Northern California Training Academy
Fundamentals in Evidence-based Decision-Making
Session 1: Making an Observation

June 5, 2018

Jennifer Haight, Lily Alpert, and Daniel Webster

The Center for State Child Welfare Data
Chapin Hall at the University of Chicago

Today’s agenda:

9:00 – 9:30  Introductions
9:30 – 10:30  PDSA, hypothesis development, and the demand for evidence: How do you know?
10:30 – 10:45  Stretch break
10:45 – 12:00  “I observe that…” – Making an observation about permanency in your county.
12:00 – 12:45  Lunch break
12:45 – 2:15  “I observe that…” continued… What did you observe?
2:15 – 2:30  Stretch break
2:30 – 3:45  “I think it’s because…” – Generating hypotheses and plans for supporting/refuting them with evidence
3:45 – 4:00  Recap, assign homework, conclude
Practicum Overview

• Long time partnership with Northern California Training Academy:
  o Advanced Analytics/Data Slam
  o Quarterly CQI trainings for managers
  o Permanency academy
  o CQI online modules

• Next step: A cohort-based practicum; ongoing CQI support regarding a specific outcome

• Common interest = permanency within 12 months of entry

• Introductions

Plan-Do-Study-Act, hypothesis development, and the demand for evidence:

“How do you know?”
The Cycle of CQI: Plan-Do-Study-Act

Hypothesis Development

I observe [some outcome that I want to improve].

I think it’s because of [this reason].

So I plan to [implement this intervention],

which I think will result in [an improved outcome].
Theory of change

...affects this thing...

I observe that...

I think it’s because...

So I plan to...

Which I think will result in...

...in such a way that turns this...

How do you know?

...into this.

Because there is some evidence that this thing...

Evidence is information that is used to support an observation, claim, hypothesis, or decision. In other words, evidence helps provide an answer to the question: How do you know?

Evidence can be quantitative or qualitative. Evidence is information that has been developed using methods that are explicit, systematic, and open to scrutiny.*

Evidence can be found in or derived from a number of places (e.g., administrative data archives, case record review, stakeholder feedback, social science literature, among others).

<table>
<thead>
<tr>
<th>CQI Phase</th>
<th>Hypothesis development/testing</th>
<th>Evidence use: HOW DO YOU KNOW?</th>
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<tbody>
<tr>
<td>Plan</td>
<td>Define the problem. (&quot;I observe that...&quot;)</td>
<td>What evidence supports this observation?</td>
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<td>Hypothesize as to the cause of the problem. (&quot;I think it’s because...&quot;)</td>
<td>What evidence supports this hypothesis?</td>
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<td>Identify a solution. (&quot;So I plan to...&quot;)</td>
<td>What evidence supports the hypothesis that the proposed dose of the intervention will lead to this specific degree of improvement?</td>
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<td>Set a performance target. (&quot;...which I think will result in...&quot;)</td>
<td>Taken together, what evidence supports the theory of change—i.e., the claim about how this intervention will have the intended effect on the target population?</td>
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<td>Do</td>
<td>Implement the intervention.</td>
<td>Collect data required for an analysis of intervention effectiveness and analysis of implementation fidelity.</td>
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<td>Monitor implementation.</td>
<td>What evidence is there that the intervention was (or was not) implemented with fidelity?</td>
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<td>Study</td>
<td>Measure progress toward the target outcome.</td>
<td>What evidence is there that the intervention was effective (or not effective)?</td>
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<td>Provide feedback to relevant stakeholders and decision makers.</td>
<td>Transmit evidence regarding outcomes and fidelity to those who will interpret the findings and make decisions accordingly.</td>
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<td>Act</td>
<td>Determine the extent to which the problem still exists.</td>
<td>What evidence supports this observation?</td>
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<td>Confirm or refute the theory of change.</td>
<td>What evidence supports this claim?</td>
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<td>Adjust the intervention as needed.</td>
<td>What evidence supports the decision to continue, modify, or discontinue the intervention?</td>
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I observe that...
The process of improvement starts with a question.

What questions do we have regarding permanency following entry to foster care?

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<th>Outcome</th>
<th>Process</th>
<th>Quality</th>
<th>Capacity</th>
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Numerators and Denominators

Making meaning of evidence takes more than being able to read tables and graphs correctly.

It also means being knowing who makes up the denominator (risk set) and the numerator, and employing best practices in measurement.

Two types of risk sets: entries and exits. The decision to use one or the other is tied to the question you want to answer/what you want to know.
Questions about the timely permanency

Excel workbook: FundamentalsWorkbook_permenancy

• Based on California’s state customized FCDA spell file.

• Only children adjudicated for child abuse/neglect are included (i.e., no juvenile justice youth are included).

• First foster care spells and reentry spells are displayed, but they are displayed separately

• Censor date is 12/31/2017

• Smaller counties will have smaller cell sizes – be sure to attend to the count as well as the percent when interpreting the rate of re-entry.

I observe that...

• Use pivot table functions to swap in your county. Compare your county to the state.

• Use the workbook to record the answers to the questions posed in each tab.

• Complete this section by summarizing your observations.
I observe that...

- What did you observe?

I think it’s because...
I think it’s because...

I observe that, in Acme County, children who enter care as teens are less likely to exit to permanency within one year when compared to younger children.

I think teens are less likely to reunify because...

What child/family characteristics could delay permanency?

I think it’s because...

I observe that, in Acme County, children who enter care as teens are less likely to exit to permanency within one year when compared to younger children.

I think teens are less likely to reunify because...

How could process, quality, or capacity factors delay permanency?
I think it’s because...: How do you know?

• Analyze process data: (visits, kin finding, service delivery)

• Case record review: process and quality of care

• Capacity assessment: available care types and services given children’s needs and families’ needs.

• Focus groups and interviews

Gathering evidence to support your hypothesis does not have to involve a sophisticated scientific study. The most important thing is to use a method that is systematic, objective, and representative.

Between now and next time

• Use the 5-part exercise at the end of your workbook to craft a research plan for developing evidence to explore your hypothesis.

• If you would like feedback on your plan before beginning, send it to Jennifer, Daniel and Lily by email.

• Execute your plan. Gather and analyze your data (see resources). Your hypothesis may be supported, unsupported, or you may decide further research is needed. Any of these conclusions are possible (and ok).

• Best practices in measurement are clear and deliberate. However, the process is rarely linear.

• Send us your plan along with your findings by July 23, 2018.

• Come to class prepared to discuss your work. What did you do and what did you learn?
Housekeeping

All courses run from 9AM to 4PM. Coffee, tea, and lunch will be served at all sessions:

Session 1: 6/5/2018: Sacramento Galleria, 2901 K Street Room 305, Sacramento CA

HW1: By 6/29/2018: Draft your plan on the second half of the word workbook, and send to instructors

HW2: By 7/23/2018: Execute your plan to prove/disprove your hypothesis; put in power point template and send to instructors

Session 2: 7/31/2018: UC Davis Extension – 1632 Da Vinci Ct, Davis CA

Session 3: 9/13/2018: UC Davis Extension – 1632 Da Vinci Ct, Davis CA

Session 4: 10/9/2018: UC Davis Extension – 1632 Da Vinci Ct, Davis CA

Session 5: 11/6/2018: UC Davis Extension – 1632 Da Vinci Ct, Davis CA

Resource Barn:
https://www.oercommons.org/authoring/29180-fundamentals-in-evidence-based-decision-making/view

Instructors: lalpert@chapinhall.org, jhaight@chapinhall.org, dwebster@Berkeley.edu
Contact for FCDA login credentials: MaryMy.Tran@dss.ca.gov