

AFFINITY DIAGRAMS FOR ROOT CAUSE ANALYSIS

Community health problems are complex. They have many dimensions and their solutions are not clear-cut. The causes of community health problems are multi-dimensional, meaning that one agency cannot deal with them independently. These problems require a systems perspective and multi-faceted approaches.

Identifying effective solutions to a problem means understanding what the real causes of that problem are. Root cause analysis is a method aimed at identifying factors that contribute to problems or events. There are several ways to conduct a root cause analysis, but all are based on the premise that problems are best solved by attempting to correct or eliminate root causes as opposed to merely addressing the immediately obvious symptoms. Taking action without first doing a root cause analysis can lead to misdirected efforts and a waste of time and resources.

Before beginning a root cause analysis, you should complete a community health assessment and identify the problem that you want to address. Next you need to closely examine the problem and think about its primary causes. There are many tools available to help you work through a root cause analysis. In this toolkit, we offer The Affinity Diagram. This tool encourages broad thinking, allows all perspectives to be shared equally, and assures that everyone has a voice in the process, making it a good fit for the collaborative nature of the work.

How to do an affinity process for root cause analysis

Materials Needed:

- Flip charts or wall space (large blank work surface)
- Magic markers
- Sticky notes

Step 1: Phrase your issue in a full sentence

What is the problem you wish to change? The group should reach consensus on the choice of words. Neutral statements work well, but positive, negative and solution oriented questions also work. Just make sure everyone understands and agrees on the problem, as stated.

Step 2: Silent brainstorming

You want to generate somewhere between 20 and 60 ideas so give between 3 and 8 note cards to each person depending on group size. Not everyone will use all of their sticky notes/index cards and that's okay.

- Ask each person to write ONE idea per sticky note.
- Each idea should be a complete thought and only one idea per note. Write large enough that your note can be read from a few (4-6) feet away.
- Allow about 5 minutes for this silent brainstorming. Some people will finish early, and others will use the whole time. It's okay to wait until everyone is done.

Step 3: Share ideas

Each person should share their ideas, one at a time, with the entire group. Read each idea aloud and then place on the work surface.

- Group members may ask for clarification, but should not question validity of the idea – remember different perspectives are welcomed and encouraged.
- Ideas should not be grouped at this time, just placed randomly on the work surface.

Step 4: Group ideas

Once each person has shared their ideas with the group, the group should spend a few minutes SILENTLY grouping the ideas.

- Move like ideas together.
- If a note moves back and forth between two or more groups more than once, create a second note and put it in both spots (remember, each person brings a different perspective and may have a different interpretation of something – ideas can fit into more than one spot).
- Aim for 4-8 groups (but you might have more or less).
- It's okay to have "loners" – some ideas won't fit with any other ones.
- NO TALKING – again, we want all perspectives shared – this is not the time to convince others why a note belongs in one group and not another.

Step 5: Discuss and create category names

Now is the time to discuss the groupings.

- A facilitator should read each idea in a group.
- The participants should decide if in fact all of those ideas do belong together or if something should be moved elsewhere.
- Once there is consensus on the grouping, the participants should create a name for the grouping – what is the common theme that ties the ideas together?

Step 6: Discuss the categories as potential areas for intervention

Once causes have been identified:

- Underline causes which need more information to confirm (assumptions).
- Put parentheses around causes which are constraints (group has no control over).
- Circle causes which the team can impact.

Focus discussion on where/how to collect more info on underlined issues and on the circled causes.

- What, if anything, is already being done to address these areas?
- Has the coalition done any work to address any of the causes?
- Is there currently any energy or momentum or opportunity around any of the causes?
- What areas would be considered "low hanging fruit"?
- What areas would have the greatest impact on the issue if addressed?
- What areas have an evidence base?

Adapted from the [Healthy Wisconsin Leadership Institute Community Health Improvement Toolkit](#).