

Human-Centered Design Methods to Advance Healthy Food Retail Strategies

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Background

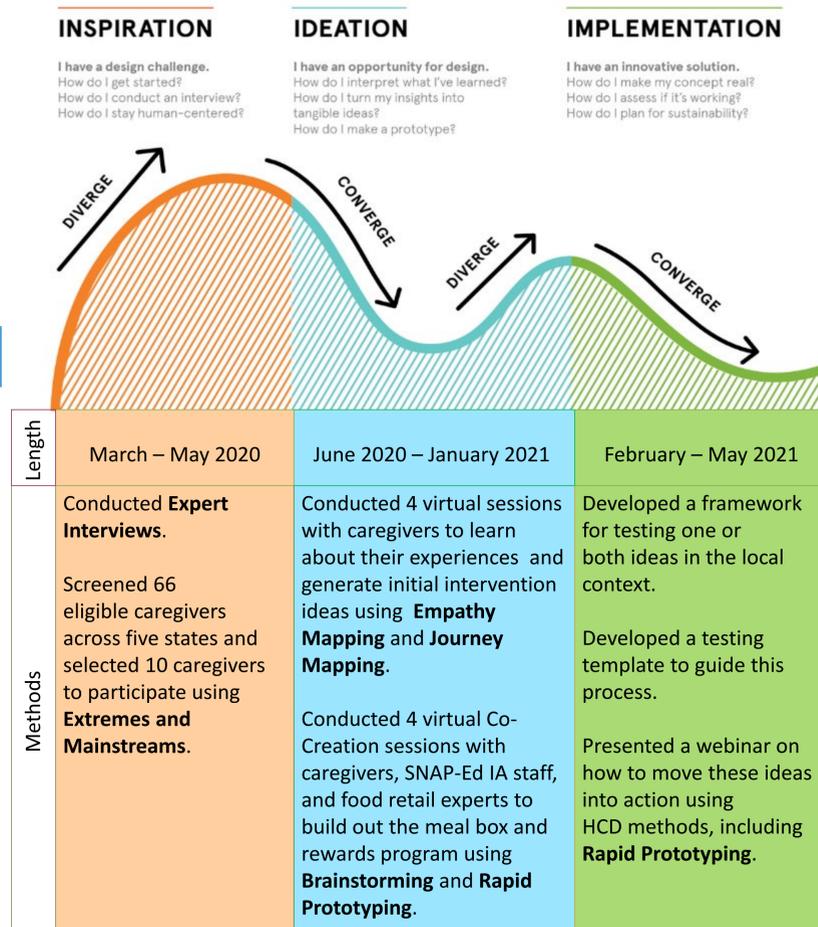
Human-Centered Design (HCD) is a participatory approach that can be used to generate ideas for health promotion interventions with your primary audience and key stakeholders. Engaging your primary audience ensures interventions are aligned with expressed needs and desires, and engaging stakeholders drives more feasible and sustainable implementation.¹

We used HCD methods to develop a framework for implementing two food retail strategies generated by SNAP-eligible caregivers of young children and operationalized by SNAP-EI Implementing Agencies and food retail stakeholders.

Methods

Our design challenge was: How might we develop a food retail intervention for SNAP-eligible caregivers of young children that meets their needs and advances SNAP-EI's reach and impact?

We employed several HCD methods (bolded), utilizing [IDEO.org's Field Guide](#) and [three-phase approach](#) to HCD engagement (right).



Results

Caregiver Sessions

Caregivers generated individual journey maps of steps they take before, during, and after the grocery store. The synthesized journey map (below) presents common experiences to identify moments when caregivers may be more open to receiving SNAP-EI programming and/or elements of happy moments or pain points to consider in the final design.

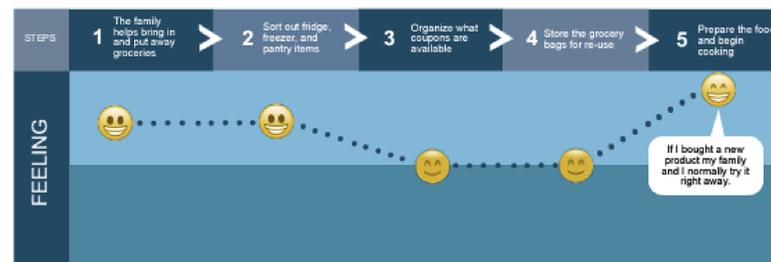
BEFORE THE STORE



AT THE STORE



AFTER THE STORE



Key insights were:



Reduce cognitive burden of shopping since there is a lot to do (e.g., budgeting).



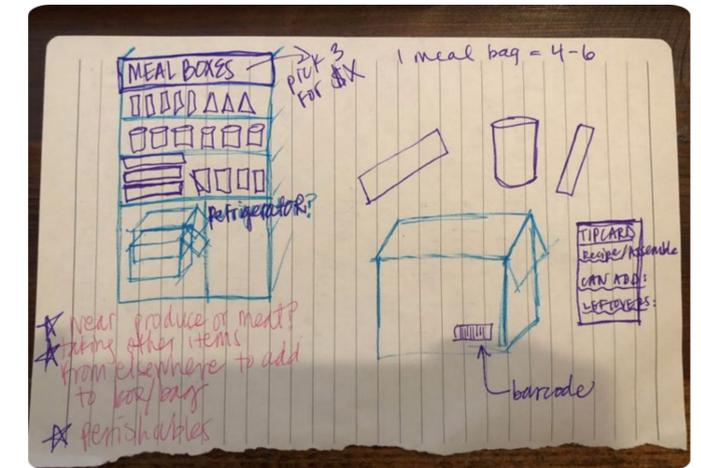
Develop opportunities to engage kids in shopping and cooking so they can teach/learn with them.



Offer flexible, customizable options to meet families' health and dietary needs and preferences.

Co-Creation Sessions

Participants prioritized two ideas generated by caregivers based on feasibility and innovation: a meal box and a rewards program. They sketched initial prototypes of the ideas and worked collaboratively to refine them. The image below is a meal box prototype from a food retail stakeholder that helped us build out key intervention components, such as how many meals the box will contain and what equipment is needed.



These conversations ultimately resulted in the development of decision trees to help SNAP-EI IAs identify the intervention format to test based on local needs and capacity.

The decision trees and additional planning tools we generated to help SNAP-EI IAs move these ideas into practice are summarized in the intervention guide accessible by scanning the QR code (right).



Discussion and Implications

Caregivers appreciated the opportunity to meaningfully contribute to this process, and food retail stakeholders felt rapid prototyping and iteration complemented the fast-paced nature of the food retail sector and their own metrics for gauging product desirability, particularly monthly and quarterly Profit & Loss inventories. HCD methods are well-suited to developing food retail strategies that promote user-centeredness and sustainability. We offer the following recommendations for those considering HCD:

- Approach co-creation stakeholders as equal partners in this process *and* acknowledge and develop a plan to address any potential challenges in power dynamics.
- Remain curious. HCD starts with a problem and encourages you to stay open to new ideas and approaches as you learn more.
- Embrace feedback and continuous learning. HCD encourages rapid prototyping and iteration of your intervention design to promote the best use of limited resources and lean into adaptability in pursuit of optimal intervention design.

Acknowledgements

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1. Chen, E., Neta, G., & Roberts, M. C. (2021). Complementary approaches to problem solving in healthcare and public health: implementation science and human-centered design. *Translational Behavioral Medicine*, 11(5), 1115 -1121. <https://doi.org/10.1093/tbm/ibaa079>