

Measuring Access to Early Care and Education with the 2019 NSECE

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Measuring Access to Early Care and Education with the 2019 NSECE

The 2019 National Survey of Early Care and Education (NSECE) is a set of four nationally representative surveys that describe the use, availability, and characteristics of early care and education (ECE) from multiple perspectives, including those from ECE providers (both center-based and home-based), the ECE workforce, and households with young children. As such, the data are useful for examining access to ECE, including measuring levels of access; comparing levels of access across family, child, or community characteristics; and, when compared to the 2012 NSECE, tracking changes in access over time.

This resource provides guidance to data users interested in using the 2019 NSECE to examine questions related to ECE access using a multi-dimensional, family-centric definition of access. Access to ECE is best understood as a multi-dimensional construct requiring the consideration of multiple family and provider characteristics simultaneously. When access is measured as a single dimension, such as number of slots or enrollment, many key factors that make that care accessible to families—such as cost, hours open, and fit between family and provider—are ignored, painting an incomplete picture of ECE access.

To support data users, this resource describes the following:

- Design elements of the 2019 NSECE that allow data users to examine ECE access—examples of design elements include the ability to link provider, workforce, and household surveys and the option to conduct analyses with various geographic units
- Variables in the 2019 NSECE that can be used to examine ECE access from a multi-dimensional, familycentric perspective
- Analytic possibilities with public-use and restricted-use data—more information on accessing the restricted-use data can be found here.

This resource should be used as a supplement to existing NSECE documentation. Data users should thoroughly review each survey's User's Guide and Questionnaires and the 2019 NSECE methodology report² to ensure they understand the data well, including appropriate variable interpretation and skip patterns. In the present resource, we highlight some, but not all, of the assumptions related to measuring ECE access in the 2019 NSECE's design. For additional questions, data users may consult extensive resources about working with the NSECE data available on the Child and Family Data Archive or contact NORC at nsece@norc.org.

ECE Access: A Multi-dimensional, Family-Centric Construct

The reauthorization of the Child Care and Development Block Grant (CCDBG) Act in 2014 increased federal investments in improving ECE access. The CCDBG Act required each state to measure its need for ECE and track progress towards expanded access to high-quality ECE, particularly for families with low incomes.

To address the need for a common understanding of access among state leaders, policymakers, researchers, and advocates, a multi-dimensional definition of access was developed by a cross-disciplinary workgroup with support from the Office of Planning, Research, and Evaluation (OPRE): "Access to early care and education means that parents, with reasonable effort and affordability, can enroll their child in an arrangement that supports the child's development and meets the parents' needs." The definition was built from the body of literature on how families experience the process of searching for and using ECE. It takes the perspective of the family, allowing for consideration of families' unique needs, preferences, priorities, and local context

along four dimensions: 1) reasonable effort to find care, 2) affordability of care, 3) how well care supports children's development, and 4) how well care meets parents' needs. More information regarding the development of the definition, as well as a common set of measurable indicators of access, can be found in the Access Guidebook developed by the workgroup.⁵

The access definition helps researchers and policymakers move beyond measuring access using a single indicator, such as the number of ECE slots or the number of families who use ECE and facilitates the development and analysis of more family-centric, multi-faceted research questions. The 2019 NSECE allows researchers to consider information from both the provider and family perspective and is well-suited to the following types of access research questions:

- Questions about alignment of child or family characteristics with ECE characteristics, for example, "How many preschool-aged children from households with low incomes are there relative to the number of low-priced or free center-based or listed home-based providers serving preschool-aged children across the U.S.?"
- Questions about patterns of ECE use for families with specific characteristics, for example, "What types of infant and toddler care do families who work overnight or weekend hours use?"
- Questions that address comparisons of access across different populations of children and families, for example, "Compared to their non-Hispanic White and non-Hispanic Black peers, do a greater or smaller percentage of Hispanic or Latino infants and toddlers receive care from a teacher with an ECE teaching credential?"

The field of ECE access research has not arrived at a single definition for a variety of key constructs such as what constitutes affordability, high quality, high and low access, sufficient access, equitable access and more. Researchers examining access with the 2019 NSECE should apply their own theoretical frameworks for determining how to quantify access as an outcome based on the populations and constructs on which they choose to focus.

Next, we detail variables in the 2019 NSECE that researchers can use to construct dimensions of ECE access.

How the Four NSECE Surveys Work Together to Describe Access

The four NSECE surveys work together to paint a portrait of access.

- The variables in the household dataset provide information on characteristics of U.S. households with children under age 13, including demographics, parental work schedules, and child ages. The household dataset also provides information on the care families searched for and use, including the type, how far each provider is from home, and the cost, among other qualities.
- The variables in the center-based and home-based provider datasets describe the characteristics of the supply of ECE, including funding source, ages served, price, curriculum used, and services offered.

NSECE Restricted Use Data

Restricted Use (RU) data include some variables that pose a disclosure risk, Primary Sampling Unit (PSU) and state identifiers where possible, and Secondary Sampling Unit (SSU) indicators for linking data. RU data is further delineated into Levels 1, 2, and 3, dependent upon the disclosure risk of the particular data elements of interest. Level 1 (L1) include questionnaire response data with limited disclosure risk as well as additional community characteristics data (e.g., community racial and ethnic composition) that will facilitate analysis on key ECE topics. Accessing L1 RU data requires an additional data use agreement and additional data security measures on the part of the data user; this data can be found at the Child and Family Data Archive. Accessing Level 2 (L2) and Level 3 (L3), which can include variables for geographic linking, requires working closely with NORC as data are only available via a secure remote server. More information on accessing RU data is available here; please write to nsece@norc.org for an application.

 The variables in the center-based workforce and home-based datasets offer information about teachers and caregivers, including experience and professional characteristics, demographic information, and health and mental health quality.

Orientation to this Resource

In Tables 1 – 4, we highlight a selection of variables from the 2019 NSECE that can be used to study each of the four dimensions of access outlined in the Access Guidebook. Table 5 highlights variables that can be used to describe characteristics of children, families, teachers, and communities, which can be used to explore equity of ECE access. We note in which dataset^a each variable can be found, and whether it only appears in restricted use datasets. Note that some variables in the public use dataset were re-coded or converted to percentages (rather than raw numbers) to reduce disclosure risk. These variables may have counterparts in the restricted use datasets; the variables listed in Tables 1 – 5 do not detail all restricted use versions of public use variables. Please see each dataset's User's Guide and Questionnaire for more information. In addition, data users may be able to create their own indicators by combining information across multiple variables; the tables below are designed to serve as a starting point and are not exhaustive. In Table 6, we list other indicators of access that cannot be adequately studied with the 2019 NSECE data.

After reviewing the available variables in each dataset, we provide considerations for thinking about how household and provider characteristics can be examined in tandem as the "supply" and "demand" for ECE, how they can be examined within geographic units, and considerations when embarking on such analyses.

^a HH = Household dataset; CB = Center-based Provider dataset; HB = Home-based Provider dataset; WF = Center-based Workforce dataset

Measuring the Access Dimension of Reasonable Effort

According to the Access Guidebook, "The reasonable effort dimension captures the interaction between the supply of ECE programs (including available slots), the use of ECE programs by families, and the extent to which information about ECE programs is readily available to parents." Table 1 shows the 2019 NSECE variables that can be used to measure the access dimension of *reasonable effort* in the 2019 NSECE. Note that some access indicators provide information about the household, some about every child in the household birth to age 13, some about every provider used by the household (up to 14 providers per child) or by each child in the household (up to nine children), and some only about a randomly selected child. The randomly selected child was most often a child under age six; children older than age six were only selected if there were no other children under age six in the household. We note in the tables which questions were only applicable to the randomly selected child. For more about the child and providers captured in the data, please see each surveys' User's Guide available from the Child and Family Data Archive.

Table 1. Variables related to indicators of reasonable effort in the 2019 NSECE

Indicators of reasonable effort	Variables related to reasonable effort	Variable names
	Household da	ataset
Geographic distance of provider from	Distance between household/child and provider in linear miles ("crow flies distance")	HH9_DIS_HHPROD_C _X (X=1-14 providers) Child: HH9_DIS_PROV_CH_C_X_Y (X=1-9 CHILD, Y=1-14 providers)
household and child ^b These questions	Restricted use only: Distance between household/child and provider by fastest travel route in miles	HH9_DIS_HHPROD_S _CC_X (X=1-14 providers) Child: HH9_DIS_PROV_CH_S_CC_X_Y (X=1-9 CHILD, Y=1-14 providers)
were only asked of households that reported non-parental care arrangements.	Restricted use only: Distance between household/child and provider by fastest travel route in minutes	HH9_IS_HHPROD_T_CC_X (X=1-14 providers) HH9_DIS_PROV_CH_T_CC_X_Y (X=1-9 CHILD, Y=1-14 providers)

^b Data in the household dataset can be examined at the household or child-level (up to 9 children) in order to draw inferences about families in the U.S. as well as young children in the U.S. in 2019; in many cases, such as this example with distance, NORC created variables at the child-level to facilitate child-level analyses.

Indicators of reasonable effort	Variables related to reasonable effort	Variable names
How families searched for care These questions were only asked of those who searched for care in the last 24 months for the	How respondent looked for the providers they considered in their last search for care	HH9_F7_SEARCH_M_X_R (X = 1 -18 select all that apply variables)
randomly selected child, and who indicated they considered multiple providers in their search.	How respondent learned about provider they considered for care (resource or referral agency; advertisement; reputation in the community or no other providers of their desired type)	HH9_F6B_KNWLDGE2
Use of care, by type of care	Type of care by provider and child	HH9_TYPEOFCARE_AGG_X_Y (X=1-9 CHILDREN, Y=1-14 PROVIDERS)
type or eare	Center-based provi	
Provider enrollment for	Total enrollment of children in the following age categories: Infant (less than 12 months old); 1 year old; 2 years old; 3 years old; 4 years old; 5 years old, not yet in kindergarten; school-age	CB9_ENRL_ X (X = INF, 1YR, 2YR, 3YR, 4YR, 5YR, SA)
each age group served	Percent of children enrolled full-time in the following age categories: Infant (less than 12 months old); 1 year old; 2 years old; 3 years old; 4 years old; 5 years old, not yet in kindergarten; school-age	CB9_ENRL_FT_X (X = INF, 1YR, 2YR, 3YR, 4YR, 5YR, SA)
Provider vacancies (number of	Restricted use only: Number of vacancies provider has for the following age categories: Infant; 1 year old; 2 years old; 3 years old; 4 years old; 5 years old, not yet in kindergarten; school-age	L1_CB9_AGECAT_ADDLENROLL_X (X=1YR, 2YR, 3YR, 4YR, 5YR, INF, SA Age Categories)
additional children they could serve)	Percent of vacancies provider has for the following age categories, as a percentage of their current enrollment in that age group: Infant; 1 year old; 2 years old; 3 years old; 4 years old; 5 years old, not yet in kindergarten; school-age	CB9_ENRL_VACANCIES_X (X = INF, 1YR, 2YR, 3YR, 4YR, 5YR, SA)
Program rejected children due to no space	Program rejected any children due to lack of enrollment space in the past year	CB9_ENRL_DENY_SPACE

Indicators of reasonable effort	Variables related to reasonable effort	Variable names
	Home-based provi	der dataset
Provider enrollment for each age group served	Number of regularly cared for children in the following age categories: less than 3 years old; 3 – 5 years old (not yet in kindergarten); school-age	HB9_ENRL_NUMCH_X (X = UNDER3, 3TO5, SA)
Provider vacancies (number of additional children they could serve)	Number of vacancies provider has in program	HB9_ENRL_ADDTL_VACAN
Program rejected children due to no space	Program rejected any children due to lack of enrollment space in the past year	HB9_ENRL_DENY_SPACE

Measuring the Access Dimension of Affordability

According to the Access Guidebook, the *affordability* dimension "reflect[s] the cost to parents and the cost to ECE programs of providing early care and education services." Table 2 shows the indicators available to measure the access dimension of *affordability* in the 2019 NSECE.

Table 2. Indicators of affordability in the 2019 NSECE

Indicators of affordability	Variables related to affordability	Variable names
	Household da	ataset
Parents' out-of- pocket expense per arrangement	Weekly amount paid to Provider Y by Household (HH) for Child X's care	HH9_WEEKLY_COST_CARE_TC_X_Y (X=1-9 children, Y=1-14 providers) See Section 5.14 of the 2019 NSECE Household User's Guide for more information on cost of non-parental care.
Parents' use of	Subsidy amount paid directly to HH member(s) for care of Child X by Provider Y	HH9_SUBSIDY_X_Y (X=1-9 children, Y=1-14 providers)
subsidies, scholarships, and copayments	Anyone in HH received child care subsidies in past 12 months	HH9_SUBSIDY_PAST
	Any copayment paid to Provider Y by HH for care of Child X	HH9_COPAY_FLAG_X_Y (X=1-9 children, Y=1-14 providers)

Indicators of affordability	Variables related to affordability	Variable names
	Payment to Provider Y for Child X from other sources	HH9_OTHPAYPROV_X_Y (X=1-9 children, Y=1-14 providers)
Parents' use of free care	Weekly amount paid to Provider Y by HH for Child X's care (if value = 0 then care is free to parents)	HH9_WEEKLY_COST_CARE_TC_X_Y (X=1-9 children, Y=1-14 providers)
	Center-based provi	der dataset
Providers' advertised price for ECE for each age group served	Provider's weekly rate for full-time enrollment	CB9_STDRATE_WKLY_#X (X = INF, 2YR, 3YR, 4YR, SA)
Provider subsidizes ECE costs through subsidies,	Center has at least one child funded by a combination of funding sources: HS, Pre-K, and CCDF dollars; HS and CCDF dollars; Pre-K and CCDF dollars; HS and Pre-K dollars	CB9_RVNU_CHILD_FUND_X (X = HS_PK_CCDF, HS_CCDF, PK_CCDF, HS_PK)
scholarships, or through funding from Head Start	Combination of government revenue sources provider received funding from at center level: HS; Pre-K; and/or CCDF	CB9_RVNU_CENTER_FUND_COMBO
(HS), public pre- kindergarten (Pre-	Percent of children in program funded by child care subsidy programs	CB9_RVNU_GOVT_PRCNTCH_CCSUBS
K), and other grants [e.g., Child Care and Development Fund (CCDF)].	Percent of children in program funded by child care subsidy programs by age group: 0 to 3; 3 to 5; schoolage	CB9_RVNU_GOVT_PRCNTCH_X_CC (X = 0TO3, 3TO5, SA)
Program is free for families	Indicates if families pay to attend the program or if all children attend free of charge	CB9_B1_3_FAMPAY
Home-based provider dataset		
Providers' advertised price for ECE for each age group served	Hourly price of care for children in the following age categories: less than 1 year old; 1 to 2 years old; 3 to 4 years old; school-age	HB9_CHRG_RATE_X (X = INF_TC, 2YR_TC, 4YR_TC, SA_TC)

Indicators of affordability	Variables related to affordability	Variable names
Provider subsidizes ECE costs through subsidy programs such as CCDF or Temporary Assistance for Needy Families (TANF)	Number of children in program funded by child care subsidy programs	HB9_RVNU_GOVT_NUMCH_CCSUBS

Measuring the Access Dimension of Supports Child's Development

According to the Access Guidebook, there are six discrete, measurable indicators at the program level that promote children's positive development:

- a program's designation of quality [e.g., Quality Rating and Improvement System (QRIS) rating]
- coordination of services, including referrals
- program practices that support the stability of ECE arrangements
- program practices that support the unique needs of children with disabilities
- program practices that support the unique needs of children experiencing homelessness
- program practices that support the unique needs of children who do not speak English or are dual-language learners

In addition to the indicators listed above, the 2019 NSECE includes several predictors of quality, 6 including teacher/caregiver-level predictors of quality, such as attitudes and professional development participation; classroom/group-level predictors, such as child-adult ratio; and program-level predictors, such as teacher/caregiver departure rates and provision of ancillary services.

Table 3 shows indicators available to measure the access dimension of supports the child's development in the 2019 NSECE.

Table 3. Indicators of supports child's development in the 2019 NSECE

Indicators of supports child's development	Variables related to supports child's development	Variable names
	Household da	taset
Stability of ECE	Total number of nonparental care providers identified for Child X in provider roster	HHC9_NPC_TOTPROV_ROS_X (X = 1-9 children)
and number of different care arrangements	Type of provider used throughout the day (e.g., wraparound care, overnight care) in a given week can be estimated from the child calendar data for Child X (1 to 9) and 15-Minute Block Z (1 to 672)	HH9_CHCAL_R_X_Z See Section 6 of the 2019 NSECE Household User's Guide for more information on the calendar data that can be used to estimate types of care used at various times of day.
Child has special needs	Indicates whether child has a physical, emotional, developmental, or behavioral condition that affects their at-home care	HHC9_CONDITION_X (X = 1-9 children)
Household	Languages spoken in the household	HH9_LANGUAGE
languages spoken	Restricted use only: Respondent has difficulties talking with ECE caregiver/provider because they are not comfortable speaking same language	HH9_C11_SAMELANG_Y
Child race/ethnicity	Child X's race and Hispanic origin	HHC9_RACE_X (X = 1-9 CHILDREN)
Household experiencing homelessness	If respondent's home is neither owned nor rented (HH_ECON_OWNHOME>2), information on the household living situation	HH9_G1A_LIVING
Household's	Respondent (R's) rating of type of care: nurturing environment	HH9_C14_1_X (X = 1-4 Type of Care) ^c
perceptions of various types of	R's rating of type of care: helping children be ready to learn in school	HH9_C14_2_X (X = 1-4 Type of Care)
care	R's rating of type of care: teaching children to get along with other children	HH9_C14_3_X (X = 1-4 Type of Care)

^c Type of Care for these items refer to 1 = center-based; 2 = relative or friend care; 3 = family day care; 4 = parental care

Indicators of supports child's development	Variables related to supports child's development	Variable names
	R's rating of type of care: safety for children	HH9_C14_4_X (X = 1-4 Type of Care)
	Center-based provid	der dataset
Departure rate	Departure rate of staff working with children 0 to 5, not yet in kindergarten	CB9_STAFF_DEPART_0TO5
Provider's quality was monitored	Provider was visited by any regulatory agency for non-health/safety quality monitoring	CB9_PRGM_RGLTRY_QUALITY
Provider offers developmental screenings and other supports	Center helps children and families get: developmental assessments; health screening; counseling services; therapeutic services; social services to parents (responses also indicate whether the services are onsite, paid for, and/or referred out)	CB9_SRVC_X_OFFER (X = DEV_ASSESS, HEALTH_SCRN, COUNSEL, THERAPY, SOCSS)
Provider offers access to specialists	Number of specialists working with children ages 0 to 5, not yet in kindergarten	CB9_STAFF_TYPE_SPCLST_NUM_0TO5
Provider serves	Percent of currently enrolled children ages 0 through 5, not yet in kindergarten, with an IEP/IFSP	CB9_ENRL_PRCNTCH_IEP_0TO5
children with special needs	Percentage of currently enrolled children ages 0 through 5, not yet in kindergarten, who have a physical condition that affects the way the provider serves them	CB9_ENRL_PRCNTCH_PHYS_CNDTN_0TO5
Provider serves children experiencing homelessness	In the past year, program served any young children who were experiencing homelessness	CB9_C15_HOMELESS
Staff language spoken	Language spoken by staff when working with children	CB9_STAFF_LANG
Provider professional development offerings for staff	Respondent provides staff with: funding to take college courses/off site training; mentors/coaches/consultants to work with; relationships with other schools for resources/professional development; paid time off to take college courses/off site training	CB9_STAFF_PROFDEV_X (X = FUNDS, MENTOR, PARTNERS, TIME)

Indicators of supports child's development	Variables related to supports child's development	Variable names
·	Workforce da	taset
Main reason for working with children	Main reason for working with young children	WF9_CAREER_REASON
Traditional beliefs about child rearing	Parental Modernity Scales-Total Traditional Belief Scale (a measure of child rearing and educational attitudes and beliefs)	WF9_ATTITUDES_PMS_TOT_TRAD
Works with children with special needs	Respondent works mostly with children with mental/physical disabilities, or other disabilities or delays.	WF9_WORK_DISABLED
Changes in assignment to classrooms or groups (indicates stability)	Frequency with which workforce member was moved to another classroom	WF9_WORK_MOVE_CLASSROOMS
Participation in professional development	Participation in professional development in past 12 months: workshops, specialist coaching/mentoring/consultation; attended professional organization meeting; community/4-year college child care course	WF9_PROFDEV_X (X = WRKSHP, COACH, MEETING, COURSE)
Member of professional organization	Respondent is a member of a professional organization focused on caring for children	WF9_CAREER_PROFASSOC
Amount of time spent in professional development	Hours per month respondent spends on professional development activities	WF9_A19_HRS_SKILLS
Financial support for professional development	Assistance for professional development: help with other participation costs; release time to participate in activity; assistance with direct costs	WF9_PROFDEV_HELP_X (X = COST, TIME, TUITION)
Educational	Highest education level obtained	WF9_CHAR_EDUC
attainment	Postsecondary education major specific to or related to early care and education	WF9_CHAR_EDUC_MAJOR

Indicators of supports child's development	Variables related to supports child's development	Variable names
	Child Development Associate (CDA) certificate or state certificate/endorsement for ECE; a CDA; a state certificate/endorsement for ECE	WF9_CAREER_X (X =CERT, CERT_CDA, CERT_ECE)
Language spoken when working with children	Language(s) respondent speaks with children or parents at center	WF9_WORK_LANG_FAMILIES
Treated with respect	Agreement with: my co-workers and I are treated with respect on a daily basis	WF9_WORK_RESPECT
Classroom uses curriculum	Respondent uses a curriculum or prepared set of learning and play activities	WF9_WORK_CRCLM
Teacher race/ethnicity	Respondent's race	WF9_CHAR_RACE
	Home-based provid	ler dataset
Provider participates in quality initiative	Program has an overall quality rating from a QRIS	HB9_F_QRIS1_R
	Respondent provides health screening/developmental assessments/special needs services/counseling on-site	HB9_E_ONSITESERV
Provider offers developmental screenings and	Respondent pays for any services for children they look after	HB9_E_PAYSERVICE
other supports	Program helps children and families get: health screening; developmental assessments; therapeutic services; counseling services; social services to parents	HB9_SRVC_X (X = HEALTH_SCRN, DEV_ASSESS, THERAPY, COUNSEL, SOC_SRVC)
Provider serves children with special needs	Number of children with a physical condition that affects the way provider cares for the child	HB9_ENRL_PHYSCNDTN_NUMCH
	Number of children with emotional, developmental, or behavioral issues that affect the way the provider cares for the child	HB9_ENRL_EMOCON_NUMCH

Indicators of supports child's development	Variables related to supports child's development	Variable names
Provider serves children experiencing homelessness	In the past year, program served any young children who were experiencing homelessness	HB9_ENRL_HOMELESS
Use of curriculum	Respondent uses a curriculum or prepared set of learning/play activities	HB9_WORK_CRCLM
Main reason for working with children	Main reason for working with children	HB9_CAREER_REASON
Traditional beliefs about child rearing	Traditional Beliefs scale score from the Parental Modernity Scales, a measure of child rearing and educational attitudes and beliefs	HB9_PMS_TTL_IMP
	Skills improved in past year: help from a home- visitor/coach	HB9_G15A
	Skills improved in past year: community agency/family child-care network sponsored	HB9_G15B
Participation in professional	Skills improved in past year: credited college/university childcare course	HB9_G15C
development	Skills improved in past year: participated in another type of activity	HB9_G15D
	Respondent attended a series of two or more workshops	HB9_G15B1_M
	Respondent trained to work with children of different races/ethnicities/cultures in past year	HB9_G_CULTTRAIN
	Respondent received 4 or more hours of training on how to use curriculum	HB9_G_CURRTRAIN
Member of professional organization	Respondent is a member of a professional organization focused on caring for children	HB9_CAREER_PROFASSOC
Financial support for professional	Assistance with direct costs for professional development in the last 12 months	HB9_G_PDASST_1
development	Assistance with other costs of participation in professional development in the last 12 months	HB9_G_PDASST_2

Indicators of supports child's development	Variables related to supports child's development	Variable names	
	Highest education level obtained	HB9_CAREER_EDUC	
Educational attainment	Relevancy of degree major to ECE, listed providers only	HB9_CHAR_EDUC_MAJOR_L	
accaniment	Child Development Associate or Certification to teach young children	HB9_CHAR_CERT	
Teacher race/ethnicity	Respondent's race	HB9_CHAR_RACE	
Language spoken when working with children	Restricted Use: Language respondent speaks with Child X	d L1_HB9_B13_LANGUSED_R_X	

Measuring the Access Dimension of Meets Parents' Needs

According to the Access Guidebook, this dimension "focus[es] on the ECE features that align with a family's needs rather than the availability of an ECE arrangement." Families have different needs, and the 2019 NSECE has many variables related to parental work schedule, household composition, and other characteristics that may indicate specific family needs. In Table 5 we note some specific variables related to family search characteristics, work characteristics, and household composition that may indicate family needs and/or preferences. More variables are available in the 2019 NSECE Household User's Guide. Table 4 also reviews variables in the Center-Based and Home-Based Provider datasets that represent characteristics that may meet particular family needs, such as provision of transportation to/from ECE.

Table 4. Indicators of meets parents' needs in the 2019 NSECE

Indicators of meets parents' needs	Variables related to meets parents' needs	Variable names	
Household dataset			
Reason for searching for care Only available for respondents who indicated they searched for care in the past 24 months for the randomly selected child	Search – Main reason respondent was looking for care at recorded time	H9_F3_REASON_R	
	Search – If only one provider considered: Type of provider considered	HH9_F6A_PRVTYPE	
Preferred program type Only available for	Search – If more than one provider considered: Any center care considered	HH9_F9C_CENTER	
respondents who indicated they searched for care in the	Search – If more than one provider considered: Any relative/friend care considered	HH9_F9C_PERSONAL	
past 24 months for the randomly selected child	Search – If more than one provider considered: Any home-based w/no prior personal relationship considered	HH9_F9C_NOPERSONAL	
	Search – If more than one provider considered: Other types of care considered	HH9_F9C_OTH	
Household's perceptions	Respondent (R's) rating of type of care: nurturing environment	HH9_C14_1_X (X = 1-4 Type of Care) ^d	
of various types of care Only available for respondents who indicated	R's rating of type of care: helping children be ready to learn in school	HH9_C14_2_X (X = 1-4 Type of Care)	
they searched for care in the past 24 months for the	R's rating of type of care: teaching children to get along with other children	HH9_C14_3_X (X = 1-4 Type of Care)	
randomly selected child	R's rating of type of care: safety for children	HH9_C14_4_X (X = 1-4 Type of Care)	

^d Type of Care for these items refer to 1 = center-based; 2 = relative or friend care; 3 = family day care; 4 = parental care

Indicators of meets parents' needs	Variables related to meets parents' needs	Variable names	
Parental work	Number of standard hours when all parents (of Child X) are in work-related activities (work, school, training, commuting) during last week	HH9_ALLP_WST_HRS_STD_X (X = 1-9 CHILDREN)	
characteristics	Number of non-standard hours when all parents (of Child X) are in work-related activities (work, school, training, commuting) during last week	HH9_ALLP_WST_HRS_NSTD _X (X = 1-9 CHILDREN)	
	Number of HH members	HH9_HHCOMP_MEMBERS	
Household composition	Number of children under 13 living in R's household	HH9_CHAR_NUMCH	
	Number of parents of any child in the HH	HH9_HHCOMP_NUMPARENTS	
Availability of other caregivers	Proximity of relative(s) and their ability/willingness to provide care	HH9_RELATIONS_CARE	
Child uses care during	Indicates whether child had at least one block (15 min) of nonparental care during non-standard hours in the reference week	HH9_ANY_NPTN_NONSTAND_X (X = 1-9 children)	
non-standard hours	Proportion of nonparental care that occurs during non-standard hours	HH9_PROP_NONSTAND_X (X = 1-9 children)	
	Center-based provider	dataset	
Age groups served	Provider serves children in the following age categories: 0 to 3 years old; 3 to 5 years old, not yet in kindergarten; 0 to 5 years old, not yet in kindergarten; school-age	CB9_SERVE_X (X = 0TO3YRS, 0TO5YRS, 3TO5YRS, SA)	
Hours of operation;	Hours open each day Monday through Friday	CB9_SCHDL_TOTHRS_X (X = MON, TUE, WED, THU, FRI)	
operation at nonstandard hours	Provider is open evenings anytime between 7 – 11 p.m., overnight anytime between 11 p.m. – 6 a.m., or weekends at any time	CB9_SCHDL_OPEN_X (X = EVENING, OVERNIGHT, WEEKEND)	

Indicators of meets parents' needs	Variables related to meets parents' needs	Variable names	
	Home-based provider dataset		
Age groups served	Indicator of regularly caring for children in the following age categories: 0 to 3 years old; 3 to 5 years old, not yet in kindergarten; 0 to 5 years old, not yet in kindergarten; school-age HB9_REGSERVE_X (X = 0TO3YRS, 0TO5YRS, 3TO5YRS, 3TO5YRS		
	Hours open each day Monday through Friday	HB9_HRSOPEN_R_X (X = MON, TUE, WED, THU, FRI)	
Hours of operation; operation at nonstandard	Total hours per week provider is open evenings (between 19:00 – 23:00)	HB9_TOTAL_EVENING_TC	
hours	Total hours per week provider is open overnight (between 23:00 and 6:00)	HB9_TOTAL_OVERNIGHT_TC	
	Total hours per week provider is open weekends	HB9_TOTAL_WEEKEND_TC	

Examining Variations in Access by Child, Family, Teacher, and Community Characteristics

Data users may want to examine variations in access dimensions by child, family, teacher, or community characteristics; such examinations may contribute to understandings of equity of ECE access. The 2019 NSECE includes demographic characteristics of children, families, and communities, as shown in Table 5. Tables 3 and 4 included additional characteristics that may be of interest, such as parental employment, household language, household experience with homelessness, and household composition. As with all constructs, data users should consult the 2019 NSECE User's Guides for additional variables that may be of interest.

Table 5. Characteristics of children, families, teachers, and communities in the 2019 NSECE

Demographic and community characteristics	Variables	Variable names	
Household dataset			
Child age	Child X's age	HHC9_AGE_X (X = 1-9 CHILDREN)	
Child race/ethnicityChild X's race and Hispanic originHHC9_RACE_X (X = 1-9 CHILDREN)Household race/ethnicityRacial/ethnic classification of householdHH9_CHAR_RACE		HHC9_RACE_X (X = 1-9 CHILDREN)	
		HH9_CHAR_RACE	

Demographic and community characteristics	Variables	Variable names	
	Annual household income for the calendar year 2018	HH9_ANNUAL_INCOME_RAW_TC	
Household income	Annual income for the calendar year 2018 adjusted to before tax levels	HH9_ECON_INCOME_ANNUAL	
	Ratio of annual income for the calendar year 2018 to poverty level	HH9_ECON_INCOME_POVRATCAT	
	Number in the household: members; parents of any children; unrelated adults; mothers to any child; fathers to any child; children ages 0 through 5; children ages 5 through 8; children ages 9 through 12; children ages 13 through 17	HH9_HHCOMP_X (X = MEMBERS, NUMPARENTS, RELATIONS_NONREL, NUMMOTHER, NUMFATHER, NUMCH_OTHRU5YRS, NUMCH_5THRU8YRS, NUMCH_9THRU12YRS, NUMCH_13THRU17YRS)	
Household structure	Respondent is, in relation to children in the household: biological or adopted parent; grandparent; stepparent	HH9_X (X = RPARENTCH, RGRANDPARENTCH, RSTEPPARENTCH)	
	Number of parents of any child in the household	HH9_CHAR_NUMPARENTS	
	Parent arrangement in household (i.e., one parent, two parents, only grandparents, other)	HH9_PARENT_STRUCTURE	
	Any children: ages 0 through 5; infants, one year old; two years old; three years old; four years old; five years old	HH9_HHCOMP_ANY_CHILD_ X (X = 0THRU5YR, LT12MOS, 1YR, 2YR, 3YR, 4YR, 5YR)	
	Languages spoken in the household	HH9_LANGUAGE	
Household languages spoken	Restricted use only: Respondent has difficulty talking with ECE caregiver/provider because they are not comfortable speaking same language	HH9_C11_SAMELANG_Y (Y=1-14 PROVIDERS)	
Household program participation	Receive food stamps; Women, Infants and Children supplemental nutrition program (WIC); participate in a reduced or free school meals program	HH9_ECON_X (X = FOODSTAMP, WIC, FREELUNCH)	
Economic insecurity indicators	ic insecurity Items related to food insecurity; could borrow HH9_ECON_X (X = EAT, BORROW, OWNCAR, OV Additional economic indicators are available in Sec		

Demographic and community characteristics	Variables	Variable names	
Relative available to provide care	Relative(s) nearby able to provide care without pay (except transport)	HH9_RELATIONS_UNPAID	
Child has special needs/condition	Indicates whether child has a physical, emotional, developmental, or behavioral condition that affects their at-home care.	HHC9_CONDITION_X (X = 1-9 children)	
Community urban density	Household: Urban ratio categories	HH9_COMM_URBAN_DENSITY	
Community poverty density	Household: Community poverty density	HH9_COMM_POVERTY_DENSITY	
Community racial/ethnic composition	Ratio of non-Hispanic, Black/African American; Hispanic/Latino; non-Hispanic, non- Black/African American population to total population, recode	L1_HH9_COMM_W_R_BLACK_RC L1_HH9_COMM_W_R_HISPANIC_RC L2_HH9_COMM_W_R_NO_BLACK	
Community immigrant density	Ratio of population of recent immigrants to total population	L1_HH9_COMM_W_R_RCNT_IMMGRNTS_RC	
	Center-based provider	dataset	
Community urban density	Community classification in the urban/rural spectrum	CB9_COMM_URBAN_DENSITY	
Community poverty density	Community poverty density	CB9_COMM_POVERTY_DENSITY	
Community racial/ethnic composition	Ratio of non-Hispanic, Black/African American; Hispanic/Latino; non-Hispanic, non- Black/African American population to total population, recode	L1_HH9_COMM_W_R_BLACK_RC L1_HH9_COMM_W_R_HISPANIC_RC L2_HH9_COMM_W_R_NO_BLACK	
Community immigrant density	Ratio of population of recent immigrants to total population	L1_HH9_COMM_W_R_RCNT_IMMGRNTS_RC	
	Workforce datase	et	
	Percent of children in the classroom that are Hispanic or Latino	WF9_CL6_PRCNT_CHCLASS_HISP	
Race and ethnicity of	Percent of children in the classroom who are non-Hispanic White	WF9_CL6A_A_PRCNT_CHCLASS_WHITE	
children in their care	Percent of children in the classroom who are non-Hispanic Black or African American	WF9_CL6A_B_PRCNT_CHCLASS_BLACK	
	Percent of children in the classroom who are non-Hispanic Asian	WF9_CL6A_C_PRCNT_CHCLASS_ASIAN	

Demographic and community characteristics	Variables	Variable names	
	Percent of children in the classroom who are non-Hispanic mixed or another race or not certain	WF9_CL6A_D_PRCNT_CHCLASS_MIXED	
Languages spoken by children in their care	Percent of children in classroom that speak a language other than English at home	WF9_CL_LANG_NONENGLISH_PRCNTCH	
	Home-based provider o	dataset	
Community urban density	Home-based provider: Urban ratio categories	HB9_COMM_URBAN_DENSITY	
Community poverty density	Home-based provider: Community poverty density	HB9_COMM_POVERTY_DENSITY	
Community racial/ethnic composition	Ratio of non-Hispanic, Black/African American; Hispanic/Latino; non-Hispanic, non- Black/African American population to total population, recode	L1_HH9_COMM_W_R_BLACK_RC L1_HH9_COMM_W_R_HISPANIC_RC L2_HH9_COMM_W_R_NO_BLACK	
Community immigrant density	Ratio of population of recent immigrants to total population	L1_HH9_COMM_W_R_RCNT_IMMGRNTS_RC	
Race and ethnicity of children in their care	Number of regularly cared for children: Hispanic or Latino; Non-Hispanic White; Non-Hispanic, Black, or African American; Non-Hispanic Asian; Non-Hispanic, other race	HB9_ENROL_X_NUMCH (X = HISP; NHWHITE; NHBLACK; NHASIAN; NHOTHER)	
Languages spoken by children in their care	Number of regularly cared for children who speak a non-English language at home	HB9_ENRL_LANG_NOENGLISH	

Table 6. Example indicators of each access dimension not available in the 2019 NSECE

Reasonable effort	Affordability	Supports child's development	Meets parents' needs
Availability of/ease of access to information about ECE programs and their quality	Affordability of ECE considering other family needs and expenses	Program provides supports for children and families experiencing homelessness	Program provides transportation

Defining ECE Supply and Demand

At the heart of the definition of ECE access is the alignment between the characteristics of ECE providers, or *supply*, and family needs and preferences, sometimes conceptualized as *demand*, in a given geographic area. This section describes some of the key design features of the NSECE that allow data users to describe ECE supply and demand to best answer their research questions.

ECE Supply

The NSECE cast a broad net in terms of types of providers surveyed, allowing for data users to decide who to consider a part of ECE *supply*:

- Provider setting: Data were collected from center-based and home-based providers.
- **Provider funding**: Providers could be funded by one or multiple public and private sources, including Head Start, public Pre-K, child care subsidies and scholarships, grants, and/or tuition.
- Home-based provider subtypes: There were a range of home-based provider subtypes, which are described in Exhibit 1. Of note, the NSECE is unique in terms of possibilities for studying the supply of relationship-based providers, also known as family, friend, and neighbor care.

Exhibit 1. Subtypes of home-based ECE providers in the 2019 NSECE

Home-based providers could be:

Listed or unlisted: Listed providers were sampled from state or national lists of ECE providers and provided care to at least one child under age 13 who was not their own for at least 5 hours weekly. Unlisted providers were sampled from the household sampling frame, as they did not appear on state or national lists of ECE providers. They also cared for children under age 13 who were not their own for at least five hours weekly.

Paid or unpaid: Paid providers received payment for at least one child from any source, including parental tuition, subsidies, grants, etc. Unpaid providers received no payment from any child in their care.

Small or large: Small providers cared for fewer than 4 children, while large providers cared for 4 or more.

Relationship-based or not relationship-based: Relationship-based providers cared only for children with whom they had a prior relationship, and they may or may not have been paid. Not relationship-based cared for at least one child with whom they did not have a prior relationship.

Relationship-based family child care (FCC)-like: The 2019 NSECE further identified a subtype of relationship-based home-based providers with characteristics resembling those of formal family child care providers: These relationship-based providers were *paid*, *large*, and *offered regular care in their own home for 20 or more hours per week*.

Depending upon the research questions, data users may choose to quantify supply by totaling the number of providers, slots used and/or available, or workforce members that meet the data user's definition of ECE supply. Data users can calculate supply at the national level overall, or for subgroups at the national level based on community characteristics (e.g., community poverty density) or provider characteristic (e.g., public funding receipt or program size). Users interested in quantifying supply at the state or sub-state level will

need to contact NORC (<u>nsece@norc.org</u>) to discuss additional requirements and considerations necessary for working with restricted-use data.

ECE Demand

Currently, there is no single definition of *demand* for ECE, and researchers and policymakers use various combinations of indicators of family need for care, parental employment status and work or school schedules, availability of related and unrelated caregivers, search for and preferences for care, and use of care to describe demand for ECE. The 2019 NSECE includes several variables that allow researchers to describe families' demand for ECE, such as parental employment, household composition, and the availability of other relatives to care for household children (see Tables 4 – 5). These variables allow data users to identify families that would likely need regular child care. The NSECE also collected data on parents' ECE search and children's use of ECE (see Table 1).

Depending upon the research questions, data users may choose to quantify demand by totaling the number of households or children (data are available for up to nine children per household) that meet the data user's definition of needing child care. Data users can calculate demand at the national-level; users interested in quantifying demand at the state or sub-state level will need to work with NORC (nsece@norc.org) as additional requirements are necessary for working with restricted-use data.

Access at National and Local Levels

The 2019 NSECE was designed to be nationally-representative, so estimates of supply, demand, and access can be generalized to the national populations of households, children, ECE providers, and workforce members in 2019 (or in 2012, if using the 2012 NSECE). Data users can also examine access for subgroups, such as Hispanic families or families living in rural areas, at a national level. Data users interested in examining access at a sub-national level, such as at the state or sub-state level (e.g., examining supply of care in the vicinity of a particular household population), will need to work with NORC (nsece@norc.org) to access Level 2 and/or Level 3 Restricted Use data. The smallest geographic unit of study in the NSECE is the provider cluster level, which represent families' local child care search area; for more detail see Opportunity 1 below.

Examining Equity of Access

A key question in the area of ECE access is whether all families have equitable access to ECE. Equitable access means that access to ECE options for families does not systematically differ by family demographic characteristics, such as race and ethnicity, family income, or geographic location.

Data users can use the 2019 NSECE to examine which families have access to particular types or characteristics of care and whether those characteristics align with their needs and preferences. Users can use any of the four surveys, or combinations of the four surveys, to examine equity of access. As shown in Table 5 below, families can be described and compared on a number of different demographic indicators, including by child age, household composition, child and household race and ethnicity, income, languages spoken, and more. For example, the household survey can be used to answer the question: Do households with lower incomes in rural areas utilize free care for infant and toddler care at a greater or lower rate than households with lower incomes in urban areas? In addition, by linking together providers and families within geographic proximity, it is possible to examine differential access to quality; for example, the household survey and the center-based and home-based surveys can answer the following question: Do the rates of credentialed teachers in local areas vary by household race and ethnicity?

Data users can also examine equity of access by considering historical and contemporary contexts, such as how policies might affect ECE access for particular groups of families. As an example, data users may be interested in whether states' child care subsidy policies are associated with QRIS participation among providers serving vulnerable populations, such as families experiencing homelessness and/or children with special needs. The NSECE allows data users to answer this question by merging the CCDF Policies Database (available from the Urban Institute) into the restricted-use NSECE data. Such an examination can illuminate how state policies can facilitate greater access for historically underserved families with lower incomes.

Opportunities and Limitations of the NSECE's Design

The 2019 NSECE can be used to understand access from families' perspectives. Below, we highlight several, but not all, opportunities and limitations related to studying access with the 2019 NSECE.

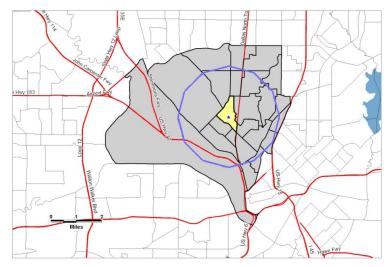
Opportunity 1

It is possible to geographically link the 2019 surveys together to measure access in a local area by using both family characteristics and child care supply variables simultaneously

Access is a function of both household demand and ECE provider supply; as a result, access is best understood when considering both household and ECE provider characteristics. Household and ECE provider data can be linked at multiple geographic levels so that characteristics of supply and demand within the same area can be examined. A brief description of the NSECE's sampling design is useful for understanding possible geographic linkages.

Figure 1. Hypothetical Provider Cluster

Dallas County 0006.01



Note: Figure from National Survey of Early Care and Education Project Team. (2022). 2019 National Survey of Early Care and Education Data Collection and Sampling Methodology Report. OPRE Report 2022-118, Washington DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

In the 2019 NSECE's sampling design, 219 counties or clusters of adjacent counties were selected across all 50 states and D.C. as primary sampling units (PSUs). Within PSUs, 747 secondary sampling units (SSUs) composed of one or two adjacent census tracts were selected. These SSUs provided the household and "unlisted" home-based provider samples; SSUs were oversampled in areas with high densities of low-income households. The NSECE study team then created provider clusters, which are collections of census tracts that overlap with a circle of a two-mile radius from the population centroid of each SSU.

Figure 1 displays a hypothetical provider cluster in Dallas County. The SSU is the yellow area, and the provider cluster area is the grey census tracts together with the yellow central tract.

Center-based and listed home-based providers were sampled from these provider cluster areas. In this way, provider clusters are designed to represent the local supply and demand for child care. Note that in a provider cluster, households only represent those in the SSU, while providers represent the population of providers from throughout any tracts within two miles of the population centroid of the SSU.

It is possible to link NSECE datasets at the provider cluster, PSU, state, and/or national levels to understand the connection between ECE supply and household demand. To learn more about the NSECE sampling strategies, see "NSECE Survey Sample Design and Data Collection" included in the Center-Based Provider, Home-Based Provider, Workforce, and Household Survey User's Guides (available from ICPSR), and 2019 NSECE methodology report.7

Limitation 1a

There are limitations to linking families and providers by geographic area

The NSECE 2019 includes several location-based variables that can be used to link households to local providers, but these variables are only available in restricted-use datasets. The two main approaches to linking households and local providers, and the limitations of each approach, are the following:

- The provider cluster level is the smallest geographic area by which information from households and providers can be linked. The provider cluster most closely approximates a local area of child care supply; however, it contains small samples from each of the populations (households, center-based providers, listed home-based providers, unlisted home-based providers). Because these are sample surveys, multiple clusters need to be aggregated together to generate a valid estimate. Within any given cluster, there may be very few observations of any specific population of interest, such as Hispanic or Latino families or providers who work in Head Start-funded settings.
- The next larger geographic unit is the county level, which is the Primary Sampling Unit (PSU) for the NSECE surveys. Households drawn from various SSUs within the PSU can be aggregated, and weights are available for generating PSU-representative estimates. The same is true for providers, drawn from various provider clusters within the PSU. PSU-level analyses describe all households or providers located in the same PSU, although distances may be large between them and for some analyses county or county-cluster is a much larger unit than one might prefer. NSECE data are not designed to generate estimates about individual PSUs, but rather to create PSU-level aggregate measures or to attach PSU characteristics to understand how county-level policies or context might relate to ECE supply or demand.

Data users must work with NORC when developing research questions that require geographic identifiers for state, PSU, or provider cluster level, as Level 2 restricted use data and user agreements are required.

Limitation 1b

Pooling unlisted home-based providers with other provider types is not advised

While it is possible to combine the center-based and listed home-based providers into a single pool of providers for analysis, combining unlisted home-based providers with either listed home-based or center-based providers is strongly discouraged because of the difference in the size of sampling weights.

Specifically, the average unlisted home-based provider in the data represents more than 3000 providers. In contrast, the average listed home-based provider represents just 22 providers, and the average center-based provider represents just 18 providers. As such, any estimates that combine unlisted and listed providers will be dominated by the characteristics of the unlisted providers because their numbers so dominate the overall population of home-based providers.

Additional limitations regarding incorporating unlisted home-based providers into analyses of local supply are that: 1) the unlisted providers were sampled from the same geographic area as the households (i.e., the SSU), whereas the listed home-based providers and center-based providers were sampled from a larger area (i.e., the provider cluster) that included, but extended beyond, the SSU, 2) unlisted home-based providers were sampled in their homes but the locations in which they provide care may be quite distant from their homes, and 3) many unlisted providers, even those who are paid, provide only relationship-based care and so may not represent available care to anyone but the children for whom they are already caring. ⁸

Opportunity 2

The NSECE surveys include multiple variables that can be used to examine each of the four dimensions of the access definition

Variables that align with each dimension (reasonable effort, affordability, supports child's development, and meets parents' needs) are detailed in the previous section, Access Variables in the 2019 NSECE. Data users can examine multiple indicators of each dimension as well as multiple dimensions in single analyses. For example, data users can examine families' access to high-quality providers that serve infants and toddlers and offer care during nonstandard hours by examining the prevalence of providers with these characteristics relative to the number of families with infants and toddlers who need this type of care (with need defined by the data user, as noted in the ECE Demand section above). Because many constructs, such as child age and non-standard hour care provision/use are available in both the household data and provider data, data users should review the following section of each Quick Tabulation manual to consider possibilities and limitations of comparing similar variables across surveys: "Relations between the 2012 and 2019 Quick Tabulation Data Files."

Limitation 2

Small sample sizes may limit options for analyzing multiple dimensions simultaneously

The more subgroups or dimensions examined in a single analysis, the smaller the sample/cell sizes become. When addressing family-centric questions of ECE access, data users will need to carefully review sample and cell sizes to ensure they are generating reliable estimates. Analysts working with restricted-use data also must adhere to the suppression and disclosure risk guidance provided by NORC.

Opportunity 3

Data users can compare the 2012 NSECE to 2019 NSECE

It is possible to address research questions related to changes in ECE access over time, from 2012 to 2019, using both sets of surveys. For example, it is possible to compare the availability of affordable center-based care in 2019 versus 2012. NORC has guidance on how to conduct statistical comparisons across survey years to account for sampling differences; this guidance can be found on the Child and Family Data Archive website, under "Tutorials" and the 2019 NSECE Making Comparisons Webinar Series.

Limitation 3

Some variables differ across survey years

Direct comparisons on all variables of interest may not be possible due to changes in item text or response options between the 2012 and 2019 surveys. For example, the 2019 NSECE variable

CB9_ENRL_PRCNTCH_IEP_0TO5 measured the percent of currently enrolled children *ages* 0 *through* 5, *not yet in kindergarten*, with an IEP/IFSP. A similar item in 2012 asked about IEPs for all children *under age* 13. As a result, the 2012 and 2019 variables would not be comparable in centers that serve school-age children. Data users should check the User's Guide for each dataset, including Quick Tabulations, which include information on comparability between the 2012 and 2019 surveys. Specifically, the section in the Quick Tabulation manuals entitled, "Relations between the 2012 and 2019 Quick Tabulation Data Files."

Opportunity 4

The 2019 NSECE's nationally-representative design allows for representative analyses of subgroups at the national level

The <u>NSECE sampling design</u> allows users to calculate nationally-representative estimates of family characteristics, preferences, and needs as well as provider characteristics. Data users can examine particular subpopulations of families or providers to examine equity of ECE access.

Limitation 4

Sample sizes may limit analyses of subpopulations

As described in limitations 1a and 2, data users should carefully review sample sizes when examining subgroups, as sample sizes for particular groups may render imprecise (even uninformative) estimates.

Opportunity 5

Users can link additional data sources to the 2019 NSECE, such as Census, licensing, and policy data, via geographic identifiers (e.g., state, census tract)

Data users can expand the possible indicators of access dimensions by merging in Census, policy, and/or administrative child care datasets. The 2012 and 2019 NSECE public use datasets contain some variables from American Community Survey data, including information about community racial demographics, density of immigrant residents, poverty density, and rurality. If additional datasets and/or data elements are of interest, users will need to work with NORC (nsee@norc.org) to conduct the merging, as Level 2 restricted data and user agreements are required.

Limitation 5

The timing of the 2019 NSECE may not align with timing of data collection from other data sources

Data users should be thoughtful about the data sources they merge with the 2019 NSECE, as well as conclusions drawn from linked data. In particular, data users should ensure that any supplemental data sources were collected in or around, or represent features of, the year 2019.

Conclusion

The 2019 NSECE represents a unique opportunity to examine on a national scale, characteristics of early care and education supply, including both public and private settings, home-based and center-based settings, as well as workforce characteristics, and demand, include families' search, use, preferences, and choices. The data are well-suited to researchers seeking to understand access to different types of care for families from a variety of backgrounds, with a variety of needs and preferences. The data also allow for comparisons across groups of families, children, providers, and geographic areas in order to identify opportunities to improve equitable access.

There are a variety of other products to support data users. Please visit the <u>Child and Family Data Archive</u> <u>from ICPSR</u> and the <u>NSECE project page</u> for additional documentation, including those cited in this memo.

References

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