

MILKEN
INSTITUTE

FINANCIAL INNOVATIONS LAB®

Market Solutions for Scaling Food Is Medicine Prescriptions

EXECUTIVE SUMMARY

REPORT BACKGROUND AND OVERVIEW

Diet-related chronic disease continues to rise throughout the US population and, with it, the cost of health care. Despite record spending, the US continues to experience the lowest life expectancy among high-income countries and demonstrates declining health outcomes year after year. Communities of color and people experiencing food insecurity bear a disproportionate burden of these impacts. With billions of dollars sunk in medical costs, lives lost from preventable diseases, and lagging productivity, medical and public health experts have increasingly turned to efforts that prioritize food as medicine.

Research has increasingly demonstrated the importance of food and nutrition as drivers of overall health. In response, Food Is Medicine (FIM) has been gaining prominence in health care to prevent, treat, and manage diet-related health needs as well as address food insecurity, which is associated with a higher risk of diet-related disease. A key component of FIM is the use of Food Is Medicine prescriptions (FoodRx), which can be tailored to an individual's needs over time, including to levels of food insecurity, and are integrated into a patient's care plan to improve health outcomes.

A number of organizations have been building the evidence base and policy recommendations for FoodRx, with support from public, private, and nonprofit funders. Private health insurance companies and public health-care systems are investing in research and trial programs to improve patient care and cost savings. California, Massachusetts, North Carolina, and Oregon, among others, have used policy tools and funding to increase FoodRx access for specific groups of Medicaid and Medicare

beneficiaries. A multitude of private delivery and technology solutions, both in-house and third-party, have cropped up to facilitate program implementation. To scale FoodRx interventions, it is necessary to understand the roles, relationships, and bottlenecks within this complex web of stakeholders (Figure 1 below).

FoodRx has been slow to scale. Its mainstream usage is not keeping pace with the rising disease burden. Stakeholders cite the lack of overarching federal policy, no clear evidence of return on investment, insufficient technological and data efficiencies, and a dearth of sustainable funding that has limited progress to small, disaggregated pilot programs. The Milken Institute identified the following specific financing, data, and technology barriers impeding the widespread adoption of FoodRx:

- **Data and Technology: A lack of interoperability standards and universally accepted research metrics** means:
 - o Organizations are left to take on the burden of harmonizing data from disparate claims engines with health-care utilization, costs, and savings metrics or outsource this expensive function.
 - o The lack of established benchmarks means researchers must use their best judgment to determine standards to gauge an intervention's effectiveness.
- **Data and Technology: Inefficient and manual coding processes** result in identifying and tracking inventory by means of barcodes like Stock Keeping Units (SKUs) and Universal Product Codes (UPCs). Maintaining and updating nutrition data online and in stores are labor-intensive, time-consuming, and error-prone.
- **Financing, Data, and Technology: Significant hurdles to navigating patient privacy** pose barriers, especially for smaller businesses and organizations in rural and underserved areas that are ill-equipped with the technology to adapt.
- **Financing and Technology: Problematic and ad hoc benefit redemption technologies** result in point-of-sale (POS) system disharmony among health plans and differing levels of system compatibility.

Market Solutions for Scaling Food Is Medicine Prescriptions summarizes the research and key findings of a Financial Innovations Lab®, conducted by the Milken Institute's Innovative Finance and [Feeding Change](#) teams in October 2022. The Lab brought together members of the [Food Is Medicine Task Force](#), including health plans and food retailers, as well as policy experts, government representatives, FoodRx technology companies, consultants, and community-based food organizations, to determine areas of technology solutions, funding priority, and the investment vehicles to help finance these efforts.

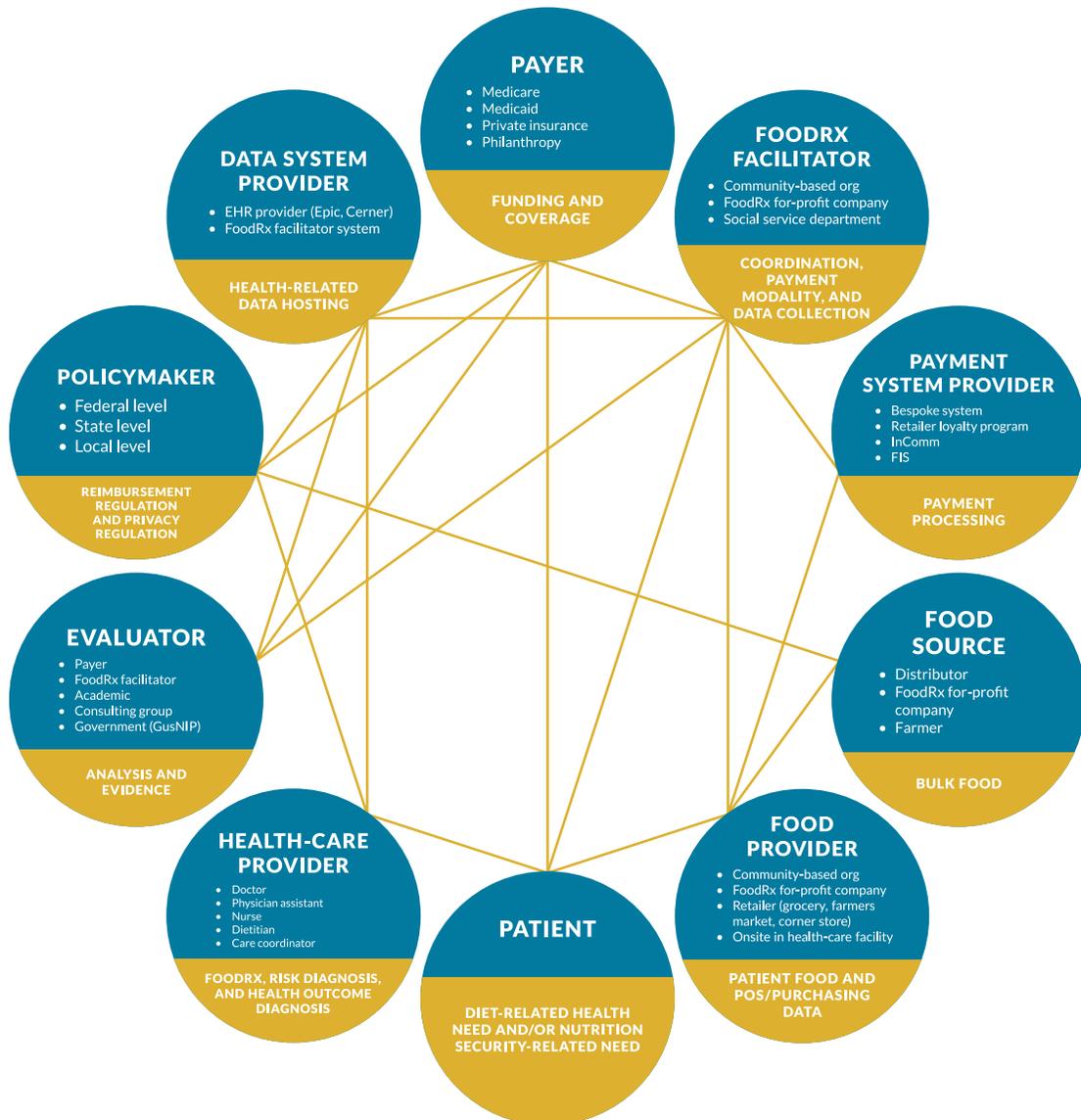
SOLUTIONS OVERVIEW

The Milken Institute spoke with more than 70 stakeholders to assess key barriers and potential areas of opportunity to scale the market.

Solution 1: Map the Pathway from Prescription to Health

- As a necessary first step to identifying gaps and potential solutions, stakeholders can benefit from establishing a clear visualization of how the FIM system operates and the processes at work beyond their own roles. An industry leader with name recognition can assemble a working group of representatives to visualize each link, from legislation to reimbursement and prescription renewals, and identify where equity and intersectional patient-centered considerations must be embedded.
- Data transfer and evidence generation mapping should include data flow and quality and who is responsible for capturing data critical to ROI evidence and intervention optimization. With a stronger understanding of the pain points and opportunities, solutions can be tailored so that FoodRx interventions are primed for scale.

Figure 1: FoodRx Stakeholder Map



Source: Milken Institute (2023)

Solution 2: Develop Standard Language and Metrics

Barrier addressed: a lack of interoperability standards and universally accepted research metrics

- Defining program goals and targets from the onset can ensure FoodRx expansion benefits both providers and members. This begins with differentiating between FoodRx and food as health, which often targets broader improvements to social determinants of health, as the evaluation of outcomes would be different for each.
- As core data sets are constructed, organizations need a coordinated way to report and access the information. A coalition of industry experts can create a universal set of metrics for all US FIM programs to enable direct comparison among programs and standardize patient information.
- The coalition can build on existing efforts such as the [Fast Healthcare Interoperability Resources \(FHIR\)](#) standard, which “defines how health-care information can be exchanged between different computer systems, regardless of how it is stored in those systems.” Programs addressing food as health can look to the Gravity Project, a multistakeholder group using FHIR standards to define how social determinants of health data are tracked and shared across digital health and human service platforms.

Solution 3: Standardize FIM Program Package Components

Barrier addressed: inefficient and manual coding processes

- Since nutrition information can change across different brands of the same product, FoodRx program developers must compare the US Department of Agriculture’s recommended consumption guidelines with the Food and Drug Administration’s nutrition labels and do the math themselves to produce nutrition data aligning with their program packages. Lab participants suggested that industry representatives from key federal agencies, food retailers, and major payers and aggregator platforms convene to discuss harmonization with a basic data set of nutrition requirements.
- The manual SKU-level data entry process can be arduous and prone to human error. A database of SKU-level nutrition information, which technology companies could align with the plans’ restricted spend lists, would help to create an efficient and error-free process by which customers would redeem FoodRx benefits on existing Visa or Mastercard payment rails.

Solution 4: Aggregate Stakeholders’ Technologies

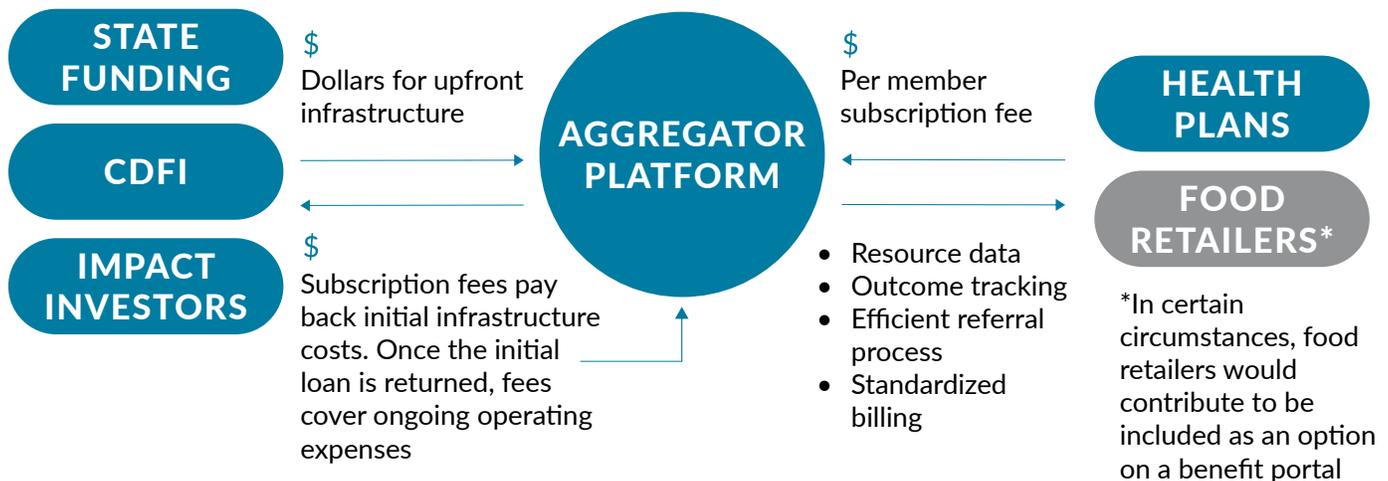
Barriers addressed: problematic and ad hoc benefit redemption technologies; significant hurdles to navigating patient privacy

- A Health Insurance Portability and Accountability Act (HIPAA) compliant, patient-facing platform that aggregates benefit offerings would help consumers

understand where they can use benefits and help facilitate data reporting between payers and retailers. Lab participants highlighted three areas of opportunity for leveraging technology to better inform participants, organizations, and individuals of what is available to them:

- o Software that better collects and communicates the availability of benefits to members would enable insurers and health plans to connect eligible members to approved vendors automatically.
 - o A platform to facilitate providers to send and receive secure electronic referrals in real time would improve coordinated care.
 - o A system that improves the payments and billing process, tracks member net costs and total health spending, and simplifies the options for on-the-ground organizations to fulfill referred benefits would streamline benefit redemption for health plans, FoodRx providers, and members.
- Representatives from the major health plans should identify the best type of governance structure for a central data exchange. This type of structure could allow oversight by multiple organizations, reduce the likelihood of data misuse, and ease some policy hurdles.
 - A subscription financing model (or paying a monthly/annual fixed rate) for access to metrics can protect health data, incentivize the delivery of high-quality metrics, and provide a sustainable financing mechanism for ongoing operations and maintenance of the platform.

Figure 2: FoodRx Aggregator Platform Subscription Model



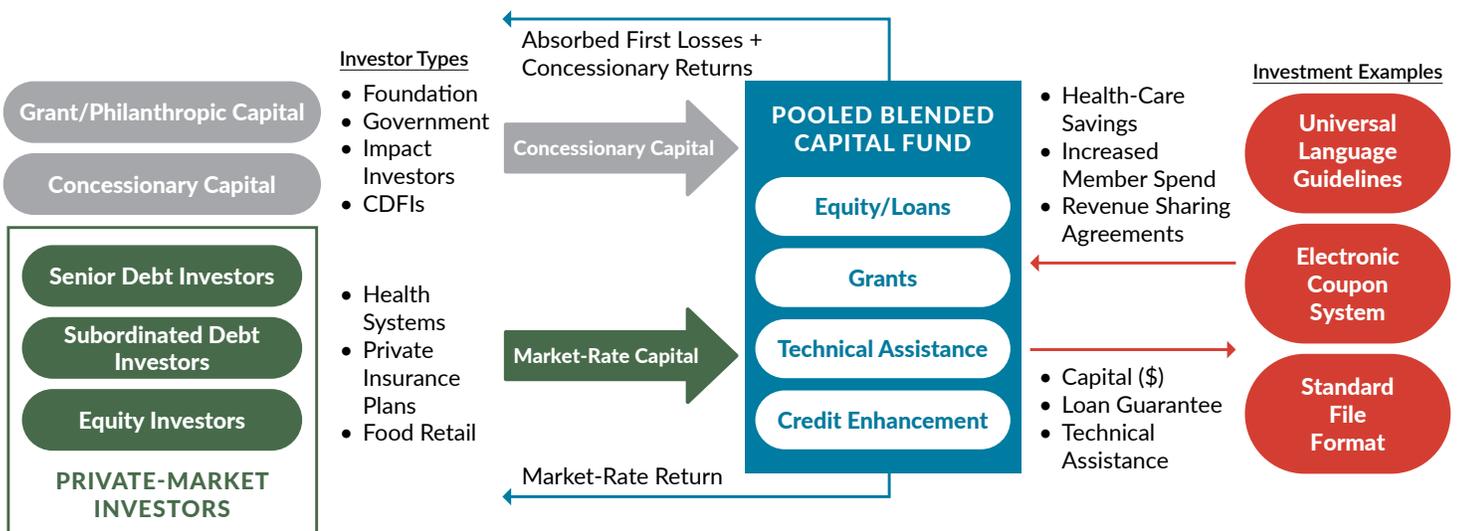
Source: Milken Institute (2023)

Solution 5: Develop a Food Is Medicine Financing Fund

Barriers addressed: all

- Current investment vehicles do not focus on financing the technology or payment infrastructure needs of a scaling FIM system, so Lab participants supported the opportunity to direct private capital sources into a pooled capital fund allocated among opportunities with the greatest impact. Blending different types of funding and financing in a single investment structure dedicated to FIM infrastructure would allow companies and technologies to move through various stages of development more seamlessly.
- Lab participants debated the most effective approach for blended financing to cover the costs of a universal payment system, as an example. Although the technologies don't yet exist, participants suggested putting resources behind:
 - research and development to determine best practices for payment providers to establish a universal language to enable closed-loop system interoperability,
 - building an automatic discount coupon system that can be accepted across different types of POS terminals to create a universal form of benefit redemption, and
 - implementing a standard file format for restricted spend requirements by product UPC.

Figure 3: Food Is Medicine Blended Financing Loan Fund



Source: Milken Institute (2023)

CONCLUSION

US food and health-care programs have been largely siloed. While various state and federal programs address specific food or health-care needs, they rarely complement one another comprehensively and equitably. With the current momentum around FIM interventions, however, there is a great opportunity for public, private, and nonprofit collaboration to scale and expand FoodRx programs beyond pilot programs. Coordinating efforts around the recommendations detailed in this report can help advance the market, integrate nutrition further into health care, and allow more patients to receive the continuous and comprehensive care required to treat, manage, and prevent diet-related chronic disease.

View the full report on the Milken Institute website at <https://milkeninstitute.org/report/scaling-food-medicine-prescriptions-market-solutions>.

