



PROBLEM TREE DIAGRAM GUIDE

**A Tool For Rooting
Equity in Your Work**



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INTRODUCTION

To bring equitable change to a system, it is important to address the root cause of the issue. Root cause analysis is a method that allows teams to explore underlying factors that lead to a problem/challenge they are experiencing. This guide provides an overview of the problem tree diagram and step-by-step instructions on how to use the root cause analysis tool to support unpacking underlying factors and inequities related to a problem/challenge being faced.

A team can use this guide to work through this tool in an in-person or virtual setting.



WHAT IS ROOT CAUSE ANALYSIS?

Root cause analysis aims to identify the underlying factors that lead to a problem/challenge an agency, organization, and/or team is encountering in their day-to-day work. It allows agencies, organizations, and/or teams to see how and where inequities exist in processes and systems. It offers an opportunity to ask “why?” a problem/challenge occurs and look beyond the obvious causes/symptoms. By taking the time and space to dive deep into all possible root causes, agencies, organizations, and/or teams can avoid jumping to a solution before truly understanding the problem/challenge. This creates space to focus on what needs to be addressed to truly overcome inequities and the problem/challenge at hand.



There are many ways teams can approach exploring root causes. Some tools that can be used include:



FISHBONE DIAGRAM

- Supports exploration of the problem broadly.
- Brings focus to the content of the problem/challenge.
- Creates a shared understanding of the problem/challenge among the team.



5 WHYS

- Supports exploration of cause-and-effect relationships underlying a problem/challenge to determine root cause.
- Helps team ask "Why?" following a logical progression from effect back to original cause.



FORCE FIELD ANALYSIS

- Support exploration of both the 'positives' (forces that can be built on) and 'negatives' (forces that are working against the desired state).
- Helps team consider all aspects of working toward SMART aim/goal.
- Encourages honest reflection about the underlying roots (forces) of the problem/challenge.



TREE DIAGRAM

- Supports in-depth exploration of the possible root causes of a problem/challenge by breaking down causes into finer and finer levels of detail.
- Asks: What causes this? or Why did this happen?
- Helps illustrate the problem/challenge the team wants to address by displaying the structure of root causes.
- Moves thinking from generalities to specifics.
- Encourages teams to conduct short, small-scale tests that build on one another.



PROBLEM TREE DIAGRAM

- Explores the possible root causes of a problem/challenge and identifies results created by the problem/challenge.
- Asks: What is causing the problem/challenge? and Why does this problem/challenge exist?
- Considers the multiple layers of the problem/challenge.
- Helps illustrate the problem/challenge the team wants to address by displaying the structure of root causes.
- Moves thinking from generalities to specifics.

In this guide we will explore the problem tree diagram and how it uncovers inequities and relationships between the causes and symptoms of a problem/challenge.

PREPARATION

Getting ready for the problem tree diagram will look a little different depending on whether you plan to convene in-person or virtually and the materials or resources you plan to use. In either case, it is important to create a collaborative space where everyone can contribute their thoughts and see the diagram in action. Additionally, it is important to ask for any accommodations team members may need to fully participate. Accommodations that are needed should be considered during the preparation phase. Here are some items to keep in mind no matter how you plan to convene your team:



TIME

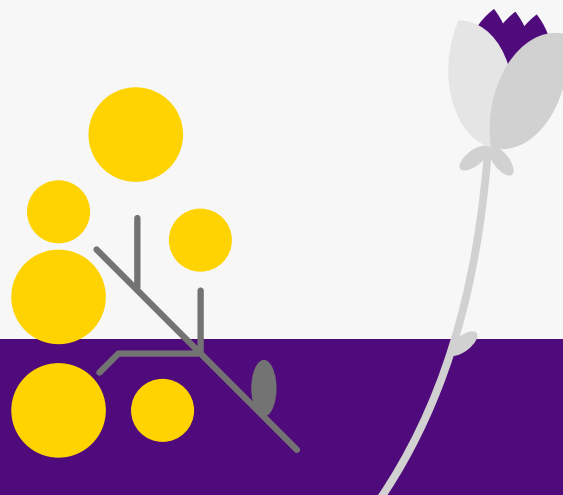
It is critical to be sure you have enough time to determine the problem/challenge you need to work through, develop the diagram, and discuss the diagram. For groups new to this activity, it is a good idea to plan for 90 minutes. For teams more experienced, you may be able to accomplish this activity in less time. However, in any case, it is important to plan for at least an hour.



WHO TO INCLUDE

When engaging in the problem tree diagram, it is critical to bring together people who play a role in the area where the problem/challenge exists. Each person who plays a role will bring their perspective on what is causing the problem/challenge and why the problem/challenge exists. For more on convening a team, see the section that follows.

The next page details items to consider depending on how you plan to convene your team, whether you choose **in-person** or **virtual**.



IN-PERSON CONSIDERATIONS

Schedule a space that can accommodate the number of team members that will be present. Space should allow for movement and include a large area (whiteboard/chalkboard, large blank wall that chart paper and/or a sticky wall (something like this: [ToP Sticky Wall® - Institute of Cultural Affairs \(ica-usa.org\)](https://www.ica-usa.org) can be hung on, etc.) to share and build out the problem tree diagram or a large screen that the problem tree diagram being built can be projected on for all to see. Although the team is convening in-person, there may be preference to create the diagram electronically to support utility once the map is developed. This would also be a desirable method to lean into if some may be participating in-person and some virtually.

Prepare materials in advance. Materials may include:

- Problem Tree Diagram Guide printed for facilitator
- Whiteboard/Chalkboard markers/chalk and eraser
- Chart paper/sticky wall
- Outline of a tree (root, trunk, and branches) on medium being used
- Cards/Post-its (3 different colors preferably)
- Markers/pens/pencils for writing on cards/stickies
- Tape to hang items as needed
- Technology equipment necessary if diagramming electronically
 - Screen
 - Computer
 - Way to project
 - Platform on computer for creating the problem tree diagram (Miro, etc.)



VIRTUAL CONSIDERATIONS

Use a virtual platform that allows you to host an online session (such as Zoom, Microsoft Teams, Google Meets, etc.). It can be beneficial to use a platform that most or all your team members are familiar with and comfortable using.

For diagramming, use a software or tool on your computer or the internet that can be shared via Zoom, Microsoft Teams, Google Meets, etc. It is beneficial to select a software or tool that the team can interact with to support engagement and provide opportunity for more than one person to support the diagramming. Some software and tool options include Miro, Zoom white board feature, PowerPoint, etc.

When using a virtual platform, it's important to provide brief instructions and even a quick demonstration on how to use the technology and platform you are using so team members can share their thoughts. You may also want to have multiple methods to capture team members input, such as in the chat box, on the white board, unmute their line and have someone take notes, etc. Finally, if possible, it can be immensely helpful to have an assigned tech person to help troubleshoot any complications that might arise and support the convening overall.



CONVENE A TEAM

A well-rounded team will provide diverse and unique perspectives on the causes and effects of the problem. These perspectives are necessary to ensure the diagram developed reflects all that is impacting the problem/challenge at hand. When considering who to invite and involve, think about:

Which **internal staff** play a role in the area that involves the problem/challenge of focus?

These **internal staff** should be invited to be at the table.

Which **partners** in our community play a role in the area that involves the problem/challenge of focus?

These **partners** should be invited as they will bring important contributions that internal staff will not carry.

Who else plays a role in the process being mapped that is missing from our invitation list?

These **other** people should be invited. When possible, it is a good idea to include someone who has experienced the problem/challenge as they can provide perspective that those who carry out or support services on a day-to-day basis are not able to.

Ideally, it is helpful to keep the team developing the diagram to a manageable size. Try to stick to not convening more than ten to fifteen people. When teams get too large, forward progress can become a challenge. If you are unpacking a system problem/challenge that involves many individuals, consider extending invitations to a core group to get the diagram started and then sharing the diagram with everyone involved for feedback and input. Feedback and input that occurs once the diagram has been initially created can happen via individual review and written feedback, review sessions that are convened, etc. As a core team, you will want to consider the best way to receive feedback and input from others, as well as the time constraints you are working under, to determine the best route for obtaining the information you are looking to get.



To help create a welcoming, productive, and safe space for the team convened to work together, it can be helpful to establish ground rules/ working agreements/ partnership principles. These do not need to be lengthy or complicated, simple agreements will suffice and support a healthy environment for the team to work together in. Often, it is helpful for the individual who will be facilitating the problem tree diagram to create a short list of some common agreements to bring to the team's scheduled working session. Some common agreements include:

- **We don't have to agree**: The goal is to gain a deeper understanding. When we disagree, challenge the statement or the behavior instead of the person. Avoid blame, shame, and guilt on others and ourselves.
- **Be willing to be uncomfortable**: It's possible to be safe and uncomfortable at the same time. Lean into the discomfort to see what you can learn.
- **Listen deeply**: Respect others when they are talking. Accept the speaker's description of their experiences as real for them, even if you haven't experienced it or don't understand it.
- **Make "I" statements**: Speak from your own experiences instead of generalizing.
- **Take space, make space**: If you tend not to talk much, challenge yourself to jump in. If you tend to talk early and often, challenge yourself to make space for others.
- **What is said stays here, what is learned leaves here**: Exercise good judgement and respect if people share personal stories. Carry away what you learned without sharing who said what.

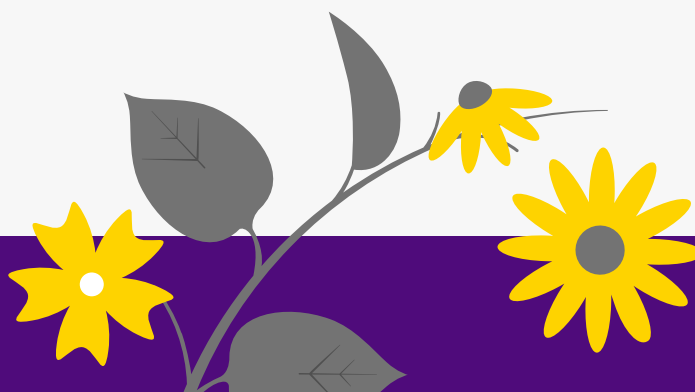
These agreements can then be reviewed with the team, and the facilitator can ask:

What would you **add**?

What would you **tweak**?

What is **missing**?

These simple questions will support the team in refining the agreements in a small amount of time (aim for no more than 10 minutes for this activity) and coming to a short list of five or so agreements that will guide the team as they work together.

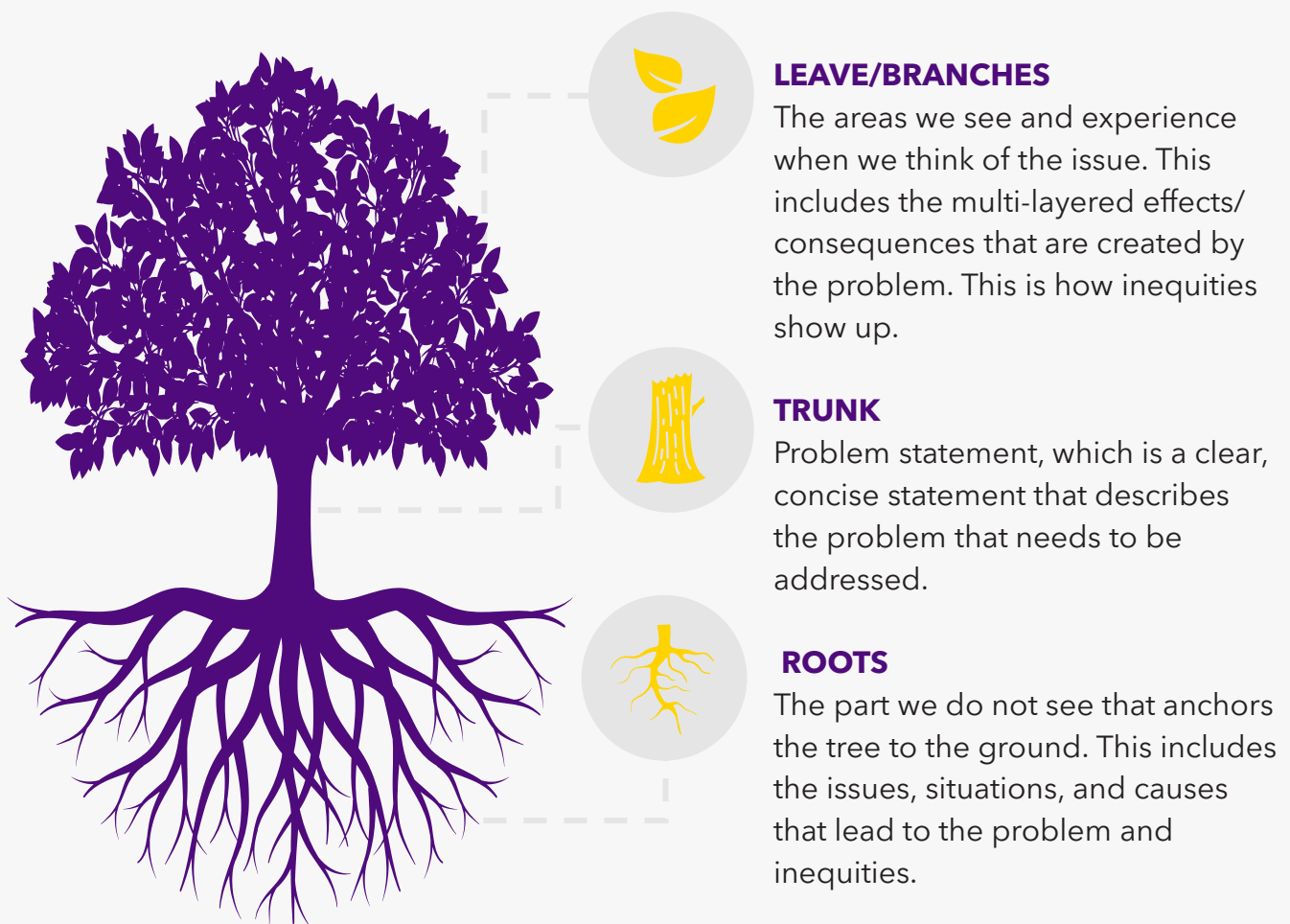


OVERVIEW

OF A PROBLEM TREE DIAGRAM

A problem tree diagram is a root cause analysis tool that explores the possible root causes of a problem/challenge and identifies effects or consequences, which are the possible/probable results or outcomes created by the problem. This tool considers multiple layers of the problem/challenge and helps to illustrate the problem/challenge and inequities the team may address by displaying the structure of the root causes. Ultimately, a problem tree diagram helps to shift thinking from generalities to specifics by asking: What is causing the problem? and Why does this problem exist? How are inequities taking place and showing up?

The problem tree diagram consists of the following components:



DEVELOPING A PROBLEM TREE DIAGRAM

Developing a problem tree diagram consists of the following four steps. This portion of this guide will provide details on what to consider, discuss, and complete during each step of the problem tree diagram.

STEP 1



Write out the problem statement (trunk).

STEP 2



Identify the causes of the problem by asking “Why does this problem exist?” (roots). Dig deeper into the root causes by asking: “Why does this happen?” and then asking “why” again.

STEP 3



Brainstorm the effects and consequences created by the problem (leaves and branches). Dig deeper into multi-layered effects by asking “then what happens?”

STEP 4



Review and discuss the tree diagram as a team for completeness and identify a root cause.



WRITE OUT THE PROBLEM STATEMENT

Step 1 includes developing a problem statement. A problem statement is a clear, concise statement that describes the problem, challenge, or opportunity for improvement the team would like to address. To help the team select a specific problem, consider the following questions:

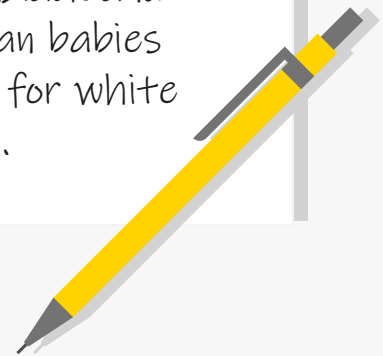
- **Where is our performance different than we would expect or want?**
- **Do our processes support diversity in our team?**
- **What processes could be more efficient for staff and the people we serve?**
- **Are there ways to make our processes more inclusive?**
- **Are there groups we are not reaching or who are dissatisfied with our services?**

Through discussion, the team can draft and refine the problem statement to ensure that all team members are focused on the same area.

SAMPLE PROBLEM STATEMENTS

Very few families from the LGBTQ+ community seek health department services.

The county is experiencing infant mortality rates that are 2-3 times higher among Black and Native American babies than the rates for white babies.



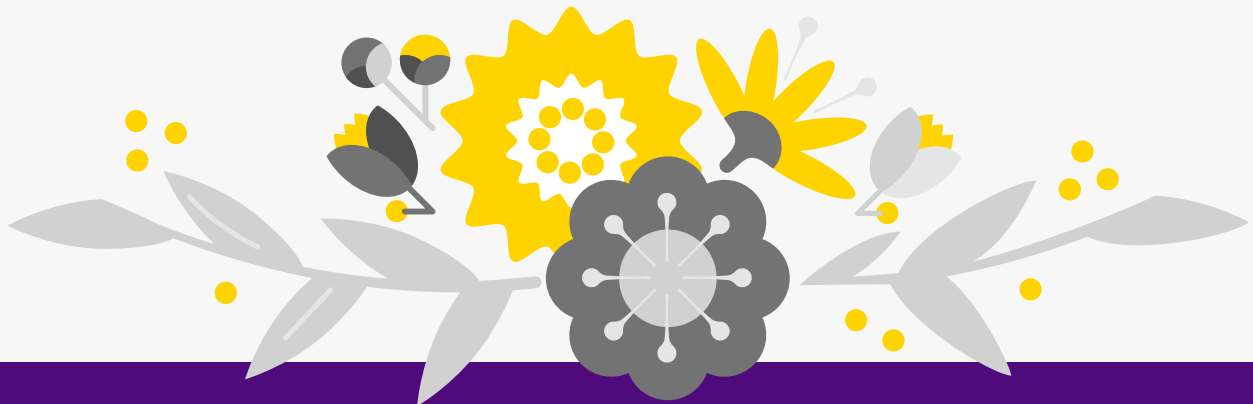


IDENTIFY THE CAUSES OF THE PROBLEM

For Step 2, team members will identify the causes of the problem by asking “Why does this problem exist?” (roots). This includes the issues, situations, and causes that lead to the problem. Team members should dig deeper into the root causes by asking: “Why does this happen?” and then asking “why” again.

To begin, team members will individually brainstorm ideas that may be the root cause of the problem. If in a virtual environment, share the Problem Tree Workbook in Appendix A and use the table found on page 26. If in-person, the team can use the table found in Appendix A, sticky notes, scrap paper, cards, etc.

Once the team has individually brainstormed, each team member will share their top ideas and place them into the root section of the problem tree. If in a virtual environment, use the template on page 26 of Appendix A. If in-person, team members can share their top ideas by writing them on a card/sticky note and placing it at the root of the tree (see ‘prepare for the problem tree diagram’ earlier in this guide for detailed recommendations on materials for in-person convening).





BRAINSTORM THE EFFECTS AND CONSEQUENCES CREATED BY THE PROBLEM

For Step 3, team members will brainstorm the effects/consequences, which are the possible/probable results or outcomes created by the problem (leaves and branches). The effects/consequences are the area we see and experience when we think of the issue. This includes the multi-layered effects/consequences that are created by the problem. Dig deeper into multi-layered effects by asking “then what happens?”

To begin, team members will individually brainstorm ideas that may be the effects/consequences of the problem. If in a virtual environment, share the Problem Tree Workbook in Appendix A and use the table found on page 27. If in-person, the team can use the table in the Appendix A, sticky notes, scrap paper, cards, etc.

Once the team has individually brainstormed, each team member will share their top ideas and place them into the leaves/branches of the problem tree. If in a virtual environment, use the template on page 28 of Appendix A. If in-person, have team members share their top ideas by writing them on a card/sticky note and placing it in the leaves/branches of the tree (see ‘prepare for the problem tree diagram’ earlier in this guide for detailed recommendations on materials for in-person convening).





REVIEW AND DISCUSS THE TREE DIAGRAM

For Step 4, as a group, use the following questions to unpack your problem tree diagram and select the root cause of the problem the team will work to address. If some individuals cannot meet and discuss with the group, consider sharing the problem tree diagram with them and asking for feedback and input individually. Be sure to document what the team discusses (the team can use the discussion question section of the Problem Tree Workbook in Appendix A).

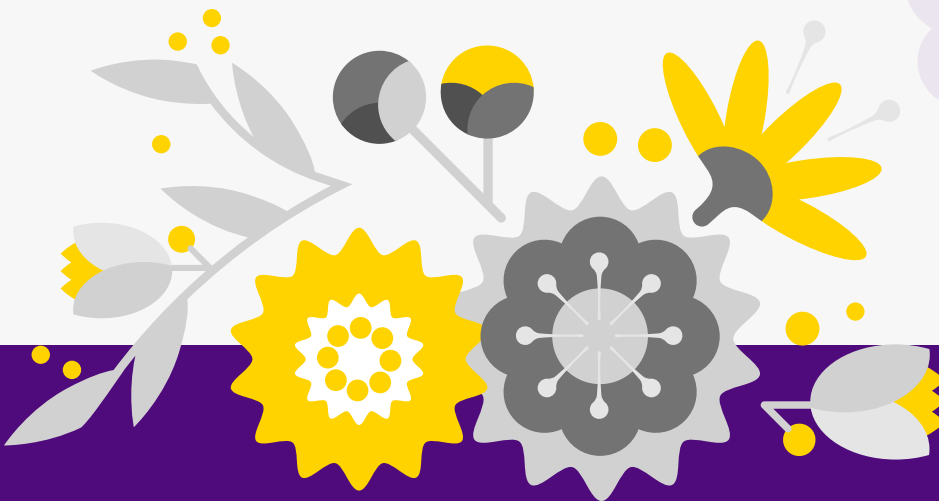
What root causes are/could be **influencing certain groups** more than others?

What root causes are particularly **important to those we work with and serve?**

What **effects/consequences could potentially be impacted** by addressing the root causes within our control/influence?

Of these root causes, which are **within the team's control or influence?**

What root cause should the team **tackle first to best address the challenge at hand?**



EXAMPLE PROBLEM TREE DIAGRAM

BACKGROUND INFORMATION

The Excellence County Health Department (ECHD), located in a growing rural community, strives to continually improve the programs and services they provide. Over the past few years, the community has seen an increase in the population, with a growing community of immigrant and migrant families, who primarily speak Spanish, making up 40% of the population. As a result of federal policies, the community has seen an increase in arrests and deportations, leading to trauma and loss, fear, isolation, and economic insecurity among the immigrant and migrant communities. The ECHD strives to serve all community members but has not proactively sought out input from any specific community group or made changes based on the changing social and political environment of the community. ECHD has used satisfaction surveys throughout the department for some time to collect feedback from the people it serves. The department values feedback from the community, regularly reviewing the feedback provided to make improvements to services. Over the past year, ECHD has noted a steady decline in satisfaction survey completion rates via monthly monitoring. Breaking the survey response data out by race/ethnicity the health department noticed that the declining trend among people they serve who identify as Hispanic or Latinx was especially notable. ECHD is worried about not receiving feedback, as it's difficult to identify where improvement is warranted if they are not hearing from most of the community members they serve.

PREPARING FOR THE PROBLEM TREE DIAGRAM

The ECHD decided to use a problem tree diagram to help highlight causes and effects to their problem statement. To increase participation and meet people where they are at, the team decided to do a virtual problem tree diagram, so everyone can contribute their thoughts.

The team brainstormed accommodations that are need for a virtual space and came up with the following list of tasks:

- 1) Brainstorm** invite list of those mostly impacted by the problem (see step below).
- 2) Capture participants' availability** and schedule date and time for the virtual meeting to take place.
- 3) Set up** a Microsoft Teams (because that is what the team is most familiar using) meeting.
- 4) Send invite** with instructions on what will be taking place during the meeting and expectations.

CONVENE A TEAM

The ECHD brainstormed who was impacted the most and created a list of those they wanted to invite:



THE COMMUNITY SERVED

Those they provide services to, and those they do not, who have a Hispanic/Latinx background.



INTERNAL STAFF

Any staff members, such as Health Educators, Community Health Workers, Epidemiologists, Department Supervisors, or Administrative Staff, who have experience and interests working with immigrant and migrant families.



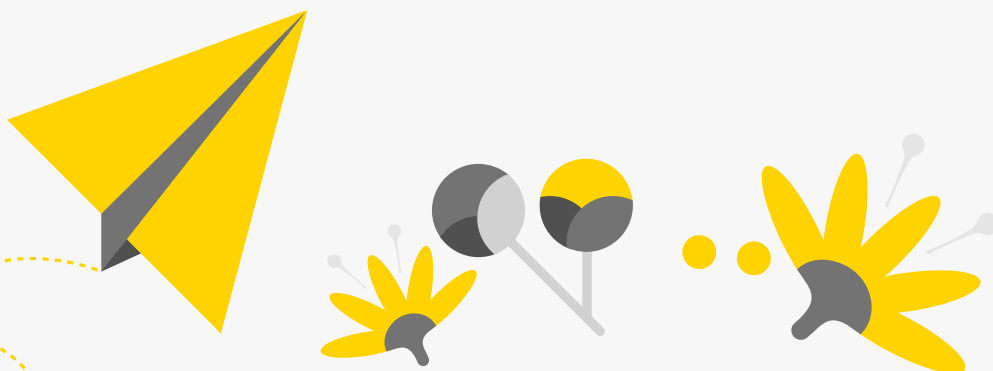
PARTNERS

Local organizations that support immigrant and migrant families.

ECHD team members placed flyers in the waiting room and posted bi-weekly on the organization's social media pages inviting community members with Hispanic/Latinx backgrounds to participate. The purpose and background information were included on the flyers and posts in Spanish and English. Staff members were encouraged to sign up for the session at an all-staff meeting. Those working directly with the community were invited with an email from the ECHD team. Partners were provided with a packet that included background information and the purpose of the session.

Once the team was developed, a quick phone call orientation was done with partners and community members to orient them to the expectations of the process and allowed an opportunity to ask questions. Additional accommodations were collected from the partners and community members to ensure all needs were met.

To kick off the meeting an inclusion activity took place that allowed everyone to introduce and share a little bit about themselves.



AGREEMENTS ESTABLISHED

After the inclusion activity, the team reviewed the ground rules and discussed any additional ground rules they would like to include. The following list of ground rules were used:

1

We don't have to agree: The goal is to gain a deeper understanding. When we disagree, challenge the statement or the behavior instead of the person. Avoid blame, shame, and guilt on others and ourselves.

2

Be willing to be uncomfortable: It's possible to be safe and uncomfortable at the same time. Lean into the discomfort to see what you can learn.

3

Listen deeply: Respect others when they are talking. Accept the speaker's description of their experiences as real for them, even if you haven't experienced it or don't understand it.

4

Make "I" statements: Speak from your own experiences instead of generalizing.

5

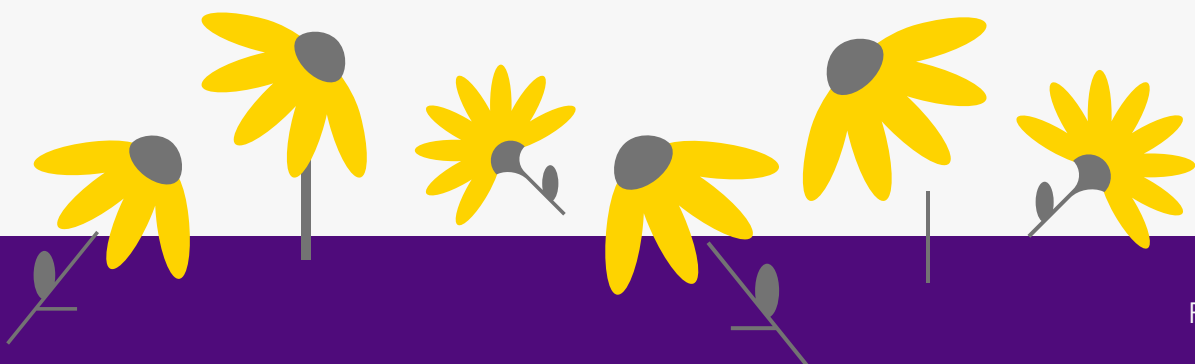
Take space, make space: If you tend not to talk much, challenge yourself to jump in. If you tend to talk early and often, challenge yourself to make space for others.

6

What is said stays here, what is learned leaves here: Exercise good judgement and respect if people share personal stories. Carry away what you learned without sharing who said what.

7

Turn off all distractions: Being in a virtual space, it can be distracting. Closing all windows and silencing phones can help with this.



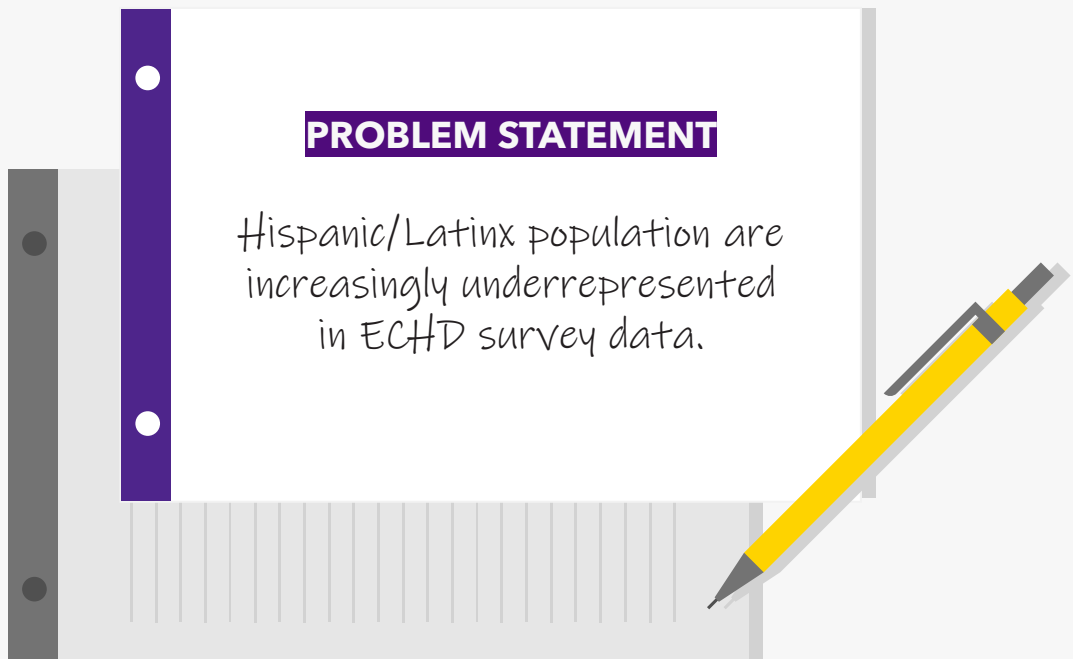
CONSTRUCTING THE PROBLEM TREE DIAGRAM

STEP 1



FINALIZE THE PROBLEM STATEMENT

The team shared the clear concise problem statement that was developed by the ECHD team. The facilitator asked if there were any questions or other considerations needed before the team began. The group agreed that the problem statement was clear and placed the statement in the trunk of the tree.



STEP 2



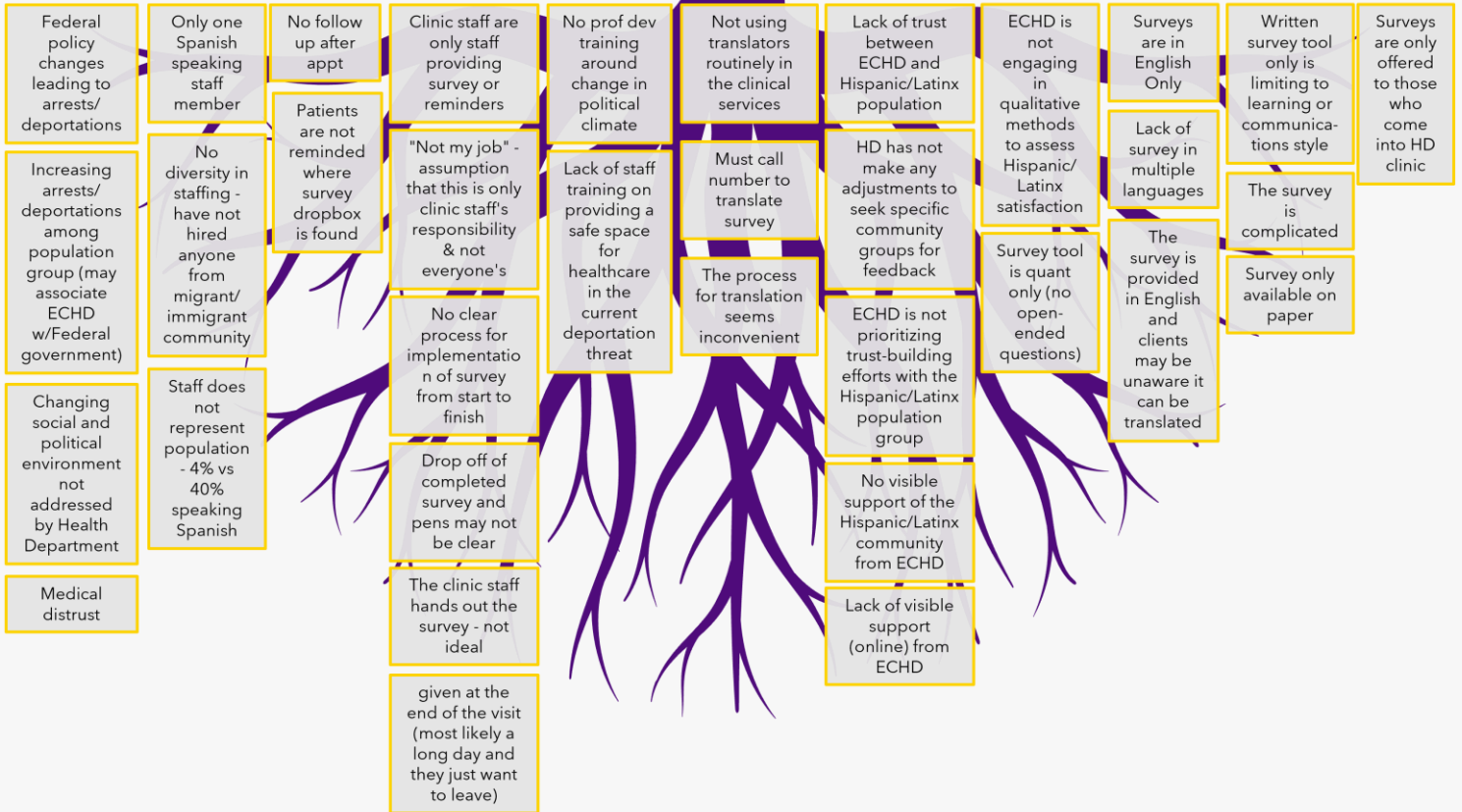
BRAINSTORM ROOT CAUSES OF THE PROBLEM

The team members individually brainstormed root causes of the problem by asking themselves, "Why does this problem exist?". Team members wrote their ideas in the Google Drive shared document that was being used during the virtual meeting. After everyone had an opportunity to share their ideas, the team discussed any that were confusing and add additional ones.

BRAINSTORMED ROOT CAUSES TO THE PROBLEM

PROBLEM STATEMENT

Hispanic/Latinx population are increasingly underrepresented in ECHD survey data.



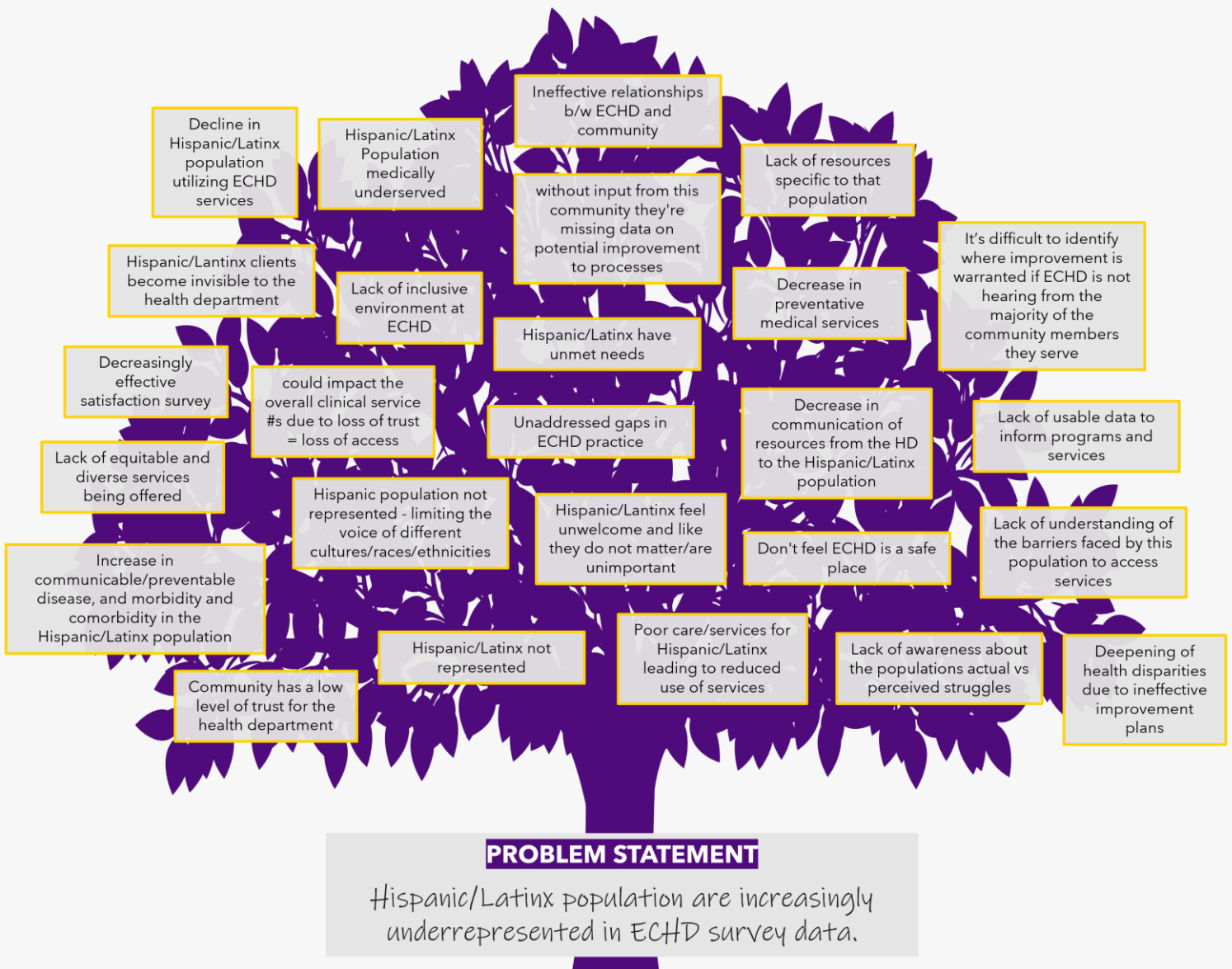
STEP 3

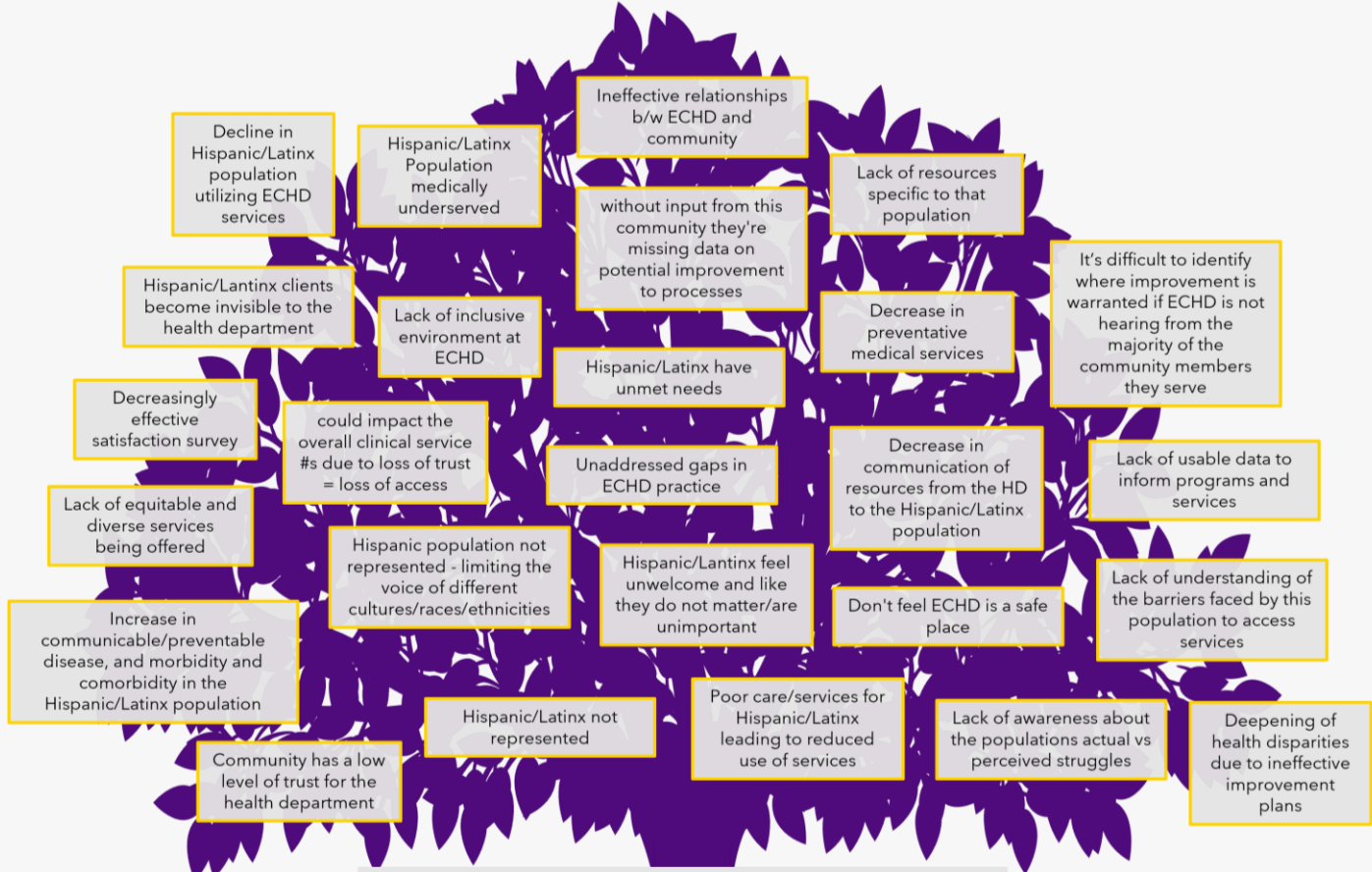


BRAINSTORM EFFECTS/CONSEQUENCES OF THE PROBLEM

The team members individually brainstormed effects/consequences of the problem by asking themselves, "then what happens?" Team members wrote their ideas in the leaves section of the Google Drive shared document that was being used during the virtual meeting. After everyone had an opportunity to share their ideas, the team discussed any that were confusing and added additional ones.

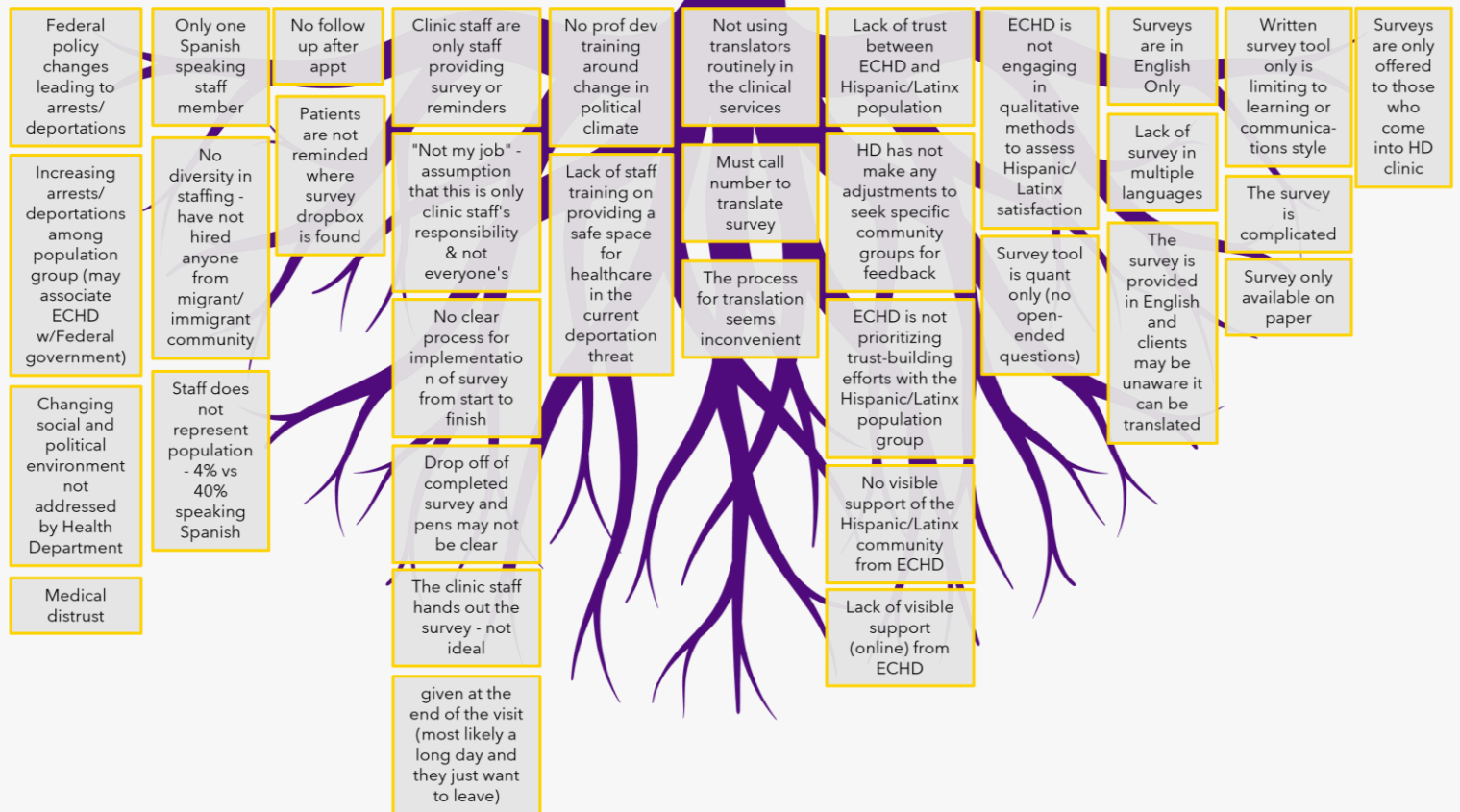
BRAINSTORMED EFFECTS/CONSEQUENCES TO THE PROBLEM





PROBLEM STATEMENT

Hispanic/Latinx population are increasingly underrepresented in ECHD survey data.



STEP 4



REVIEW AND DISCUSS THE PROBLEM TREE DIAGRAM

The team members reviewed the problem tree and discussed the following questions:

What root causes are/could be influencing certain groups more than others?

The team discussed how non-English speakers and members of the Hispanic/Latinx community are impacted the most.

What root causes are particularly important to those we work with and serve?

- A community member shared that the lack of trust is important to them, and it has a huge influence on their ability to reach out to the ECHD for services.
- A community member shared that they thought the federal policy changes leading to arrest/deportation is important and impacting those they serve.
- Other team members shared the following:
 - Reaching out and hearing from those that the ECHD is currently missing
 - The accessibility of the survey
 - Staff representation

Of these root causes, which are within the team's control or influence?

The group shared some barriers that they have as team that impact its influence and control. The team discussed the importance of these barriers and committed to bringing these up at the next ECHD department meeting. These barriers included:

- Hiring practice and budget necessary to hire Spanish speaking staff
- The time and effort to build trust in the community
- Lack of allocated time and funds to support staff training

The team then discussed what was in their influence and control and produced the following list:

- Follow up after appointment at the department
- Survey reminders
- Professional develop and training (on a small-scale)
- Survey language, accessibility, and reminders

What effects could potentially be impacted by addressing the root causes within our control/influence?

The lack of understanding of the barriers actually faced by the Hispanic/Latinx community, leading to not providing services that meet the needs of the community

What root cause should the team tackle first to best address the challenge at hand?

The team discussed and came to consensus on addressing the accessibility of the survey because it showed up as an important need and is also something the team has control or influence over. The team discussed how they can improve the accessibility of the survey to capture more of the Hispanic/Latinx community and ask what barriers they experience. Through that information, the ECHD will be able to address those barriers and possibility address some of the other root causes such as building trust.

FINAL TIPS TO KEEP IN MIND

- Be sure to **take time to prepare**. Time spent preparing will ensure a smooth use of the tool.
- **Ensure those impacted the most by the problem you are trying to address are invited to participate** and you properly plan for how to compensate them for their participation (time, childcare, transportation, etc.).
- **Create a safe and welcoming environment** so all participants are equal members at the table and can freely share their ideas.
- After your team completes a problem tree diagram, you are not done, be sure to **discuss the problem tree and document what is discussed**.

APPENDIX A

Problem Tree Workbook



A PROBLEM TREE WORKBOOK

STEP 1



Develop a problem statement. A problem statement is a clear, concise statement that describes the problem, challenge, or opportunity for improvement the team would like addressed. To help the team select a specific problem, consider the following questions:

- Where is our performance different than we would expect or want?
- Do our processes support diversity in our team?
- What processes could be more efficient for staff and the people we serve?
- Are there ways to make our processes more inclusive?
- Are there groups we are not reaching or who are dissatisfied with our services?

Use this space to draft a problem statement:

STEP 2



Identify the causes of the problem by asking “Why does this problem exist?” (roots). This includes the issues, situations, and causes that lead to the problem. Team members should dig deeper into the root causes by asking: “Why does this happen?” and then asking “why” again.

Individually brainstorm ideas that may be the root cause of the problem and write/type them out in the space below:

Once the team has individually brainstormed, each team member share their top ideas, use the root section of the problem tree template on page 29 of this workbook.

STEP 3



Brainstorm the effects/consequences, which are the possible/probable results or outcomes created by the problem (leaves and branches). The effects/consequences are the area we see and experience when we think of the issue. This includes the multi-layered effects/consequences that are created by the problem. Dig deeper into multi-layered effects by asking “then what happens?”

To begin, team members individually brainstorm ideas that may be the effects/consequences of the problem. Write/type them out in the space below.

Once the team has individually brainstormed, each team member can share their top ideas, by typing them into a box in the leaves/branches of the problem tree template, found on page 29 of this workbook.

STEP 4



Finally, as a group, use the following questions to discuss your problem tree diagram and select the root cause of the problem the team is working to address.

What root causes are/could be influencing certain groups more than others?

What root causes are particularly important to those we work with and serve?

Of these root causes, which are within the team's control or influence?

What effects/consequences could potentially be impacted by addressing the root causes within our control/influence?

What root cause should the team tackle first to best address the challenge at hand?



PROBLEM TREE TEMPLATE

Effects/Consequences

Problem Statement:

--

Root Causes



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