E4: Supporting Data-Driven, Family-Centered Child Care and Early Education Improvements Through Maps
Thursday, June 29, 2023
1:45 p.m. – 3:00 p.m. | *Gallery I*

1. **Descriptive Information**

| E4: Supporting Data-Driven, Family-Centered Child Care and Early Education Improvements Through Maps

Child care and early education (CCEE) leaders want to improve access to high-quality CCEE. The Child Care and Development Block Grant Act of 2014 further encourages states and territories to improve CCEE access for children in underserved areas, infants and toddlers, children with disabilities, children who receive care during nontraditional hours, and children living in areas with significant concentrations of poverty and unemployment. CCEE leaders can leverage state administrative data to make data-driven decisions about improvements to CCEE, and mapping CCEE administrative data is an emerging and innovative method for doing so. Many states are using maps to understand and communicate CCEE patterns and trends regarding how they can support children, families, and providers. This session will provide an overview of the types of decisions that can be informed with the use of maps to improve CCEE and will offer two state examples to support continued use of this innovative method. The session will end with considerations and implications for future research, practice, and policy. | **Presenters**
    Van-Kim Lin, Child Trends
    Michaella Sektnan, Oregon State University
    Erin Bumgarner-Harris, MEF Associates
    Meredith O'Shea, Department of Human Development and Family Studies, University of New Hampshire

Scribe
Anna O'Connell

Number of Attendees: 10 |

2. *Documents/Presentations Shared* (Please list any electronic documents, PowerPoint presentations, or web links used during the session.) ***Collect presenter PowerPoints or other documents on the flash drive provided.***

    Supporting Data-Driven, Family-Centered CCEE Improvements through Maps

3. **Brief Summary of Presentations**

- **Summary of Presentation #1: Resource Overview (Van-Kim Lin)**
    - Why use Maps to understand CCEE?
        - Children in underserved areas and children living in areas with significant concentrations of poverty and unemployment
        - Already being heavily used by states and territories
            - Almost every state and territory had a relevant publicly available map according to a 2021 scan
                - Many included information about multiple settings
    - Four ways to use maps to understand and improve CCEE
        - Understanding Policy Effects
            - How policies are implemented differently, how policy changes affect target populations differently, and or how policy changes affect programs or settings differently
        - Resource Allocation
            - Example: looking at birth rates to predict future needs
        - Building CCEE Supply
            - Establishment of regional hubs, use maps to identify collaborative partnerships
        - Supporting Families
            - Family search for CCEE
            - Targeted outreach effort for CCEE based on maps

- o Technical Considerations for Mapping
  - Engaging partners in decision making
    - Allow users to have meaningful input
    - Tailored engagement practices
  - Select the appropriate data to map
  - Selecting how to analyze your data
    - Are analyses needed?
      - o Data cleaning and manipulation
      - o Spatial analysis
  - Display Map Contents to Support Decision Making
    - Is this interactive or static?
    - What terms need to be defined?
    - Do users need training or guidance?
    - Is the map accessible to all?

- **Summary of Presentation #2: Oregon Spotlight (Michaella Sektnan)**
  - o Oregon has been tracking CCEE supply for close to 30 years
    - Base data is "Find Child Care Oregon" which is mostly used by parents to search for CCEE
      - Then combined with data from licensing, employment related day care data, Head Start and Early Head Start, and the quality improvement and rating system among others.
    - Every 2 years a joint Market Price and Supply Survey is collected from providers
  - o Mapping Supply Adequacy and Child Care Deserts
    - Used to identify supply gaps and target resource allocation
      - Found that across OR there is inadequate regulated child care supply – especially for infants and toddlers
      - Public funding plays a role in creating OR's child care supply; especially for preschoolers and in rural areas
  - o Using mapping to track supply and investment overtime
  - o Using maps for early learning decision making
    - Integrated provider and supply data with other indicators to assist with system decision making at state, regional, and local levels

- **Summary of Presentation #3: New Hampshire Spotlight (Meredith O'Shea and Erin Bumgarner)**
  - o Goal: Better understand access to CCEE in NH
    - Update existing maps to use more recent data
  - o Goal: Improve Statewide Coordination and Integration
    - Early childhood coalitions and child care deserts
      - No unified presence on the state level
  - o Approach
    - Primary Data Sources
      - List of licensed programs for NH DHHS
      - Child population data from the census and American community survey
      - Created a list of locations and catchment areas for 17 early childhood and family support systems
    - Analytic Approach
      - Python was used to generate "access scores"
        - o Access scores were from 0 (no available care) to +1 (sufficient available care)
      - ArcGIS was used to plot access scores, contextual factors from census data
      - Locations and catchment areas for the 17 early childhood and family support services
  - o What Maps Taught Us about Access in NH
    - There was about 1 licensed spot for every three children within a 20 minute drive from home
    - Higher access scores tended to be concentrated in urban areas

- Trade off between ease of interpretation and replicability versus precision
    - How maps were used to create NH's early childhood regional systems
        - A lead entity in each region would collaborate with state and local providers to coordinate service provision (early childhood care, schools, and family supports)
            - Had to layer multiple systems with differing regions and overlapping coverage areas

4. Brief Summary of Discussion

Balancing the needs of different audiences (parents versus government officials)
- Both mentioned that they tend to cater to government officials / policy makers

What is the sustainability of updating the maps, etc
- Upfront cost is large
- Who are you making it for?
    - Some audiences may need more frequent updates than others

5. Summary of Key issues raised (facilitators are encouraged to spend the last 3-5 minutes of sessions summarizing the key issues raised during the session; bullets below are prompts for capturing the kinds of issues we're looking for)

- Sustainability of maintaining up to date maps
- Audience needs impact what information should be visualized and how it should be visualized on a map

Next Steps:
- After the session, please review your notes for typos, complete thoughts, etc.
- Send finalized notes to CCEEPRC@icf.com