Will It Work Here: Generalizing and Applying Evidence

Spencer Crawford

October 22, 2020

I. The Challenge of Using Evidence
II. The Generalizability Framework
III. Examples
IV. References and Resources

Objectives for Today

- Review the four steps of the generalizability framework, which provides a systematic way to assess how evidence applies to new contexts

- Practice applying the generalizability framework in a North Carolina example

Let's say you're the Deputy Secretary of Juvenile Justice at NC DPS facing a challenge: Many youth fail to appear to their court summons.

Then you see
this press release:

The Official Website of the City of New York

NYC

NYC Resources | NYC311 | **Office of the Mayor** | Events | Connect

Mayor | First Lady | **News**

SHARE

New Text Message Reminders for Summons Recipients Improves Attendance in Court and Dramatically Cuts Warrants

January 24, 2018

New York City partnered with behavioral economics firm ideas42 and the University of Chicago Crime Lab to test simple "nudges" to get people to court; text reminders improved appearance rates, resulting in thousands fewer arrest warrants

NEW YORK—Mayor de Blasio today announced the City's text-reminder program for people who receive summonses – launched by the Mayor's Office of Criminal Justice, the Office of Court Administration and NYPD – has been successful in encouraging individuals to appear when they have upcoming court dates. The text reminders have been shown to cut failure-to-appear rates by 26 percent, potentially preventing thousands of warrants each year. When paired with a redesigned summons form, the text reminders decreased rates of failure-to-appear in court by 36 percent.

"Little reminders can make a big difference, and these text messages will help people avoid a missed court appearance – and a warrant that could eventually lead to spending a night in jail. We've found that these gentle nudges help New Yorkers remember when and where their court appearance is and reduce failure-to-appear rates, and that progress is a great step toward a fairer justice system," said **Mayor Bill de Blasio**.

The NYC Press Release refers to a randomized controlled trial of a text message reminder program in New York City for adults that found that the text messages reduced failure to appear in court by 26%.

You might ask: How do I know if this program would also work *in my context?*

The Challenge

- In context of limited resources, knowing which programs provide the most value is important

- To date we have seen a number of rigorous impact evaluations in the education sector and many others

- But finding evidence that is perfectly relevant to your context is probably unlikely

The Puzzle

- Can a study inform policy only in the location in which it took place?

- Should we use only whatever evidence we have from our specific location?

- **What counts as a "similar enough" new setting?**

- Should a new local randomized evaluation always precede scale up?

I. The Challenge of Using Evidence
II. The Generalizability Framework
III. Worksheet
IV. References and Resources

The Generalizability Framework

- We don't have to see impact evaluations as a black box

  o The generalizability framework focuses on mechanisms to unpack what happens from intervention to impact
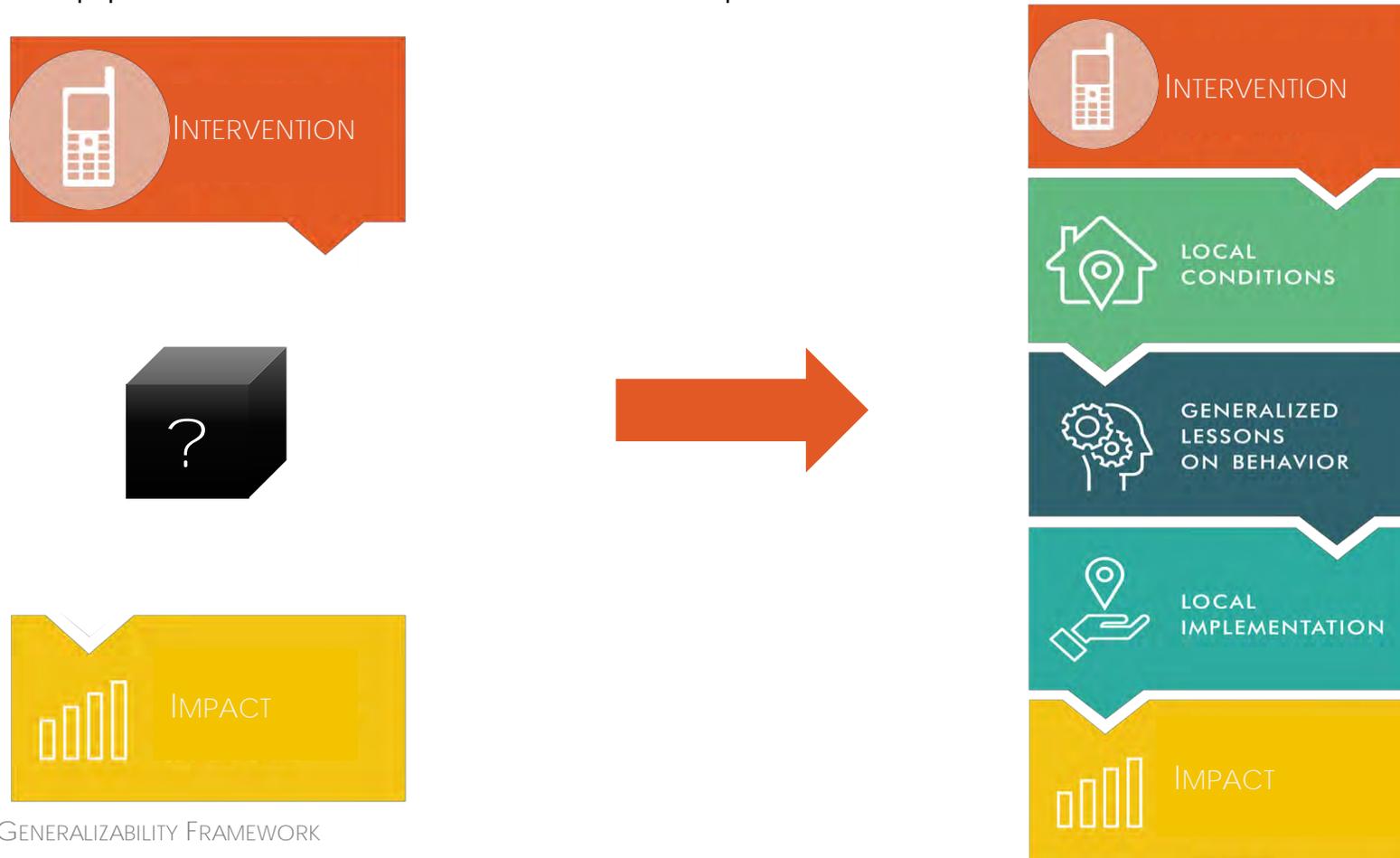
Step 1: Theory of Change

Write down the theory of change for the original program and articulate the key assumptions for why it worked.

Needs		Intervention Components		Intervention Delivered		Behavior Change		Impact
The needs of the population an intervention is designed to serve		*What activities and/or inputs are done as part of the intervention*		*Tangible products or services produced as result of intervention*		*Behavioral changes that result from the delivered intervention*		*The change in the desired outcome(s)*
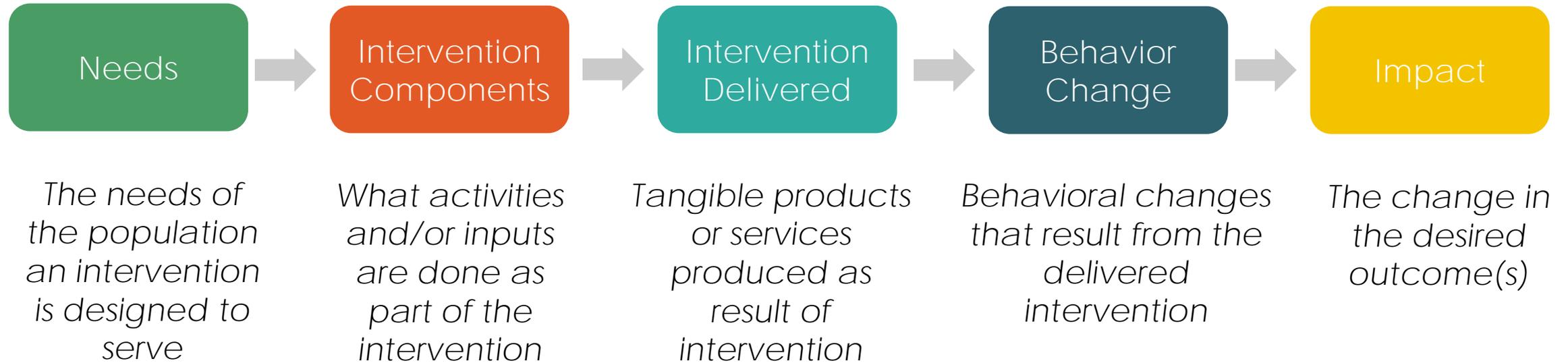
Underlying Assumptions

Step 1: Theory of Change

Write down the theory of change for the original program and articulate the key assumptions for why it worked. Identify performance measures for each step.

Needs		Intervention Components		Intervention Delivered		Behavior Change		Impact
Youth fail to appear. They want to appear, but forget.	→	Actionable text messages sent to youth.	→	Text messages are delivered at appropriate times to youth.	→	Youth remember their court summons time and find transportation to the court.	→	Failure to appear rates reduce.
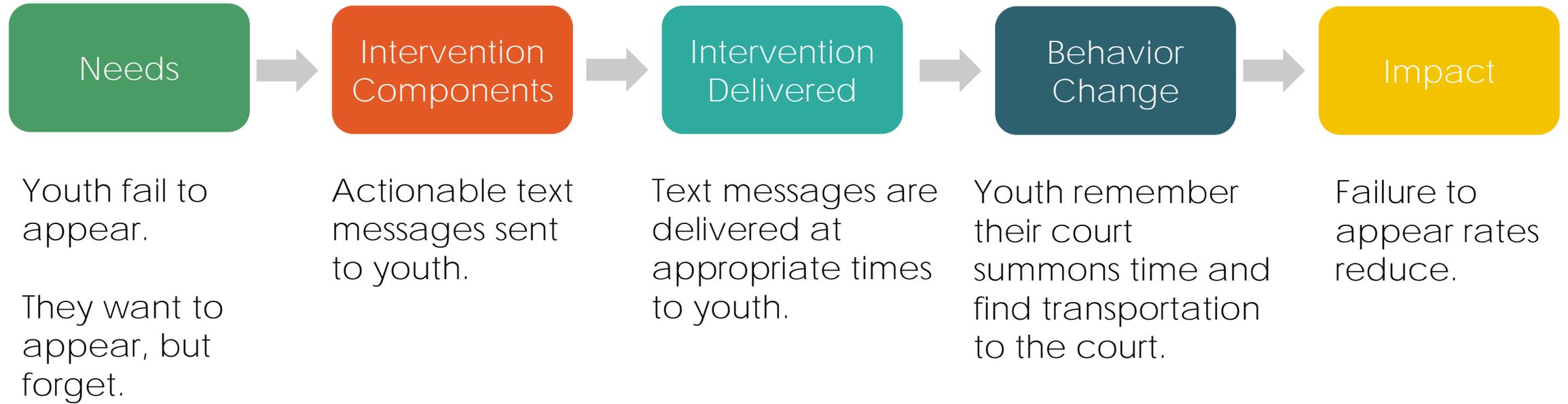
Underlying Assumptions

Step 2: Local Conditions

Find descriptive data to better understand if the underlying issue from the original context is also at play in your community.

Use it to answer the following questions:

- *Does the <u>issue or challenge</u> that the original program aimed to solve exist in your community? To what extent?*

  - *Issue: Youth fail to appear to court summons*

- *Is there evidence that the <u>underlying cause</u> is the same or similar?*

  - *Underlying cause: Youth want to appear, but they forget.*

- *Are the same conditions that were important for the intervention to be implemented in the original context also true in your case?*

Step 3: General Lessons from Existing Evidence

Assess the strength of the evidence for the mechanisms that made program effective in the original context(s), and whether the key assumptions are likely to hold in your context.

Answer the following questions:

- *What evidence exists that the theory of change for the original program is valid? What is the quality of the evidence?*

- *What are the underlying reasons for why this theory is generally effective?*

- *What assumptions are required and do they hold in the new context?*

Step 3: General Lessons from Existing Evidence

Needs	→	Intervention Components	→	Intervention Delivered	→	Behavior Change	→	Impact
Youth fail to appear.

They want to appear, but forget. | | Actionable text messages sent to youth. | | Text messages are delivered at appropriate times to youth. | | Youth remember their court summons time and find transportation to the court. | | Failure to appear rates reduce. |
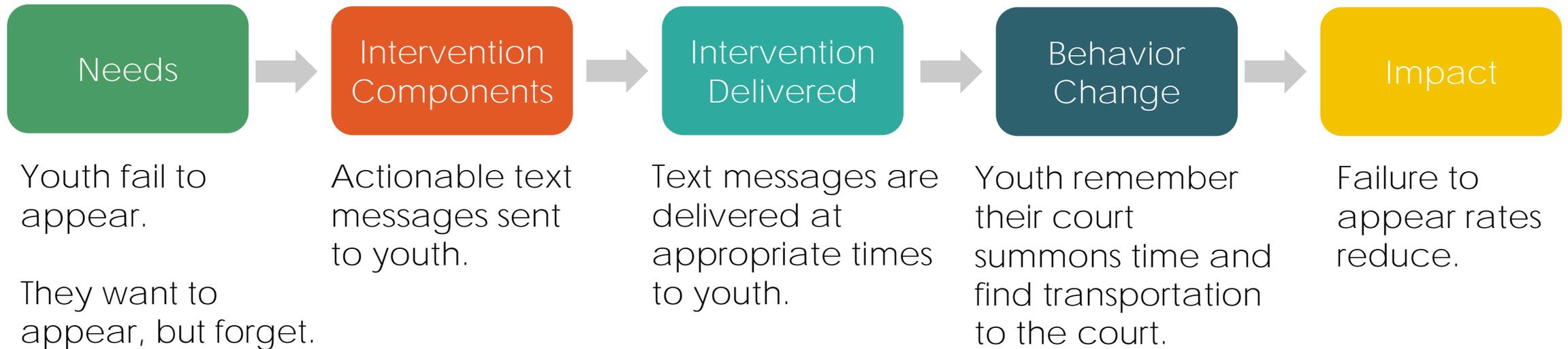
Step 4: Local Implementation

Assess whether you or another organization can successfully implement the intervention with fidelity to the original model.

Answer the following questions:

- *What are the critical implementation assumptions that must be met for the program to be implemented with fidelity?*

- *In this new context, who would implement the program and do they have the capacity?*

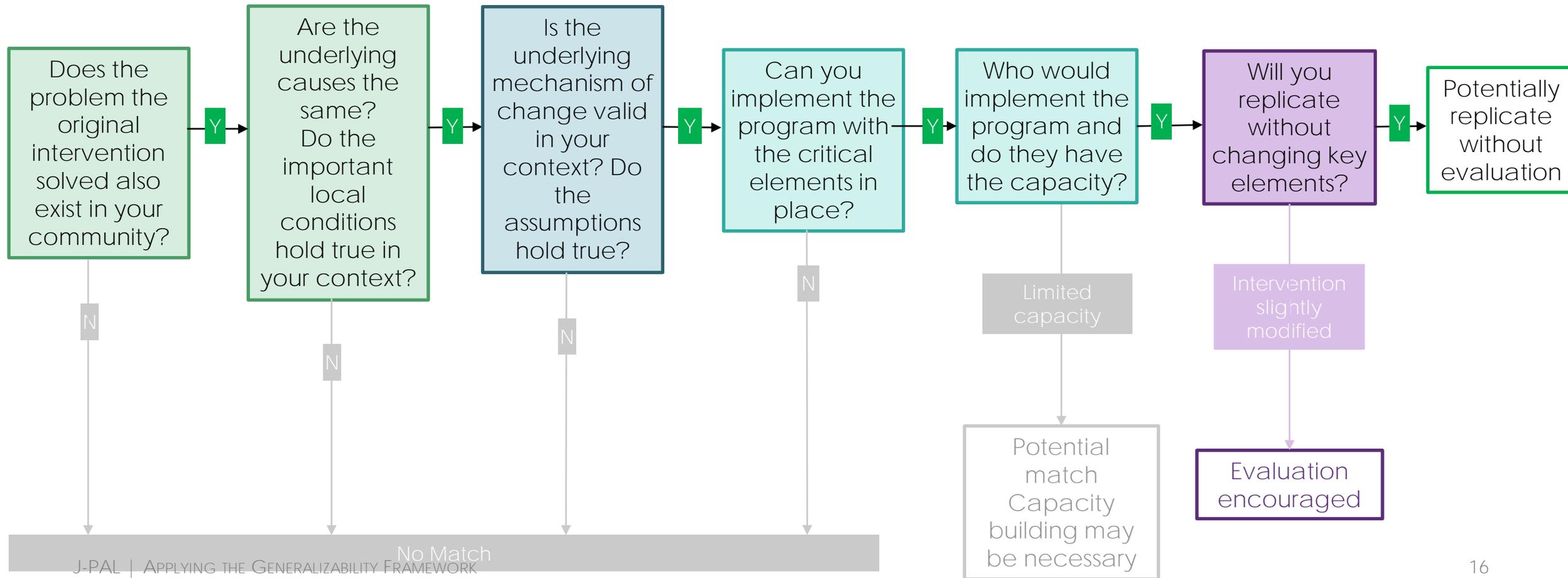- *What are potentially enabling/hindering factors?*

A Decision Tree

Local Conditions

General Lessons from Existing Evidence

Local Implementation

Intervention Adaptations

Does the problem the original intervention solved also exist in your community?

— Y → Are the underlying causes the same? Do the important local conditions hold true in your context?

— Y → Is the underlying mechanism of change valid in your context? Do the assumptions hold true?

— Y → Can you implement the program with the critical elements in place?

— Y → Who would implement the program and do they have the capacity?

— Y → Will you replicate without changing key elements?

— Y → Potentially replicate without evaluation

N ↓ / N ↓ / N ↓ / N ↓

No Match

Who would implement the program and do they have the capacity? — Limited capacity ↓ Potential match Capacity building may be necessary

Will you replicate without changing key elements? — Intervention slightly modified ↓ Evaluation encouraged

Questions?

Group Activity: Applying the Generalizability Framework Scenario

- The goal of this exercise is to think through what measures and data sources you would use to apply the Generalizability Framework.

- You work at NC DHHS and oversee an initiative aiming to improve North **Carolinians' lives by addressing the social determinants of health (SDOH).**

- The initiative runs an RFP to select programs that address SDOH among North Carolina Medicaid enrollees.

- One entity that submitted an RFP proposal is for a community health worker (CHW) program, which cites evidence from a Randomized Controlled Trial in Philadelphia demonstrating its effectiveness.

- Your task: Will the program adapt well to North Carolina?

CHW Program

- The intervention, known as IMPaCT (Individualized Management for Patient-Centered Targets), occurs in three stages:[1]

1. Goal setting. CHWs assess relevant socioeconomic determinants of health and collaborate with the patient to create individualized goals that feed into tailored action plans.

2. Tailored support. CHWs provide six months of hands-on, tailored support, communicating with patients at least once per week, including monthly in-person contact.

3. Connection with long-term support. CHWs help identify long-term supports such as neighbors or family members who can support the patients after the intervention is completed.

[1] *Disclaimer: J-PAL North America was not involved with this research. For more comprehensive information about the IMPaCT model, see the Penn Center for Community Health Workers' webpage (chw.upenn.edu/about/).*

Evidence

Study Setting: This study took place at three locations in the Philadelphia area: 1) a VA (Veterans Affairs) primary care practice, 2) a federally qualified health center, and 3) an academic family practice clinic.

Study Eligibility: Patients in the study met the following criteria:

1. Adult patients (aged 18 years or older) with appointment in the prior year
2. Residents of high-poverty ZIP codes in the Philadelphia, PA area
3. Uninsured or publicly insured, including all veterans
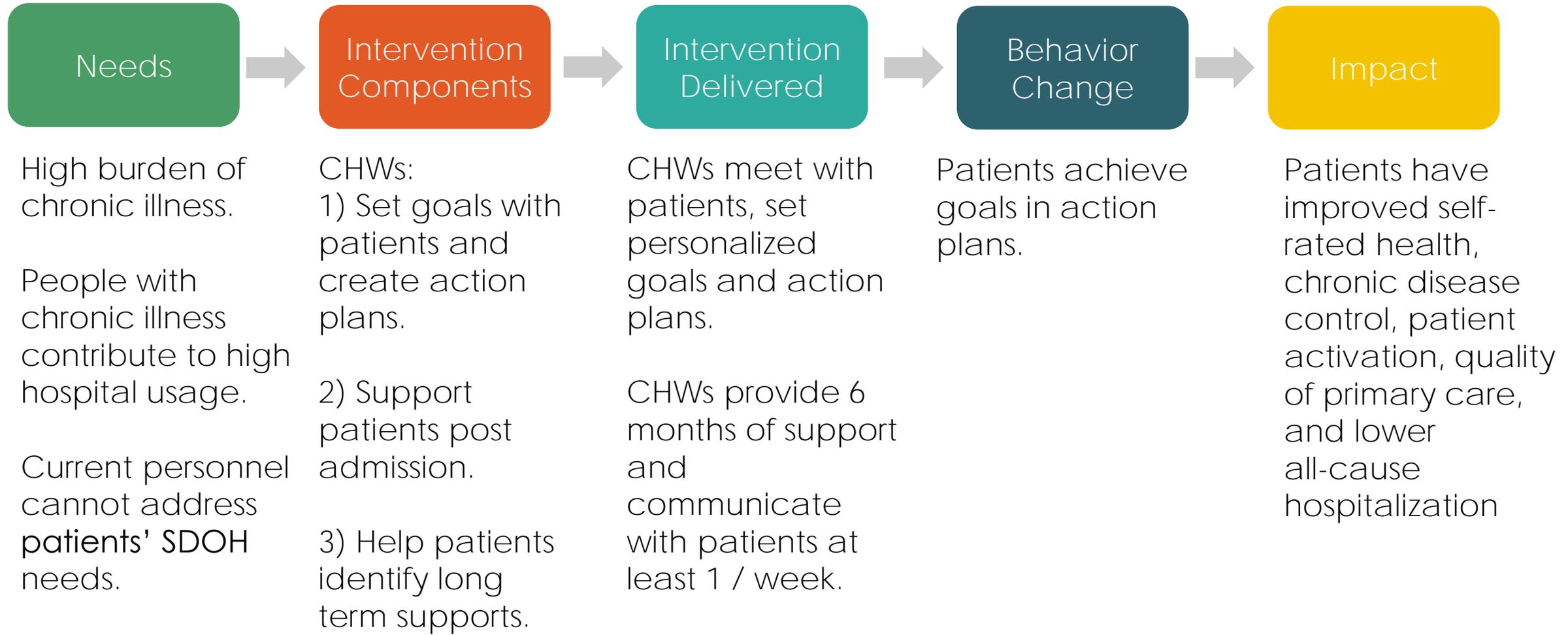4. Received a diagnosis for two or more targeted chronic diseases

Results:

Access to high-quality care ⬆

Days in hospital in last 6 months ⬇

Chance of repeat hospitalizations ⬇

Physical health measures 🚫

Step 1: Map a Theory of Change for Study

Needs	Intervention Components	Intervention Delivered	Behavior Change	Impact

High burden of chronic illness.

People with chronic illness contribute to high hospital usage.

Current personnel cannot address **patients' SDOH** needs.

CHWs:
1) Set goals with patients and create action plans.

2) Support patients post admission.

3) Help patients identify long term supports.

CHWs meet with patients, set personalized goals and action plans.

CHWs provide 6 months of support and communicate with patients at least 1 / week.

Patients achieve goals in action plans.

Patients have improved self-rated health, chronic disease control, patient activation, quality of primary care, and lower all-cause hospitalization

Small Group Activity

- Question 1: What measures and data sources would you want to see in the RFP to assess whether the important local conditions apply in North Carolina counties?

- Question 2: Where would you find evidence that supports or qualifies the theory of change for this program?

- Question 3: What implementation adjustments may need to be made in North Carolina's context?

Questions?

References and Resources

- Generalizability Resources:
  - Read "The Generalizability Puzzle" in the Stanford Social Innovation Review: https://ssir.org/articles/entry/the_generalizability_puzzle
  - See J-PAL's Evidence to Policy resources: https://www.povertyactionlab.org/evidence-to-policy/resources
- Failure to Appear Evaluation Summary and Original Paper:
  - https://www.povertyactionlab.org/evaluation/text-message-reminders-decreased-failure-appear-court-new-york-city
  - Cooke, Brice, Binta Zahra Diop, Alissa Fishbane, Jonathan Hayes, Aurelie Ouss, and Anuj Shah. 2018. "Using Behavioral Science to Improve Criminal Justice Outcomes: Preventing Failures to Appear in Court." Ideas42 and the University of Chicago Crime Lab. https://www.ideas42.org/wp-content/uploads/2018/03/Using-Behavioral-Science-to-Improve-Criminal-Justice-Outcomes.pdf
- More J-PAL North America Resources:
  - All J-PAL North America Evaluation Summaries
  - J-PAL North America Evaluation of Nurse Family Partnership Pay For Success Project with South Carolina's Department of Health and Human Services
  - Virtual Webinar Series "Charting the Next Decade of Evidence Generation in State and Local Government"
  - J-PAL North America State and Local Innovation Initiative