
CCI
CENTER FOR CARE INNOVATIONS
Using Human-Centered Design to Bring Patient Voice to Improvement Projects

Workshop Agenda

1. What Is Human-Centered Design and Why Co-Design with Patients?
2. Co-Design in Action: Health Quality Partners' SMBP Pilot
3. Q&A
4. Co-Design Activity: Journey Mapping
5. Reflection & Resources

Learning Objectives

1. Learn what human-centered design is.
2. Learn how to use human-centered design to engage patients.
3. Understand the basic steps to co-designing and examples of how to begin co-designing with patients.
4. Hear an example of how co-design has been used for a SMBP pilot.
5. Experience one design activity that can be used in a future co-design session.
6. Take away practical resources and techniques to use immediately!

Before We Begin…

I Like…

I Wish…

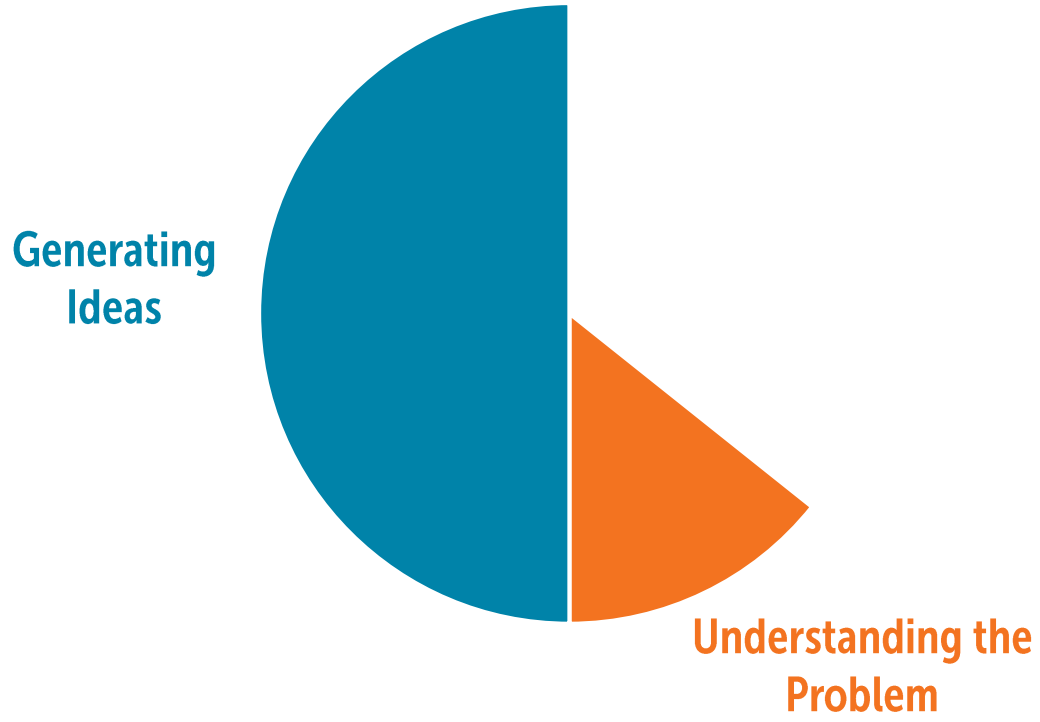
I Wonder…

What Is Human-Centered Design and Why Co-Design with Patients?

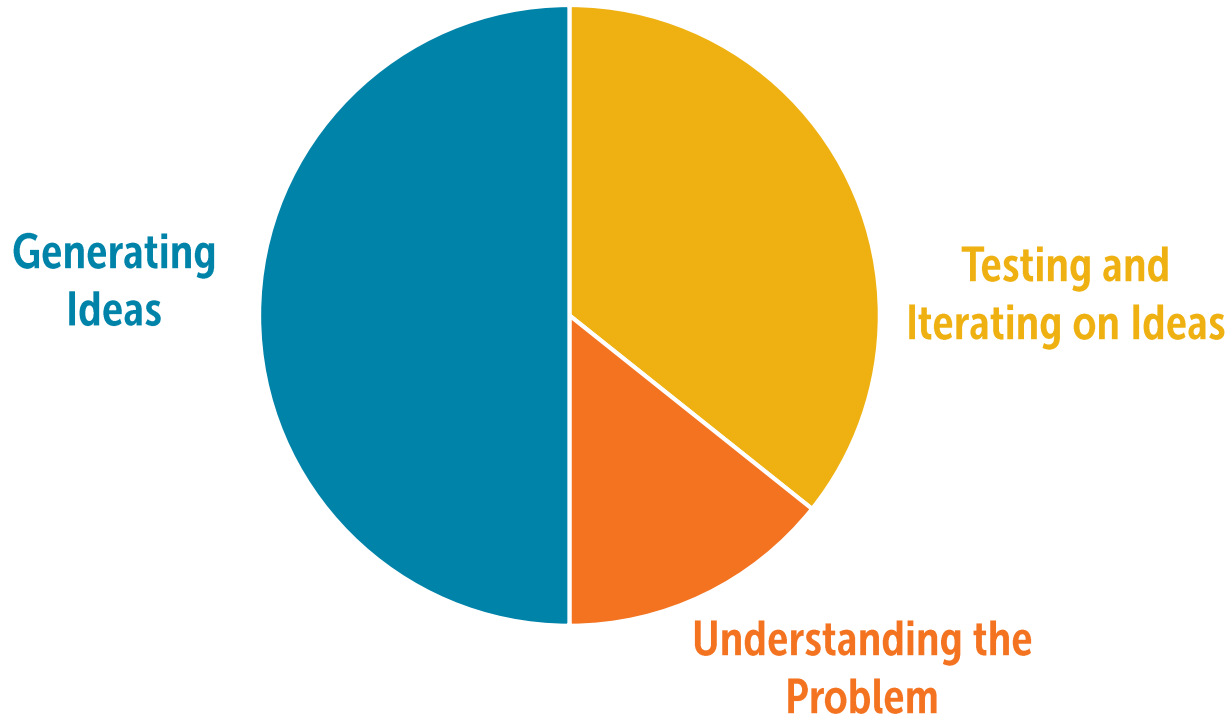
How we've traditionally worked (more or less)

Understanding the Problem

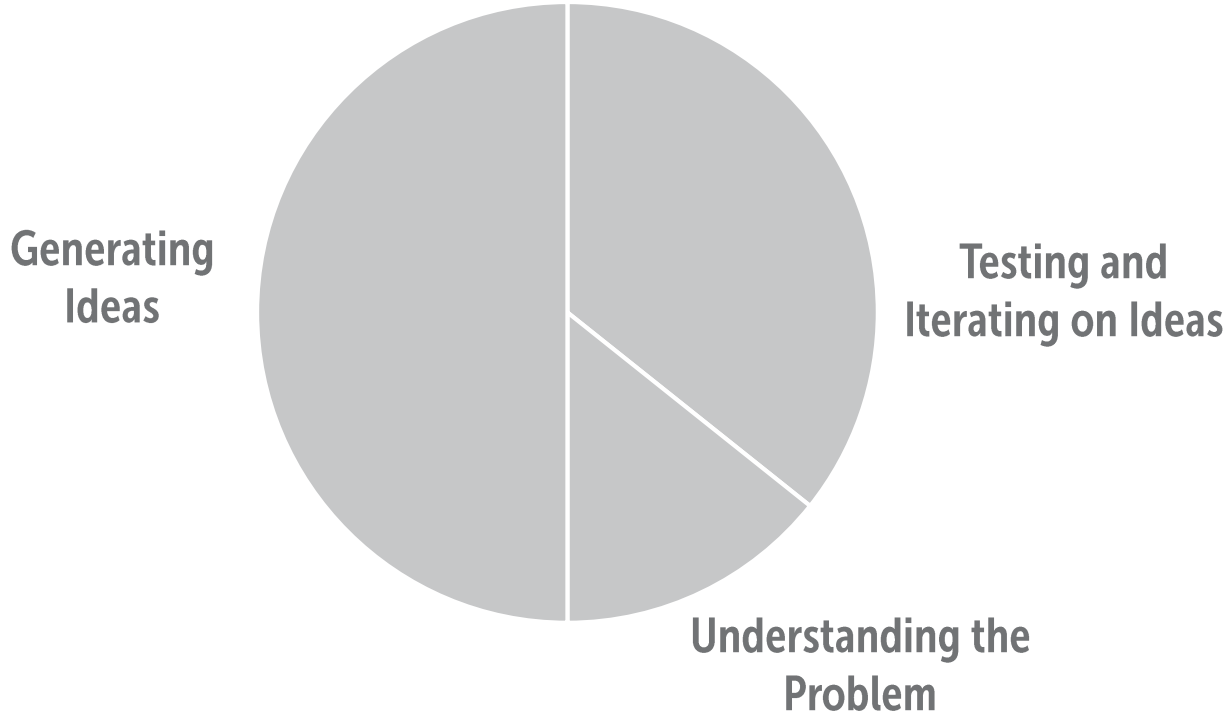
How we've traditionally worked (more or less)

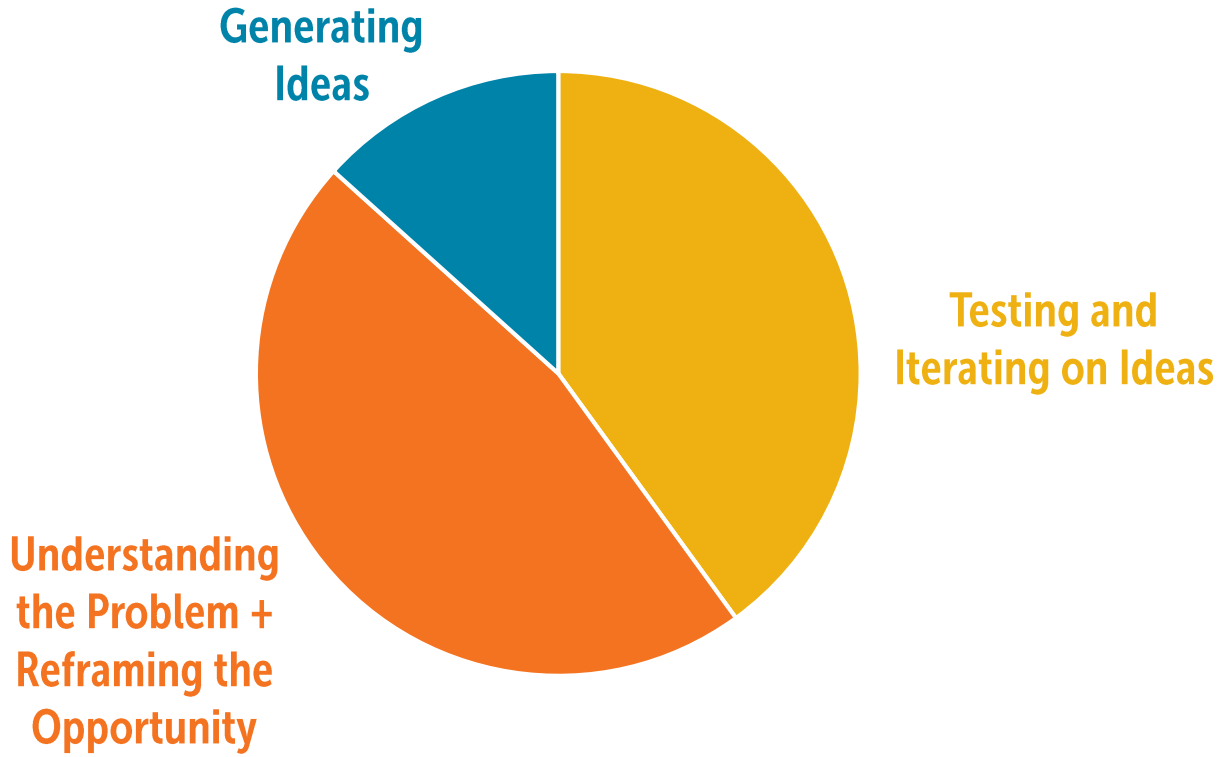


How we've traditionally worked (more or less)



In HCD, we spend more time exploring the problem...





"I learned that human-centered innovation is more than a tool or 'solution', it is a way of thinking about and approaching a problem, a way of framing solutions... then trying them to learn with real end-users in their real environment."

– CCI Program Participant

What HCD looks like

Leveraging Patient Voice

- Surveys
- Focus groups

- Observation
- Shadowing
- Interviews/ Intercepts
- Journey Mapping

- Patient & Family Advisory Councils
- Peer Navigators

- Patients on project team longitudinally, creating value alongside staff

Why Co-Design with Patients?

Build stronger relationships with patients.

- Transform care in a way that **truly matters to patients.**
- Build a **deeper relationship and trust** with patients.
- Patients **appreciate sharing their stories** and ideas.

Better problem solving.

- **Reduces risk** and waste of resources.
- **Help prioritize** what problems to address
- **Challenge what you "know" and assume** to be true
- Encourages **radical thinking and creativity**.

Anyone can do this...
be creative.
listen.
have humility.

- You don't need to be an expert to do this work!
- Be curious, ask questions & learn.
- Start small with the resources you have.
- Be visual and make things tangible.
- Show your work to peers early and often. Be open to feedback.
- Consider how relatable you are.

Basic Approach to Co-Design

1. Understand the Problem
2. Generate Ideas
3. Test Ideas
4. Iterate on Ideas

Basic Approach to Co-Design

1 **Understand the Problem**

2 Generate Ideas

3 Test Ideas

4 Iterate on Ideas

Examples include:

- Interview patients and health center staff to learn about their experience
- Shadow patients during their clinic visit
- Home visit to better understand the patient's at-home environment
- Review data from patient surveys, patient advisory councils and patient portals

Basic Approach to Co-Design

1 Understand the Problem

2 **Generate Ideas**

3 Test Ideas

4 Iterate on Ideas

Examples include:

- Recruit a diverse group of patients to participate with living and/or lived experience of health concern
- Host a co-design session with patients to brainstorm and prioritize ideas

Basic Approach to Co-Design

1 Understand the Problem

2 Generate Ideas

3 **Test Ideas**

4 Iterate on Ideas

Examples include:

- Have patients engage with & experience the idea(s)
- Gather feedback on the idea(s): what went well and what could be better?

Basic Approach to Co-Design

1 Understand the Problem

2 Generate Ideas

3 Test Ideas

4 **Iterate on Ideas**

Examples include:

- Go back to designing the solution idea so that it addresses patients' feedback
- Share updates with the patients you engaged during Step 1 & 2 to let them know they were a vital part of making this happen!

Engaging Patients in Developing a Self-Measured Blood Pressure Monitoring Program using Co-Design

June 10, 2019

Jennifer Covin, MPH, Director of Programs

HEALTH QUALITY PARTNERS
of Southern California

Agenda

1. Overview of Health Center Partners of Southern California
2. Our Pathway to a Self-Measured Blood Pressure (SMBP) Monitoring Pilot Program
3. Utilization of Co-Design
4. Application of Co-Design to develop a SMBP monitoring program
5. Questions

A Family of Companies….

The mission is righteous. The work imperative. The impact profound.

HEALTH CENTER PARTNERS
of Southern California

- **Consortium of 17 primary care organizations**
- **Voice & advocate for its members**
- **Training & technical assistance**
- **Serving the health needs of communities in southern California (San Diego, Riverside & Imperial Counties)**

OUR MEMBERS…

806,158 Unduplicated Patients*

3.25M Unduplicated Patient Visits

135 Sites Of Care In 5 Counties

* UDS = 806,158. OSHPD = 926,413

Rationale for a SMBP Program:

- The US Preventive Services Task Force, in its October 2015 Recommendation Statement on Screening for High Blood Pressure in Adults, recommends obtaining blood pressure measurements outside of the clinical setting for diagnostic confirmation before starting treatment.

- Increasing scientific evidence shows that self-measured blood pressure monitoring (SMBP), coupled with clinical support, supports people in managing their hypertension.

- SMBP is also a useful tool to rule out white coat hypertension, masked hypertension, and as a self-management tool to enhance medication adherence.

Our Pathway to a SMBP Pilot Program

ALL HEART program *(2011 to 2017)*

- Funded by Kaiser Permanente Southern California Region Community Benefit
- Aimed to reduce heart attacks and strokes through the identification and treatment of diabetes and hypertension using evidence based guidelines among the safety net population in community health centers (CHC) in Southern CA
- Kaiser Permanente's **ALL** initiative (**A**spirin, **L**isinopril and **L**ipid-lowering medication) was implemented to reduce heart attacks and strokes
- Targeted patients: those with heart disease or were 55+ years old with diabetes, in a therapeutic program that included the use of these three medications
- In the 2016-2017 year funding cycle, HQP expanded our focus to include patients age 18+ with hypertension.
- Sample Outcomes from CCHE's evaluation from 2015 – 2017:
  - Reached almost 50K patients with hypertension (11 health center organizations, 47 sites, in five counties)
  - Blood pressure control rates increased, with 6 showing statistically significant improvements (program goal = 70%)
  - Diabetes outcomes were sustained through the shift to hypertension
  - Health centers improved in all key capacity domains (QI, team based care, proactive care; and medication adherence)
  - Sustainable impact on health center systems

Our Pathway to a SMBP Pilot Program

Participation in the Hiding in Plain Sight (HIPS) Project *(2014 – 2016)*

- Collaborated with the National Association of Community Health Centers (NACHC) on their Million Hearts initiative
- NACHC recruited 11 federally qualified health centers nationwide to participate in a two-year cooperative agreement, including two Health Center Partner member health centers, La Maestra Community Health Centers and Neighborhood Healthcare.
- Issue: many safety-net patients with hypertension are not formally diagnosed and may remain untreated and at increased risk for cardiovascular events
- Strategy:
  - Piloted the quality improvement strategy and tools to improve the detection and control of high blood pressure in community health centers that serve populations disproportionately burdened by hypertension.
  - Included an algorithim criteria to identify patients who might have undiagnosed hypertension
- Sample Results:
  - Diagnosed hypertension prevalence increased significantly
  - There were no specific goals around blood pressure control increasing, but it did!
- Reference / Outcomes: The Joint Commission Journal on Quality and Patient Safety 2018; 44:117-129
  https://www.sciencedirect.com/science/article/pii/S1553725017302039?via%3Dihub

HQP's Utilization of Co-Design to date:

Initial application of co-design through a Center for Care Innovations project:

- *CCI Reimagined Care Challenge*
- Overview/application of co-design provided at a CCI convening and via follow-up coaching calls; never used previously
- Co-design sessions with PCP providers and patients with diagnosed hypertension
- Case Study (CCHE and CCI) of HQP's co-design process and development of a SMBP pilot: https://www.careinnovations.org/wp-content/uploads/2017/10/RIC_case_study_HQP.pdf

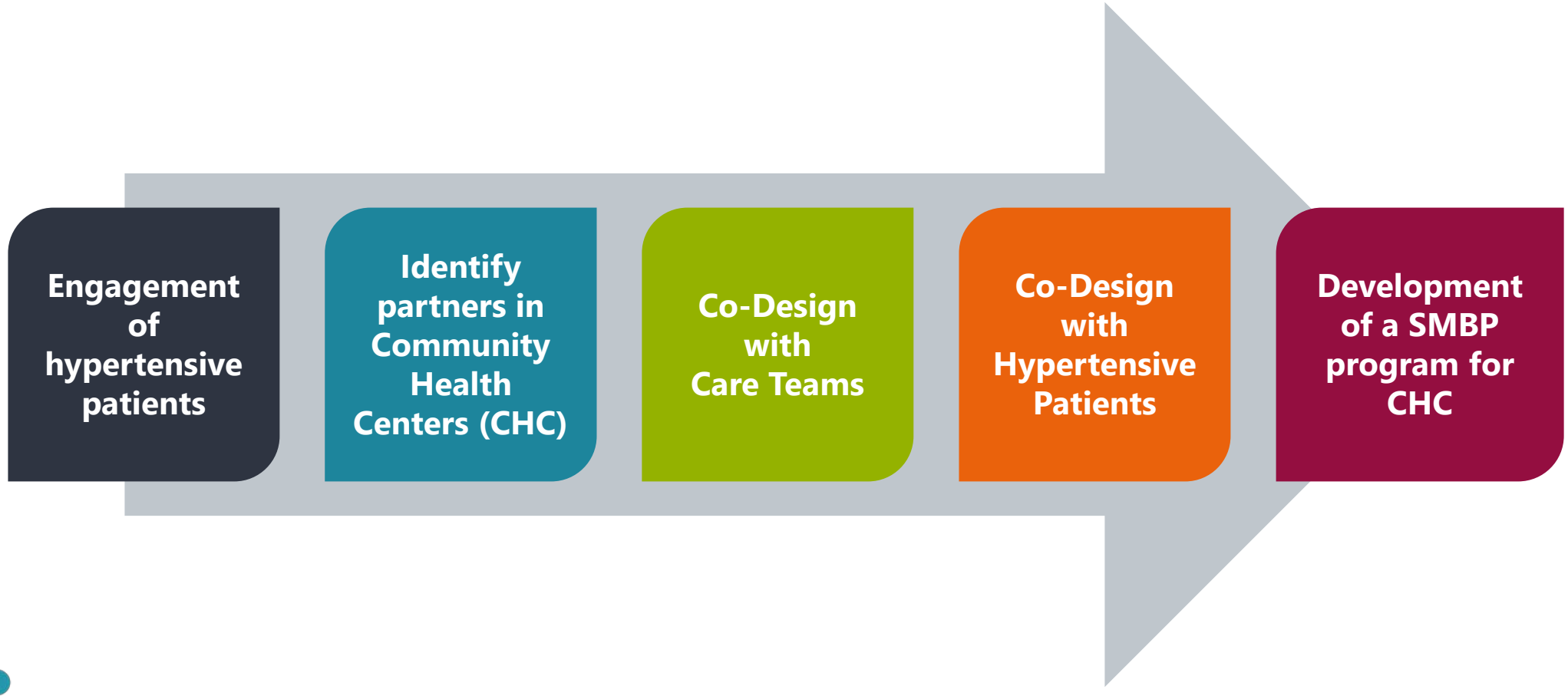
Second application through a Blue Shield of California Foundation project:

- *Advancing Value-Based Care Through Patient Engagement*
- How can we better engage with patients in their care?
- Co-design sessions with patients from partnering community health centers
- Organizational assessments with health center staff
- Patient Surveys

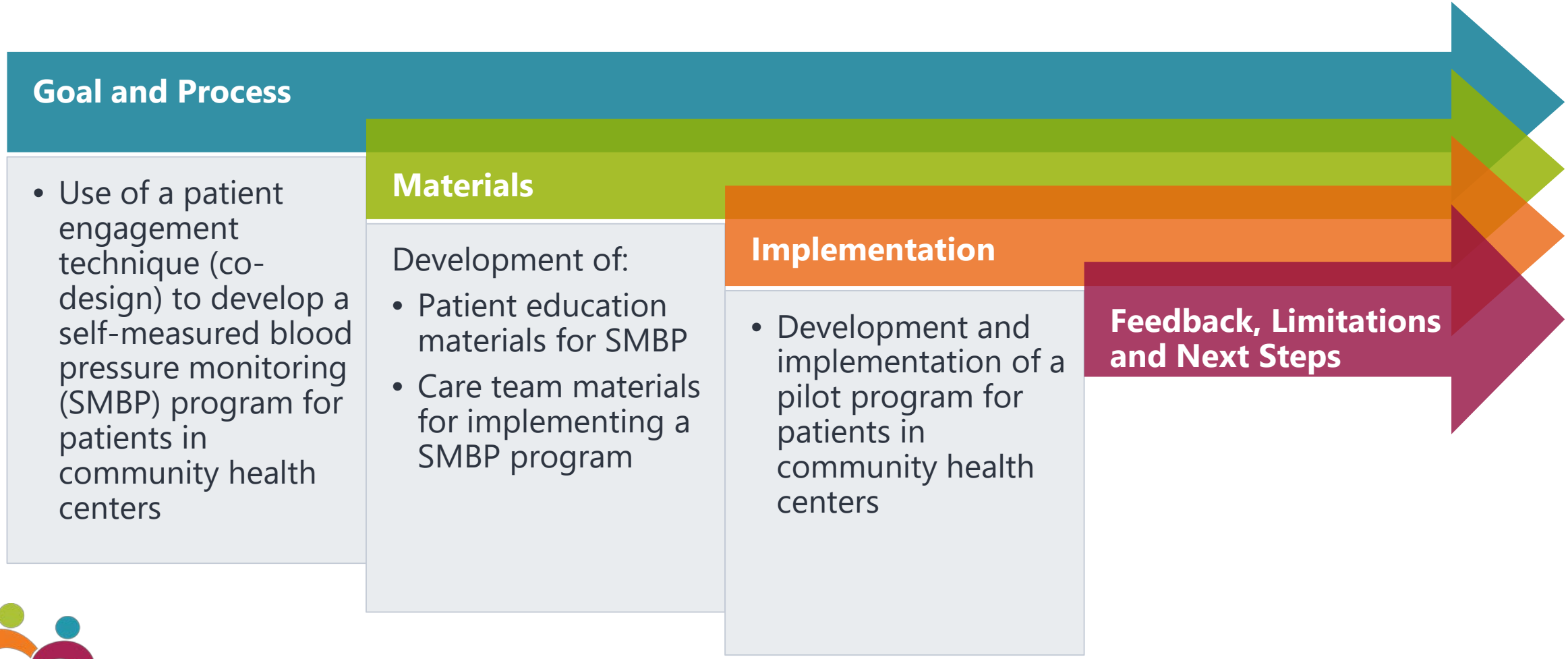
Third application through a current US DHHS, Office on Women's Health project

- *Chronic Pain Management in Female Community Health Center (CHC) Patients*
- How should we design and implement a pain management program for female patients (50+) with chronic pain that receive their care at a community health center?
- Co-design sessions with: (1) PCP and BH providers; and (2) patients with chronic pain

Our Engagement Process



Overview of SMBP Pilot Program

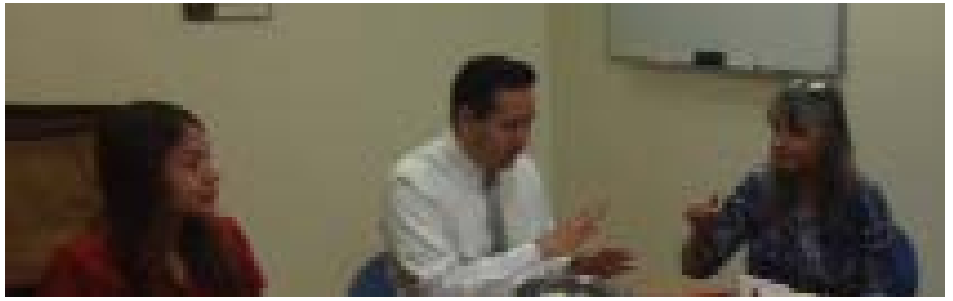


Overview of Co-Design Sessions

Methods / Activities	**Co-Design Sessions with CHC Care Coordination Teams**	**Co-Design Sessions with CHC Patients**
Target Participants	2 CHCs with a large number of HTN patients and prior experience with management approaches	CHC patients with hypertension
Selection of Co-Design Partners	▪ Champion Physicians ▪ Panel Manager ▪ QM & Population Health Directors ▪ Care Team members (MAs, Site Coordinator, Health Educators)	▪ CHCs ran reports to select patients based on HTN & past visit criteria. ▪ Site Coordinator or HE contacted patients by phone using a HQP / CCI recruitment guide. ▪ gift card provided ($15).
Content	Initial Sessions: ▪ patient centered design approach ▪ experience with HTN issues, programs ▪ patient feedback/issues ▪ infrastructure	Initial Sessions: ▪ approaches to get to know the patient as a person, what's important to them, experience with HTN management
	Subsequent Sessions: ▪ logistics ▪ feedback on pilot materials ▪ develop protocols/procedures	Subsequent Sessions: ▪ prototyped a SMBP program ▪ design of / input on materials ▪ post pilot program

Insights from Care Teams

- Patient populations vary across each geographic site (e.g., race, ethnicity, culture, languages, compliance)
- Staff had received interest in BP monitoring from patients
- Providers voiced that the consequences of HTN is often not realized by patients
- Providers and care teams are interested in engaging patients in SMBP
- There are obstacles to overcome (e.g., patient knowledge, resources, compliance, collection and management of the BP data by the health center)



Insights from Patients

- Disclosure of multiple health issues:
  - time spent at medical appointments
  - interested in reducing the face time at the health center, especially for a brief appointment like a blood pressure reading

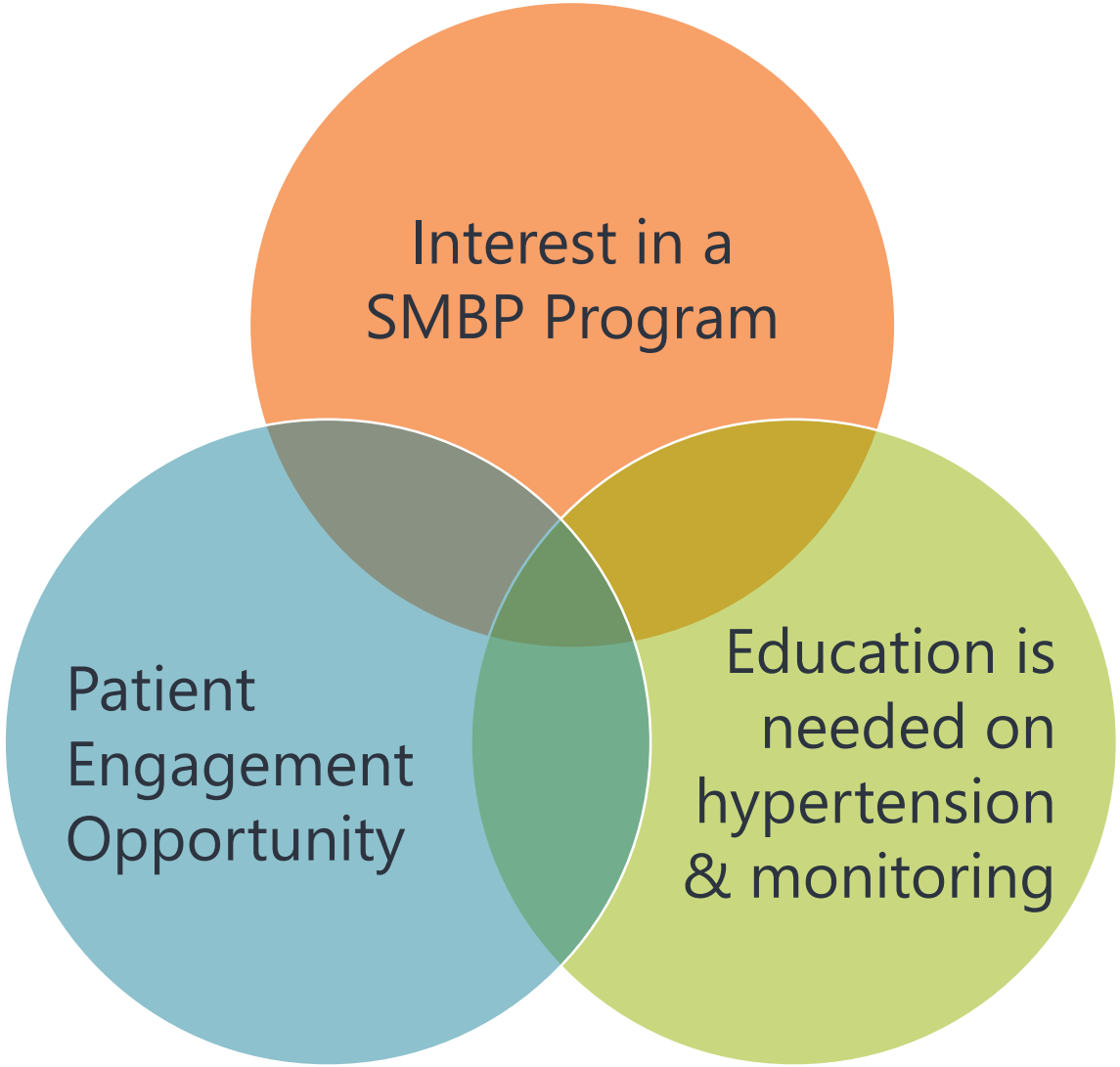
- There is interest in SMBP. Some patients had taken their BP at home or went to a store to get an occasional reading, but it was inconsistent
- Consistent tracking was not evident
- Lack of resources is an issue (device, transportation, etc.)
- More education on hypertension is needed
  - Misconception that you could stop taking medication when their BP reading was normal
- Patients are aware of how to engage in managing their blood pressure through some lifestyle changes, however this is challenging for some

Insights from Patients

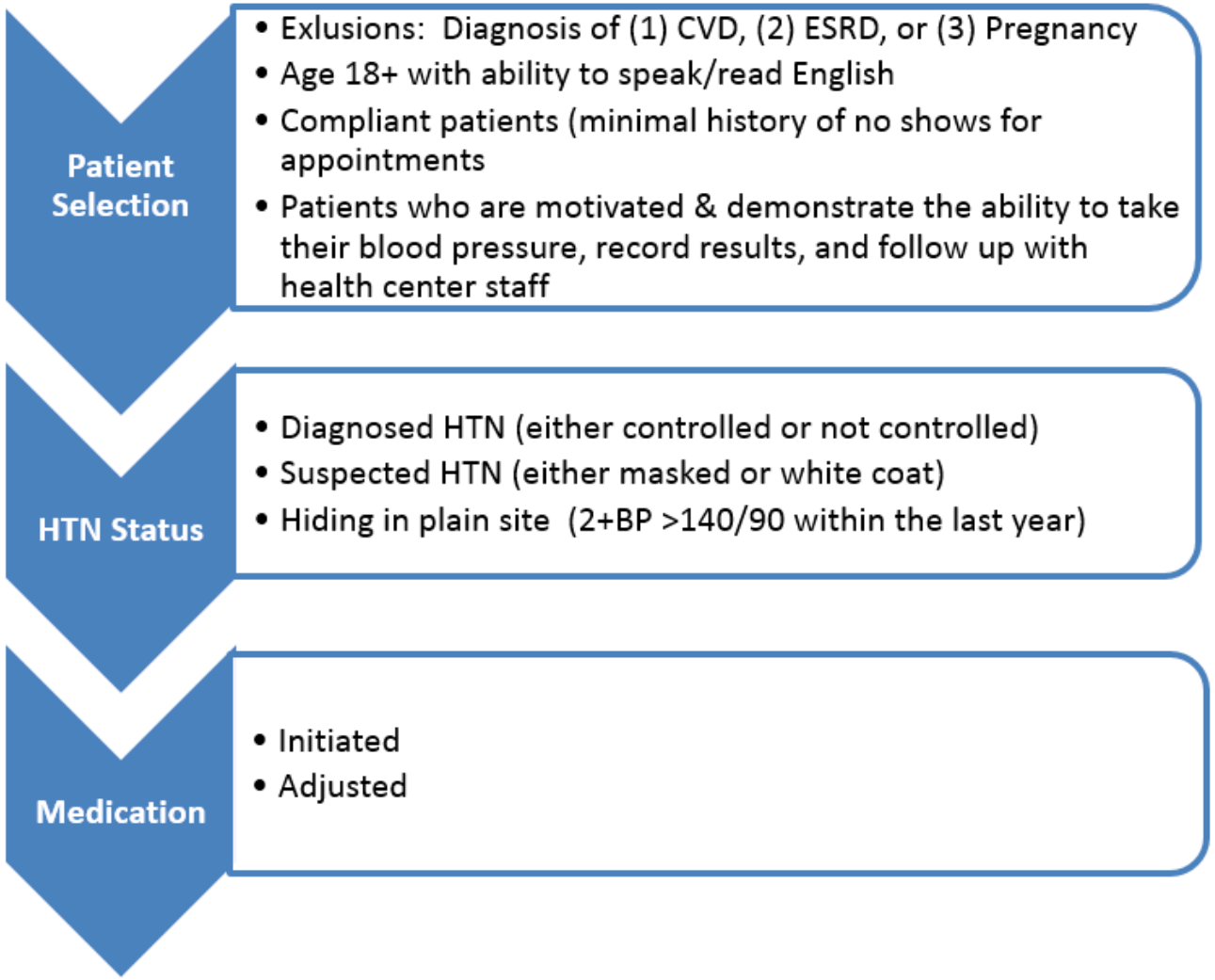
Based on verbal feedback during the co-design sessions, patients:

- provided written and verbal feedback on sample material content and format.
- found the patient materials helpful and did not identify any additional information om SMBP that was needed
- were motivated to do SBMP, particularly if it would reduce the number of office visits for only BP readings and/or medication renewal
- appreciated the opportunity to provide feedback and to be heard throughout the co-design process

The Common Themes from Providers & Patients



SMBP Pilot: Patient Recruitment Criteria



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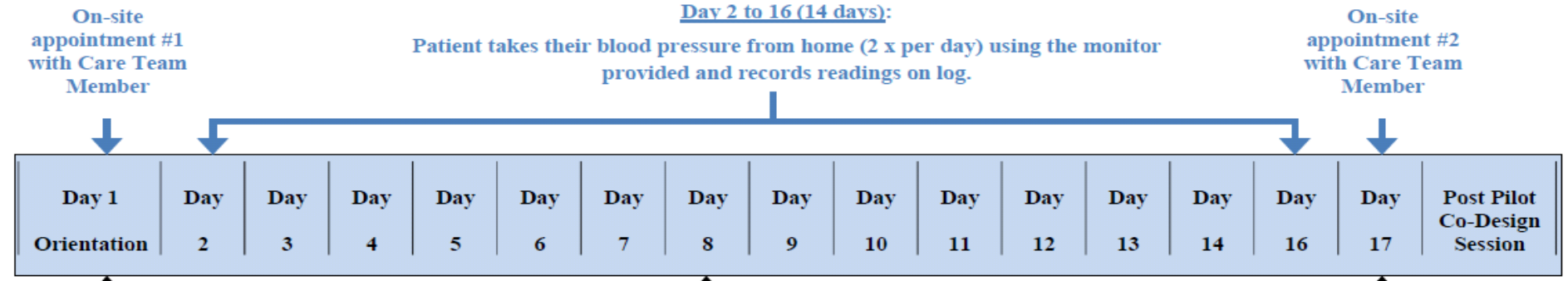
Timeline

HQP Blood Pressure Monitoring Pilot

Patient / Pilot Participant Activities



Day 1:

Orientation Session

This follows recruitment and/or referral procedures. The Care Team Member:

- Obtains Consent
- Distributes and reviews packet of materials
- Distributes monitor
- Instructs on how to take BP, record reading, and has patient demonstrate understanding
- Schedules follow-up call and next on-site visit

Day 8:

Follow-up phone call

NHC staff calls patient and solicits:

- Questions
- Feedback on experience to date
- Adverse Events
- BP Readings
- Confirmation of next appointment on Day 17

Day 17:

Patient meets with a Care Team Member to:

- Answer Questions
- Record any Adverse Events
- Collect BP Readings and monitoring logs
- Invite patient to co-design session
- Discuss any next steps with clinical provider

Care Team Member Activities include the above noted in black and submitting patient data (de-identified) to HQP.

HEALTH QUALITY PARTNERS

How Do I Take My Blood Pressure?

Below are some reminders of how to prepare and get started on taking your blood pressure. Please refer to the instructions that came with your blood pressure monitor on how to use the device.

Prepare

Within 30 Minutes of taking your Blood Pressure

Do Not:

- Eat a large meal
- Smoke
- Exercise
- Take decongestants
- Have caffeine

These will cause your blood pressure to go up.

Getting Started

Do the following steps:

- Empty bladder first
- Take a seat
- Support your back
- Don't have a conversation

- Support your arm at heart level
- Keep legs uncrossed
- Keep your feet flat
- Put cuff on bare arm

Now that you are comfortably seated:

1. Apply the cuff securely on the upper part of your arm. The cuff should be ½ inch or 2 fingers above the crease of the elbow.
2. Push the start button to begin taking your blood pressure.
3. When the machine stops, write down the upper and lower blood pressure numbers on your blood pressure log.
4. Wait one minute and then repeat. Always check your blood pressure twice, one minute apart, then write down the numbers on your blood pressure log. Take your two blood pressure readings once in the morning and once in the evening for the next 14 days.

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Self-Measured Blood Pressure Log

Name: _____ My Blood Pressure Goal: _____

Take your blood pressure two times a day, once in the morning and once in the evening.

Take two blood pressures each time you take your blood pressure and write them down on this log. Wait at least one minute between each time.

Write anything that might have affected your blood pressure in the comment section. (for example, are you angry; just had coffee; full bladder)

MORNING					EVENING		
Date Time	**#1**	**#2**	**Comment**	**Date Time**	**#1**	**#2**	**Comment**
10/6/16 10AM	*130/72*	*125/60*	Feeling good	*10/6/16 8PM*	*155/89*	*136/68*	*Family stress*

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Monitoring Blood Pressure Action Plan

Name: _____ **Doctor:** _____ **Date:** ___/___/___

If you have any questions call:

My blood pressure medication:

Notes:

For a NORMAL BLOOD PRESSURE reading:
The UPPER NUMBER should be LESS THAN 120
and the LOWER NUMBER should be LESS THAN 80

The following is an action plan for when your blood pressure reading is outside of this normal range.

TOO LOW: Watch It

TOO LOW

Blood Pressure Readings

Equal or less than 90 / Equal or less than 60

- **Your blood pressure is too low**

Recommended Actions:

- **Wait an hour and retake your blood pressure.**
- Do not take your blood pressure medication, if you haven't already, when your blood pressure reading is less than 90/60.
- You may be dehydrated! Drink plenty of non-alcoholic fluids and increase your salt intake.
- If your blood pressure is still low several hours later, call your doctor. You may need to be seen urgently.

CALL 9-1-1 if you feel like you are going to pass out, have chest pain, or have difficulty speaking.

BETTER: Make Lifestyle Changes

BETTER

Blood Pressure Readings

120-139 / 80-89

- **Your blood pressure is higher than the normal range**

Recommended Actions:

- Make lifestyle changes that reduce blood pressure.
- Get plenty of exercise. Try to get at least 30 minutes a day.
- Have less alcohol. Women: limit to 1 drink per day. Men: limit to 2 drinks per day (1 drink equals 1 ½ ounces of hard alcohol, 5 ounces of wine, and 12 ounces of beer).
- Keep your weight down. Try eating smaller portions.
- Use spices, not salt to add flavor and limit your salt intake.
- Don't smoke. If you smoke, get help to quit.

See the back side

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Monitoring Blood Pressure Action Plan

NOT GOOD: High Blood Pressure (Hypertension) Stage 1

NOT GOOD

Blood Pressure Readings

140-159 / 90-99

- **Your blood pressure is high**

Recommended Actions:

- Continue to make lifestyle changes.
- If you are on a medication keep taking it every day as your doctor prescribed.
- Your blood pressure is considered under control when the upper (systolic) number is less than 140 AND the lower (diastolic) number is less than 90.

BAD: High Blood Pressure (Hypertension) Stage 2

BAD

Blood Pressure Readings

160 or above / 100 or above

- **Your blood pressure is very high**

Recommended Actions:

- Your blood pressure may be raised and one or two readings may be high.
- If your blood pressure stays 160/100 or above, make an appointment with your doctor in the next few days.
- Think of what may have caused your blood pressure to increase.
- When you are angry, stressed or in pain your blood pressure increases.
- If you know what it was, take action to alter what has taken place and take your blood pressure an hour later.

DANGER: Seek Medical Attention (Hypertensive Crises)

DANGER

Blood Pressure Readings

180 or above / 110 or above

- **Your blood pressure is dangerously high**

Recommended Actions:

- Stay calm and try some relaxation techniques.
- Just sitting still and thinking about your breathing can help calm you down. Notify your physician within the next couple of days.
- If your blood pressure is higher 180/110 and you are NOT experiencing symptoms such as chest pain, shortness of breath, back pain, numbness/weakness, changes in vision or difficulty speaking, wait about five minutes and take it again.

If you ARE experiencing any of those symptoms AND your reading is still at or above that level, you should CALL 9-1-1 and get help immediately.

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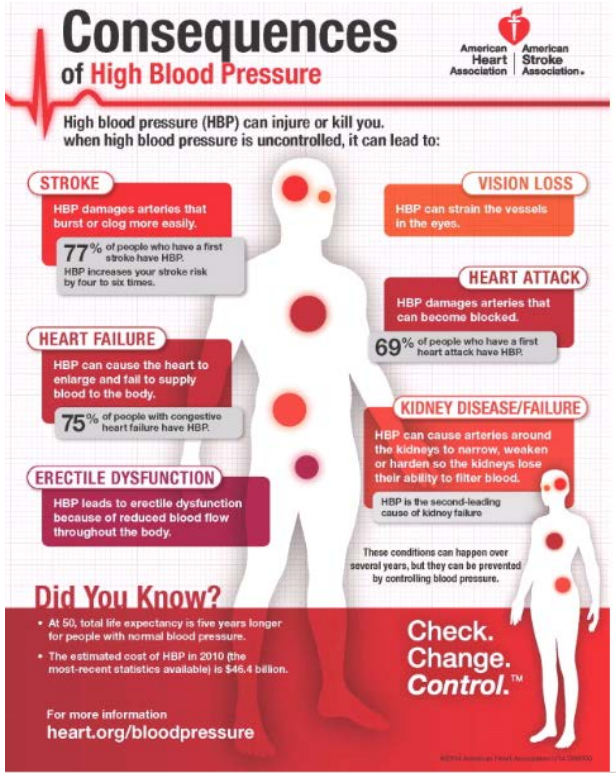
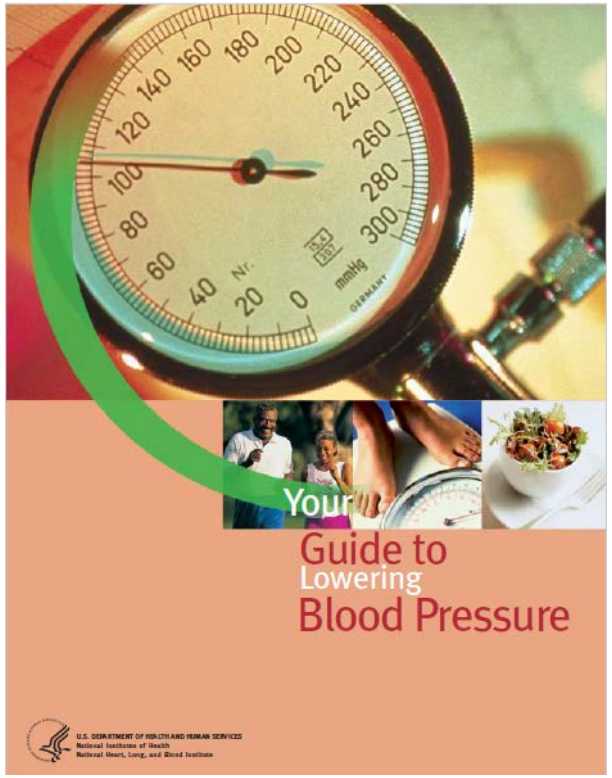
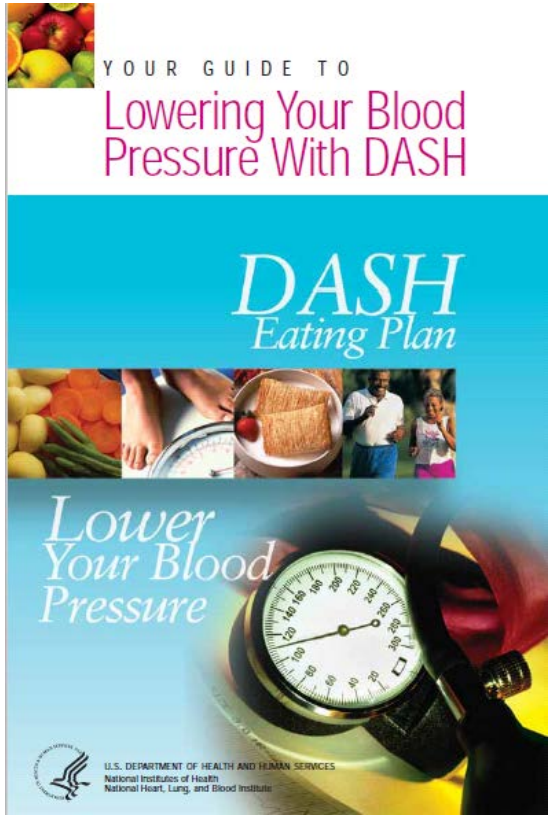
Sample Existing Materials Utilized







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RESOURCES FOR HYPERTENSION (HIGH BLOOD PRESSURE)

* *Included in your packet*

Topic	Source	Resources
General Information	National Institute of Health	* https://www.nhlbi.nih.gov/files/docs/public/heart/hbp_low.pdf
	American Heart Association	http://www.heart.org/idc/groups/heart-public/@wcm/@hcm/documents/downloadable/ucm_300310.pdf http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/SymptomsDiagnosisMonitoringofHighBloodPressure/Home-Blood-Pressure-Monitoring_UCM_301874_Article.jsp#.WH03qDjTI2M
	Center for Disease Control and Prevention	https://www.cdc.gov/bloodpressure/
	American Heart & American Stroke Associations	www.heart360.org
Nutrition and Lifestyle	National Institute of Health	*https://www.nhlbi.nih.gov/files/docs/public/heart/new_dash.pdf
	American Heart Association	http://targetbp.org/m-a-p-introduction/patient-resources/ http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/GettheFactsAboutHighBloodPressure/The-Facts-About-High-Blood-Pressure_UCM_002050_Article.jsp#.WH046zjTI2M
	American Heart & American Stroke Associations	http://www.heart.org/idc/groups/heart-public/@wcm/@hcm/documents/downloadable/ucm_461840.pdf
Smoking and Hypertension	American Heart Association	*http://www.heart.org/idc/groups/heart-public/@wcm/@hcm/documents/downloadable/ucm_300457.pdf http://www.heart.org/HEARTORG/HealthyLiving/QuitSmoking/Quit-Smoking_UCM_001085_SubHomePage.jsp
Hypertension Medication	American Heart Association	http://www.heart.org/idc/groups/heart-public/@wcm/@hcm/documents/downloadable/ucm_300448.pdf http://www.heart.org/idc/groups/heart-public/@wcm/@hcm/documents/downloadable/ucm_461839.pdf
Applications for your Phone	Google Play	Blood pressure log (android): https://play.google.com/
	iTunes	Blood pressure Monitor-Family Lite (iPhone): https://itunes.apple.com

1/16/2017

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Care Team Materials Developed

- Provider Summary
- Recruitment protocols & reports
- Orientation Session Checklist
- Follow-up Call and Visit Checklist and questions
- Blood Pressure Reading Log
- Tailored EMR documentation & provider referral flow developed by individual CHC

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Recruitment Encounter Checklist

At Home Blood Pressure Monitoring Pilot
CCI Reimagined Care Project

- ☐ **Introduce yourself** and the purpose for your call / visit.
- ☐ Let the patient know:
  - they were selected to be in a **17 day program that is being offered now to only 20 patients** at your health center on at home blood pressure monitoring.
  - there is **no cost** to them to be in the program.
  - they will receive one **blood pressure monitor** for them to keep AND they can also earn a **$15 gift card by coming to a group session** after the program ends.
  - the program is **voluntary** and in no way will affect the care they get at the health center if they choose not to participate.
- ☐ If applicable, let the patient know their **provider** thought they would be a good person to be in the program due to their high blood pressure.
- ☐ Explain the **overall purpose of the program** is to:
  1) **Help them manage their blood pressure** and engage in their care by:
     - learning about how to manage high blood pressure
     - taking their blood pressure on their own at home
     - tracking their daily readings
     - giving the information back to the health center to help with their care

     AND
  2) **Help us learn from THEM** about their experience taking their own blood pressure and being in the program so we can improve it and help other people with high blood pressure also.
- ☐ Explain that if they join the program, they **would do the following activities:**
  - attend a one-on-one orientation session
  - receive a blood pressure monitor to take home and keep
  - take their blood pressure on your own using the monitor (2 times/day for 14 days in a row)
  - record their daily readings on a piece of paper. This may be shared with their doctor/nurse to help them manage their blood pressure
  - complete one phone call with a care team member on Day 8 of the pilot to check in.
  - meet with you at the health center on Day 17. During this visit they will hand in their blood pressure reading log, answer a few final questions about their experience, and give their thoughts and opinions on the program
  - have an opportunity to be part of a group session with other people in the pilot to share your thoughts on what you liked and what you suggest changing. Participation in this group session is optional. If you come to the group session you will also get a $15 gift card.
- ☐ **Solicit questions** the patient may have on anything you covered.
- ☐ **Ask the patient if they are ready to move on to the next step (the orientation session)**
- ☐ **Schedule the Orientation Session at your health center (if applicable).**
- ☐ Record the recruitment encounter on the on the **HQP Recruitment Tracking Sheet**.
- ☐ **Record the visit in your health center electronic medical record/system** and enter the scheduled follow-up phone call and visits on your schedule.

HEALTH QUALITY PARTNERS of Southern California

Follow-up Phone Call & Visit Checklist

Self-Measured Blood Pressure Monitoring Pilot
CCI Reimagined Care Project

- ☐ **Introduce yourself** and the purpose of the call/visit (to follow-up on your last meeting at the orientation session for the at home blood pressure monitoring pilot program).
- ☐ **Obtain the blood pressure readings** to date and report them on the Blood Pressure Readings Report form. Record the date you received the information, the date and time of the reading, the reading (systolic/diastolic), and any actions the patient took for abnormal readings.
- ☐ **Provide any necessary feedback** about abnormal readings, questions on medication, feedback on the type of action the patient took for any high readings, and/or referrals to their provider in any urgent circumstances.
- ☐ Encourage continued participation and **remind the patient of the date/time of their next appointment** for the pilot (if applicable).
- ☐ **Solicit questions** the patient may have on how to use the **blood pressure monitor**.
- ☐ **Solicit questions** the patient may have on any of the **printed material in their folder**.
- ☐ **Ask the patient the following questions** and record their answers on the Follow-up Call / Visit Form:

  What have you **discovered** that you do or eat/drink that makes your blood pressure go up or down?

  What **new information** have you learned from our initial visit or your experience so far?

  What do you like about taking your blood pressure at home daily?

  What has been hard/challenging about taking your blood pressure at home daily?

  What do you think about the **monitor**? Is it easy/hard to use?

  Have you used or looked at any of the **educational materials** yet? If so, which ones? What was helpful? Was anything unclear? What new information did you learn?

  What **other information** do you wish was included in our meeting or the materials?

  Is the **amount of support and follow-up** you have received so far: Too much? Too little? or Just right? How can we support you taking your blood pressure at home better?

  Do you have any other **questions or feedback** you would like to give at this time?

- ☐ Record the visit on the **HQP Recruitment Tracking Sheet.**
- ☐ **Record the visit** in the health center electronic medical record/system.

Developed in partnership with the Center for Care Innovations, with funding from Blue Shield of California Foundation. www.careinnovations.org www.blueshieldcafoundation.org

Rev 6.19.17

NEIGHBORHOOD HEALTHCARE
a californiahealth center

HEALTH QUALITY PARTNERS
of Southern California

CONSENT FORM

Title: At Home Blood Pressure Monitoring Pilot Program

Purpose:

The overall purpose of this pilot is to determine if an at home blood pressure monitoring program is helpful for patients and health care providers from community health centers for engaging hypertensive patients in managing their blood pressure. This pilot is being offered to you by Neighborhood Healthcare and Health Center Partners of Southern California, with funding from the Center for Care Innovations.

You have been invited to be in this pilot program because your doctor/nurse and/or care coordination team identified you as having Hypertension (High Blood Pressure), thought you might like to be part of the pilot, and give your feedback to help us design a program for other people like you.

Please note that this pilot program does not replace any advice or direction you have received from your doctor/provider. Please continue to take any prescribed medication as directed and attend any of your scheduled visits. If you have any questions about your medical care during this pilot program, please contact your doctor's office. In case of an emergency, call 9-1-1.

Activities:

If you agree to be in this pilot you will:

- receive instructions during a one-on-one orientation session with a care team member
- receive a blood pressure monitor to take home
- take your blood pressure on your own using the monitor (2 times per day for 14 days in a row)
- record your daily readings on a piece of paper. This may be shared with your doctor/nurse.
- complete one phone call with a care team member on Day 8 of the pilot. You will give your blood pressure readings over the phone and answer a few questions about how you like the program.
- attend one visit at your health center on Day 17. During this visit you will meet with a care team member, hand in your blood pressure reading log, answer a few final questions about your experience, and share your feedback.
- be invited to attend a group session with other people in the pilot to share your thoughts on what you liked and what you suggest changing. Participation in this group session is optional. If you come to the group session you will also get a $15 gift card.

Benefits:

Benefits from being in the pilot include: receiving a blood pressure monitor and information on hypertension to keep; learning how to take your blood pressure on your own and what actions to take if it is too low or high; and having a chance to voice your thoughts and opinions on the program.

Risks to Participate:

There are no known risks from participating in this pilot program. If you have any questions about your medical care during this pilot program, please contact your doctor's office. In case of an emergency, call 9-1-1.

Costs / Compensation:

There is **no cost** to you to be in the pilot. No co-pays or insurance will be collected for the two visits or the phone call with your care team required as part of the pilot.

You **will receive** the following for being in the pilot: a free blood pressure monitor, information and materials on hypertension, and educational visits with a care team member. If you choose to come to the group session after the pilot, you will also receive a $15 gift card.

Your Rights:

Being in this pilot program will not affect any health care services you receive or are eligible for through Neighborhood Healthcare. Your participation in the pilot is voluntary and you can stop at any time.

Confidentiality:

Any information you give during your follow-up phone call and visits during this pilot will only be viewed or used by the necessary doctor/nurses and care team members at your health center. Any information about the pilot that is shared with Health Center Partners of Southern California will not contain any names on it and will not be able to be linked to you directly in any way.

Contact Information:

If you have any questions about this pilot, please contact: _____ at _____.

Consent:

I have read this consent form and fully understand the benefits of participating in this pilot program. I voluntarily give Neighborhood Healthcare and Health Quality Partners my consent to participate in the At Home Blood Pressure Monitoring Pilot described above effective the date noted below.

Language Preference: Spanish or English *(circle one)*

Preferred Phone Number: _____

I received a blood pressure monitor: YES or NO *(circle one)*

_____	_____	_____
Patient Name	*Patient Signature*	*Date*

_____	_____	_____
Neighborhood Health Care Team Member	*NHC Team Member Signature*	*Date*

Pilot Recruitment & Participation

- A total of 69 patients were identified by CHC staff as eligible to participate in the pilot.
  - QI staff ran preliminary reports to identify HTN patients.
  - Schedules scrubbed by care teams to identify patients eligible during the pilot timeline.
  - Same day referral by providers.

- Of the 69 patients approached, 39 agreed to complete the pilot.

Patients:	39 (20 from La Maestra and 19 from Neighborhood
Staff:	15 (7 CHC staff and 8 referring providers)

BP Log and Protocol

- Patients were given specific instructions and resources to take their blood pressure:
  - daily for 14 days
  - once in the AM and once in the PM. Two readings should be taken each time (1 minute apart)
  - blood pressure readings recorded on a provided log

- Thirty-five of the 39 pilot patients recorded their blood pressure readings.

Please complete one tracking sheet for each patient participating in the HQP Blood Pressure Monitoring Pilot.
Only submit the information below to HQP to secure patient information.
Do not send the patient name, only the corresponding pilot ID.

HQP BP Pilot: Patient Readings Tracking Sheet

Pilot ID # _____

Date Received	Pilot Day #	Date of Reading (mm/dd/yyy)	Time of Reading #1 (00:00 am / pm	BP Reading #1 : (Systolic / Diastolic)	Time of Reading #2 (00:00 am / pm	BP Reading #2: (Systolic / Diastolic)	Action Taken:
	1						Taken at orientation session.
	2						
	3						
	4						
	5						
	6						
	7						
	8						
	9						

Patient Outcomes and Feedback

- Based on verbal feedback to a care team member during the follow up calls/visits, patients:
  - liked the program and found the materials clear and easy to understand
  - learned throughout the pilot period about their blood pressure and things that effected their blood pressure
  - liked the extra time with the care teams
  - wanted to share their logged BP readings with their doctor
  - did not always have their BP readings on hand at the time of the follow-up call.
  - found it cumbersome to take two BP readings 1 minute apart (particularly if it was in the normal range) and preferred to take BP once in the AM and PM

Patient Outcomes and Feedback

- 11 of the 35 patients that completed the pilot (31.4%) participated in a final co-design session. This included a written survey:
  - 82% indicated they were satisfied with the program. Another 18% of patients somewhat agreed that they were satisfied with the program. None somewhat disagreed or disagreed
  - 91% of the patients said they would recommend the blood pressure program to a friend or family member who has high blood pressure
  - Most patients indicated that they would like to continue a blood pressure monitoring program like this (strongly agree =73%) or somewhat agree =18%).

Patient Quotes

"The good thing I guess is that it makes more conscious of my health. At my age I do not take my health for granted I try to watch my health and its extra tool to monitor health."

"I thought the program was perfect. I am saving all my BP logs to give to my doctor"

"I liked all the education. It helped me change my routine like when I have my coffee"

"This is a good program and I am glad I was selected by my doctor to take part in this program. I feel that La Maestra CHC is there for me when I need help. I do not feel like I am just a number to them. Thank you. "

"I did not know that a full bladder makes my BP go up I learned that from your material. My experience has been good so far I really like having this BP monitor I have never taken my own BP before so it's been a new experience for me I usually get my BP checked only at the doctors office. I've learned that my stress actually increased my BP. "

"It helped me learn what triggers my BP to get high"

"It was great to have a machine at home!"

"I feel empowered because I can take my blood pressure myself and see my numbers"

"Following up monthly to review the BP readings that I have been recording would be great so that the doctors can see my numbers and give me input on what I can do differently this would really help."

"It hasn't been hard at all I think the only thing is just getting the habit of checking it so often has been a little challenging because I am not used to taking my own BP"

"It taught me to be in tune with my body"

"Its good an I like this program and you help me in my daily life"

Limitations & Next Steps

Limitations

- Small pilot sample
- Diagnosed HTN patients
- No follow-up SMBP data post pilot
- Staff resources/not billable
- Monitors provided
- No BP Monitoring data in EHR

Dissemination

- Case Study [CCI / Center for Community Health and Evaluation]
- Dissemination of current and/or tailored patient and care team materials
- Health Center Partners Member Health Centers
  - Identification of candidates for SMBP program
  - Are there existing programs that can incorporate / sustain SMBP? (e.g. Health Education, Medication Adherence, etc.)

Next Steps

- Identify future funding to continue work with more CHC, patients, and conduct follow-up activities
- Explore incorporation of data into existing CHC infrastructure / EHR
- Work on spread and sustainability of SMBP programs


CCI
CENTER FOR CARE
INNOVATIONS
Questions?

Let's Try An Activity!

Journey Mapping

What's a Journey Map?

- A flow chart of a user's experience
- Made up of core activities
- Layered with important information like feelings, interactions, and pain points

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When to Use Journey Mapping?

1. Understand the Problem
2. Generate Ideas
3. Test Ideas
4. Iterate on Ideas

Helps to visualize the patient experience

Identify opportunities for improvement & generate ideas with patients!

Why Use A Journey Map?

- Infuses process with human stories
- Makes user experience tangible and easy to share
- Weaves different kinds of information into one diagram
- Offers spring board for solutions and strategy

Journey Map Elements

X-Axis: Steps Over Time

Y-Axis:

- Emotions
- Pain Points
- Questions That Arise
- Quotes
- Influencers
- Motivations

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Journey Map Example: Cooking Dinner

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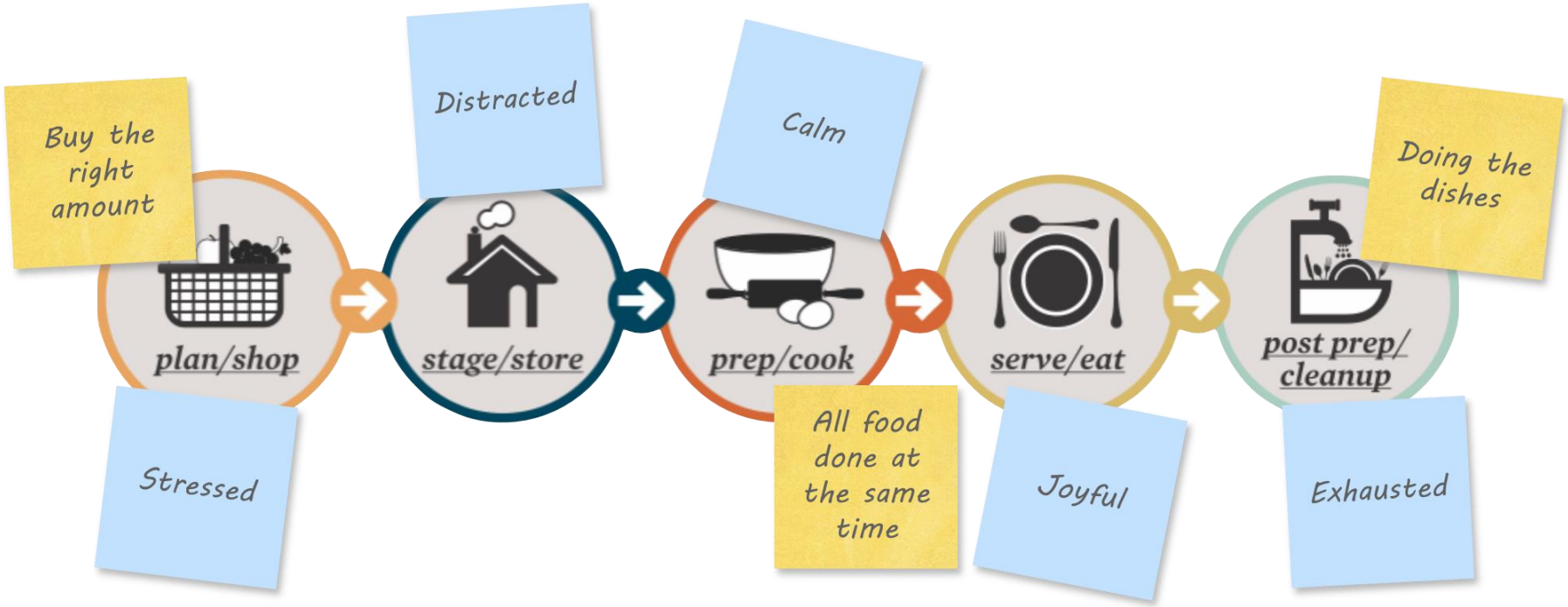
Journey Map Example: Cooking Dinner



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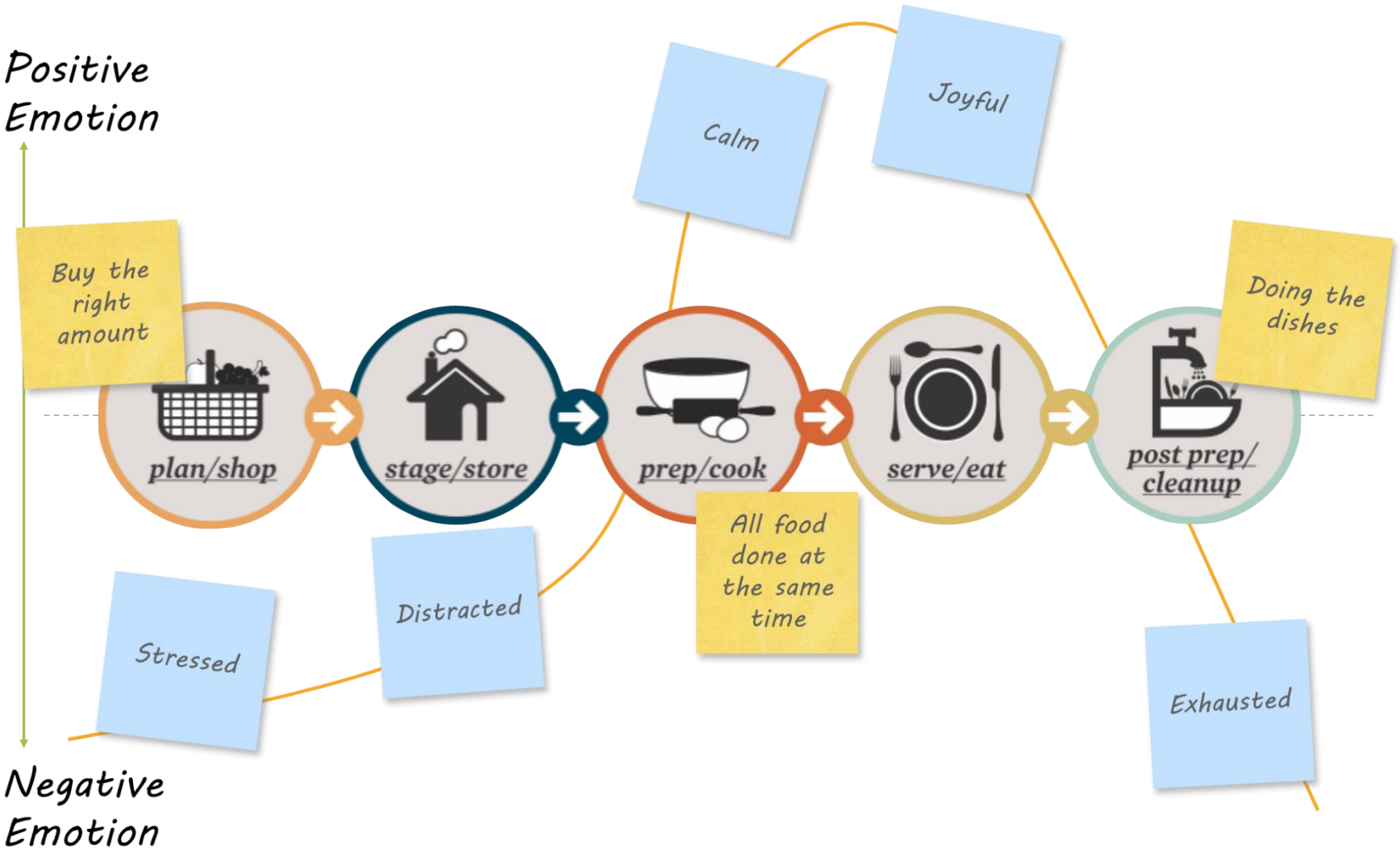
Journey Map Example: Cooking Dinner



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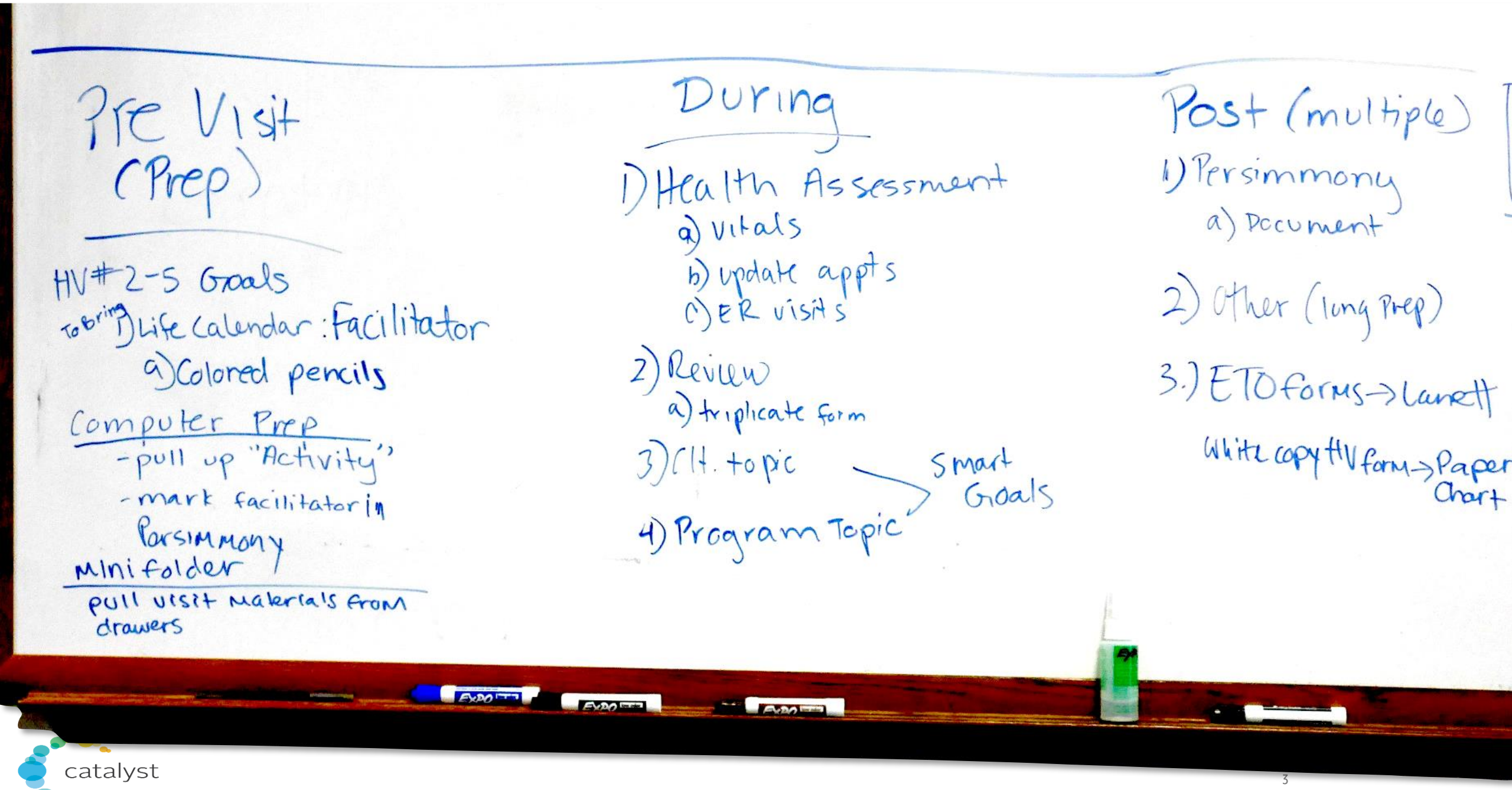
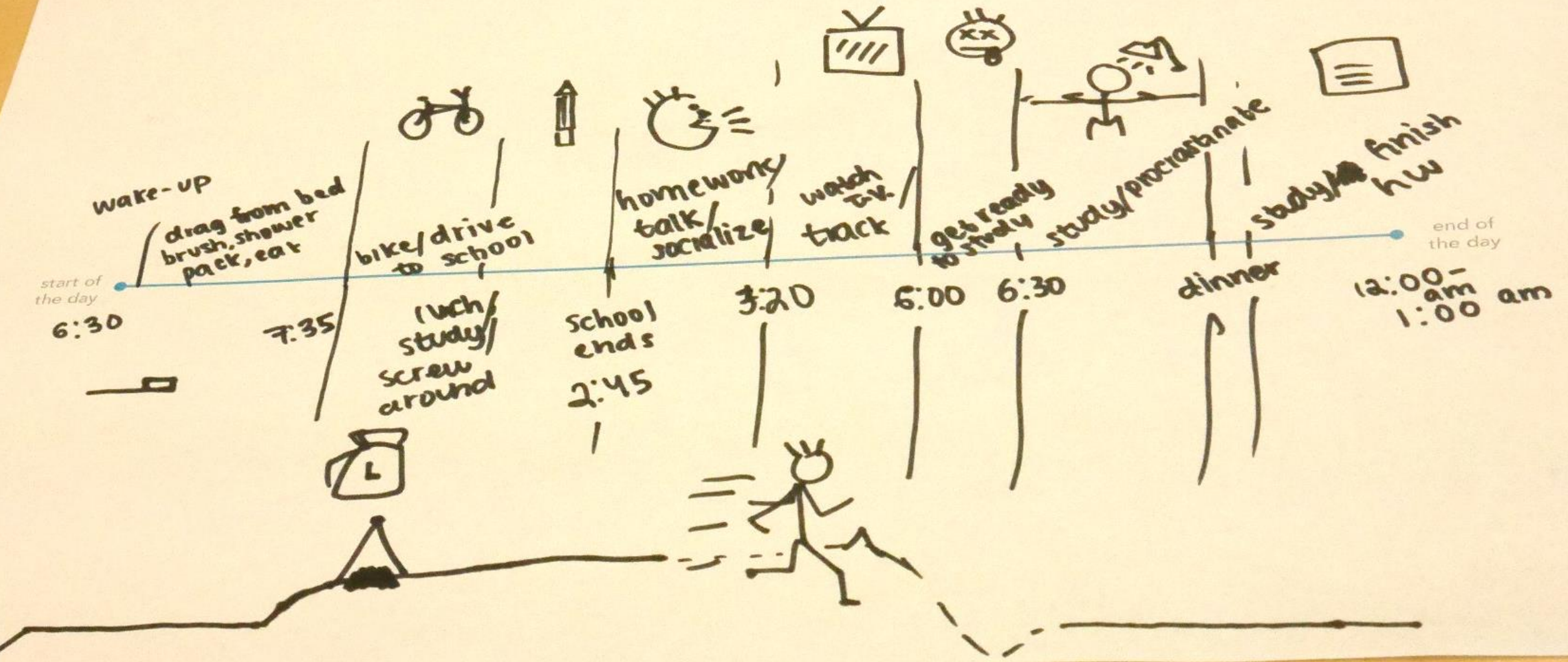

Pre Visit (Prep)
HV# 2-5 Goals
To bring 1) Life Calendar : Facilitator
a) Colored pencils
Computer Prep
- pull up "Activity"
- mark facilitator in Parsimmony
Minifolder
pull visit materials from drawers
During
1) Health Assessment
a) Vitals
b) update appts
c) ER visits
2) Review
a) triplicate form
3) Clt. topic
4) Program Topic
Smart Goals
Post (multiple)
1) Persimmony
a) Document
2) Other (long Prep)
3.) ETO forms → Lanett
White copy HV form → Paper Chart

G.V.


wake-up
drag from bed brush, shower pack, eat
bike/drive to school
lunch/ study/ screw around
school ends 2:45
homework/ talk/ socialize
watch t.v. track
get ready to study
study/procrastinate
dinner
study/
finish hw
start of the day
end of the day
6:30
7:35
3:20
6:00
6:30
12:00-1:00 am
am


persona aspects:
-No kids
-Live Nearby
-Coordinator
-20-something
-Pod member
-unbothered by movement/activity
-Early arriver (before 9:30/10)
feel great when manager shares an affirmation
TUESDAY
High noise levels are distracting (multiple mtgs)
Movement to other space dictated by project and/or team
feel distracted by sound
Preference of desk setup (dual screens)
feels nice to connect with pod neighbor
"like meetings in morning" 10-2pm
Go Go Go!
feel okay & sometimes energized by movement in pod
feel energy go down
feel good (or not) at end of day based on how much accomplish
"feel grateful for the environment" when walk home
feel energized
feel neutral
feel good having prep time
feel good hearing about others - not too long
feel squeezed for lunch "Hangry"
feel passive collecting at staff mtg.
feel like lost momentum after staff mtg
"feel super checked out by this time"
feel need space with no distraction in afternoon that is not work
feel tired at end of day "hit a wall"
"happy & excited when leave when sun is still out"
"feel heavy weight" in evening when have a lot to do
Wake Up [7am]
Work out 7:30-8
Getting Ready [8:30]
Commute [15 min bus 20 min walk]
Arrive in Office [9:15]
Email, Prep Calendar, breakfast no meetings
Informal Check-in w/ Kendra
CCI Huddle 10am
Project Team Meetings 10:15-1:00pm Often B2B
CCI Team Mtg 1-2:30pm
Break if possible - people watch in conf. room - collab room - if needed
Finishing other tasks, sometimes mtg 2:30-4
"Check-in" Working Meeting w/ Laura 4pm
Tasks, etc. 4:30-5/5:30
Head Home 5/5:30
Commute (bus) walk if sun's out
Evenings Make Food, Study, Not doing CCI work (incl. emails, calendar)
Prep for Day
At desk all day →
People Arrive 9/10am
LUNCH?
Have to request quick breaks
Movement + activity in pod and throughout office
Tied to computer (↓ walking mtg.)
Will move to separate space
People are leaving office
Leave laptop at work
Study is falling to the back burner
wish we had very specific feelings
how others feel MAD / ANNOYED indifferent
WONDER IF this will be consistent with others
Like started mapping from EE's routine before getting to work
I wonder how the person you're checking in...
I like all the emotions you were able to capture
If you don't get lunch
Wonder end of day feelings same for others
Wonder How would structured planned lunches affect routine?
I like the different colors to show the life cycle
I wish that feelings could be visualized w/ emojis for simplicity
I like the organization & different colors & the journey of a persona
LIKE categorized color coded emotions
Like color coding
Like the persona setting

Tips & Tricks

- Interviews and observations are your foundation
- Start simply, then add on and remake the map as you learn
- Display relevant information thoughtfully and creatively
- Show users your map to get feedback

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Activity - Journey Map

20 minutes

1. Break into a group of 4-5 friendly strangers.
2. Think about your journey of getting your blood pressure taken:
    - Starting with being taken in from the waiting room to seeing the provider.
3. List key activities that you do.
4. Order them from left to right.
5. Label “stages” of related activities.
6. Add in “layers” of information:
    - Emotions, pain points, quotes, etc.

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Journey Map Elements

X-Axis: Steps Over Time

Y-Axis:

- Emotions
- Pain Points
- Questions That Arise
- Quotes
- Influencers
- Motivations

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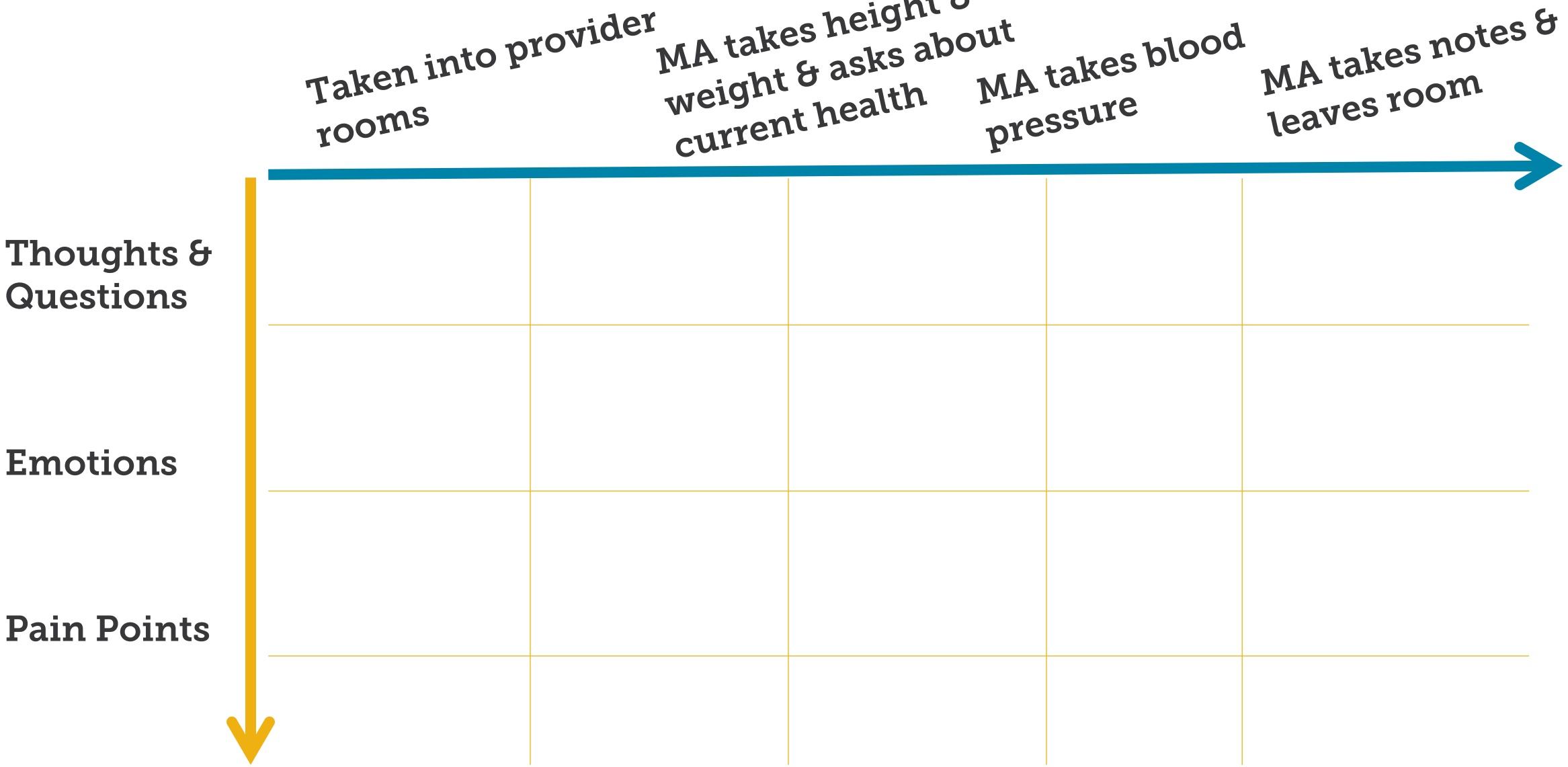
Sample: Blood Pressure Experience



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Review Your Journey Map

- What was one surprising thing you gathered from this activity?
- Which step includes the most pain points or negative emotions?
- Which step includes the most questions?

Answering these questions will help you identify your opportunities for improvement, where you can begin idea generation!

What's After Journey Mapping?

1. Understand the Problem

Visualize the patient experience

2. Generate Ideas

Identify opportunities for improvement & generate ideas with patients!

3. Test Ideas

4. Iterate on Ideas

Tips for Your Next Co-Design Session

Consider accessibility & logistics of session: timing, food, day-care, incentives?

Acknowledge that this is your first time doing this and it's a learning process for everyone!

Include fun, tactical activities that would spark creativity and help break the ice.

Seek feedback from participants on how the session could go better next time.

Share Your Feedback!

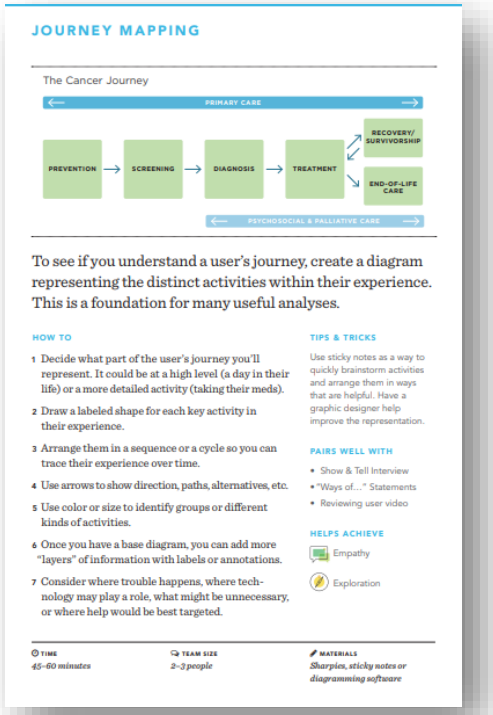
I Like...

I Wish...

I Wonder...

Please post on the flip chart as you exit!

Resources



JOURNEY MAPPING

The Cancer Journey

To see if you understand a user's journey, create a diagram representing the distinct activities within their experience. This is a foundation for many useful analyses.

HOW TO

1 Decide what part of the user's journey you'll represent. It could be at a high level (a day in their life) or a more detailed activity (taking their meds).
2 Draw a labeled shape for each key activity in their experience.
3 Arrange them in a sequence or a cycle so you can trace their experience over time.
4 Use arrows to show direction, paths, alternatives, etc.
5 Use color or size to identify groups or different kinds of activities.
6 Once you have a base diagram, you can add more "layers" of information with labels or annotations.
7 Consider where trouble happens, where technology may play a role, what might be unnecessary, or where help would be best targeted.

TIPS & TRICKS

Use sticky notes as a way to quickly brainstorm activities and arrange them in ways that are helpful. Have a graphic designer help improve the representation.

PAIRS WELL WITH

- Show & Tell Interview
- "Ways of..." Statements
- Reviewing user video

HELPS ACHIEVE

Empathy
Exploration

TIME: 45–60 minutes
TEAM SIZE: 2–3 people
MATERIALS: Sharpies, sticky notes or diagramming software

Human-Centered Design Method Cards

Journey Mapping Webinar

You can now **sign up** to receive **human-centered design tips** in your inbox!

www.careinnovations.org/catalyst-online

Stay Connected!

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Please paste your "I Like, I Wish, I Wonder" stickies on the wall on your way out!