50 for each percentage point reduction in food insecurity per person. While coaching is a cost- and resource-intensive intervention when compared to other pantry-based programs, coaching has the most evident potential of reducing food insecurity and providing clients with the necessary tools and resources to achieve sustainable improvements in their overall well-being. Moreover, by empowering individuals to take charge of their goals, coaching with motivational interviewing creates a sense of agency and self-determination, leading to improved mental health outcomes and greater community engagement. Ultimately, implementing long-term coaching with motivational interviewing as a food pantry intervention provides a comprehensive approach beyond food that seeks to address the underlying factors contributing to food insecurity.

Motivational Interviewing (MI) is a collaborative and person-centered approach developed by William Miller and Stephen Rollnick. It addresses ambivalence about behavior change and aims to enhance motivation by exploring reasons for change in a compassionate and accepting environment. MI is guided by four key principles:

1. Expressing empathy
2. Developing discrepancy
3. Rolling with resistance
4. Supporting self-efficacy.⁹

Findings show coaching participants experience food insecurity rates of 42.6 percent after 4 months and 25.3 percent after 9 months. Short-term coaching over a 4 month period is estimated to cost \$2,220 per person and long-term coaching is estimated at \$987. These costs are divided by effectiveness outcomes, amounting to a cost of \$35.75 and \$49.44 for each percentage point reduction in food insecurity with short- and long-term coaching respectively if a pantry serves 10 guests with coaching. Both short- and long-term coaching would result in a 0.02 percentage point reduction in food insecurity for every dollar spent.

This option requires the most resources for implementation and would be a phased in project with high costs. Organizations must be ready to adopt a completely new program, hire one or more coaches, undergo rigorous training, recruit participants, execute the actual coaching process, and survey and evaluate the program ongoing. Because of the potential challenges to implementing a coaching program, perhaps most notably organizational buy-in, this option is given a score of “Low-medium” for administrative feasibility. Coaching has positive and lasting impacts on participants’ lives, including improved diet quality, self-sufficiency, self-efficacy, financial stability, and social support, as coaches trained in motivational interviewing help participants cope with challenges and changes and acquire skills to set future goals, thus receiving a “High” score for spillover effects.

	Effectiveness (FI Reduction)	Cost Per Person	Cost Effectiveness	Administrative Feasibility	Spillover Effects
#4: Short-Term Coaching	27.6	\$2,220	\$35.75	Low-Medium	High

#5: Long-Term Coaching

44.9	\$987	\$49.44	Low-Medium	High
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SUMMARY OF PROJECT OUTCOMES

	Effectiveness (FI Reduction)	Cost	Cost Effectiveness	Administrative Feasibility	Spillover Effects
#1: Traditional Model	0	\$222.52	N/A	High	Low
#2: Client Choice	Marginal	\$250	N/A	Low-Medium	Medium
#3: Warm Referrals	5.2	\$80	\$15.35	Medium	Medium
#4: Short-Term Coaching	27.6	\$2,220	\$35.75	Low-Medium	High
#5: Long-Term Coaching	44.9	\$987	\$49.44	Low-Medium	High

RECOMMENDATIONS

Option 5: Long-Term Coaching is recommended as the best course of action. Long-Term Coaching has the clearest strengths when it comes to effectively reducing food insecurity as well as positive spillover effects like diet-quality and self-efficacy. All options that differ from status rank marginally close in a final weighted score and should also be considered as supplemental interventions or stand-alone options for organizations with more constrained budgets.

IMPLEMENTATION TIMELINE



Coaching programs can span six months to one year. Participants “graduate” from the coaching program once they have made substantial progress with one to three goals identified by participants and coaches. More Than Food Consulting supports coaches through peer support meetings to share better practices and insights. Continual data collection and program evaluation will allow MTFC to measure changes over time to support the existing research that shows positive impacts on food security, self-efficacy, perceived social support, financial well-being, and self-sufficiency.

Citations

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