

#### VANDERBILT UNIVERSITY

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# 2022 Prenatal-to-3 State Policy Roadmap

#### Methods and Sources

# **Effective Strategies**

## COMPREHENSIVE SCREENING AND CONNECTION PROGRAMS

## What are comprehensive screening and connection programs and why are they important?

All references for this section are provided in the Notes and Sources section at the bottom of each webpage. Additionally, search the <u>Prenatal-to-3 Policy Clearinghouse</u> for an ongoing inventory of rigorous evidence reviews, including more information on comprehensive screening and connection programs.

# What impact do comprehensive screening and connection programs have?

The following studies meet standards of strong causal evidence to demonstrate the impacts of comprehensive screening and connection program for the health and wellbeing of young children and their families:

- A. Dodge, K. A., Goodman, W. B., Murphy, R. A., O'Donnell, K., & Sato, J. (2013). Randomized controlled trial of universal postnatal nurse home visiting: Impact on emergency care. *Pediatrics*, 132(Supplement 2), S140–S146. <a href="https://doi.org/10.1542/peds.2013-1021M">https://doi.org/10.1542/peds.2013-1021M</a>.
- B. Dodge, K. A., Goodman, W. B., Murphy, R. A., O'Donnell, K., Sato, J., & Guptill, S. (2014). Implementation and randomized controlled trial evaluation of universal postnatal nurse home visiting. *American Journal of Public Health*, 104 Suppl 1, S136-143. <a href="https://doi.org/10.2105/AJPH.2013.301361">https://doi.org/10.2105/AJPH.2013.301361</a>.
- C. Goodman, W. B., Dodge, K. A., Bai, Y., O'Donnell, K. J., & Murphy, R. A. (2019). Randomized controlled trial of Family Connects: Effects on child emergency medical care from birth to 24 months. *Development and Psychopathology*, 31(5), 1863–1872. <a href="https://doi.org/10.1017/S0954579419000889">https://doi.org/10.1017/S0954579419000889</a>.
- D. Dodge, K. A., Goodman, W. B., Bai, Y., O'Donnell, K., & Murphy, R. A. (2019). Effect of a community agency–administered nurse home visitation program on program use and maternal and infant health outcomes: A randomized clinical trial. *JAMA Network Open*, 2(11), e1914522. <a href="https://doi.org/10.1001/jamanetworkopen.2019.14522">https://doi.org/10.1001/jamanetworkopen.2019.14522</a>.
- E. Minkovitz, C. (2001). Early effects of the HealthySteps for Young Children program. *Archives of Pediatrics & Adolescent Medicine*, 155(4), 470-479. https://doi.org/10.1001/archpedi.155.4.470
- F. Minkovitz, C. S., Hughart, N., Strobino, D., Scharfstein, D., Grason, H., Hou, W., Miller, T., Bishai, D., Augustyn, M., McLearn, K. T., & Guyer, B. (2003). A practice-based intervention to enhance quality of care in the first 3 years of life: The HealthySteps for Young Children Program. *JAMA*, *290*(23), 3081-3091. <a href="https://doi.org/10.1001/jama.290.23.3081">https://doi.org/10.1001/jama.290.23.3081</a>
- G. Minkovitz, C. S., Strobino, D., Mistry, K. B., Scharfstein, D. O., Grason, H., Hou, W., Ialongo, N., & Guyer, B. (2007). HealthySteps for Young Children: Sustained results at 5.5 years. *Pediatrics*, 120(3), e658–e668. <a href="https://doi.org/10.1542/peds.2006-1205">https://doi.org/10.1542/peds.2006-1205</a>.

- H. Caughy, M. O., Miller, T. L., Genevro, J. L., Huang, K.-Y., & Nautiyal, C. (2003). The effects of HealthySteps on discipline strategies of parents of young children. *Journal of Applied Developmental Psychology*, 24(5), 517–534. <a href="https://doi.org/10.1016/j.appdev.2003.08.004">https://doi.org/10.1016/j.appdev.2003.08.004</a>.
- I. Caughy, M. O., Huang, K.-Y., Miller, T., & Genevro, J. L. (2004). The effects of the HealthySteps for Young Children Program: Results from observations of parenting and child development. *Early Childhood Research Quarterly*, 19(4), 611–630. https://doi.org/10.1016/j.ecresq.2004.10.004
- J. Sege, R., Preer, G., Morton, S.J., Cabral, H., Morakinyo, O., Lee, V., Abreu, C., De Vos, E., & Kaplan-Sanoff, M. (2015). Medical-legal strategies to improve infant health care: A randomized trial. *Pediatrics*, 136(1). <a href="https://doi.org/10.1542/peds.2014-2955">https://doi.org/10.1542/peds.2014-2955</a>.
- K. Goodman, W.B., Dodge, K.A., Bai, Y., Murphy, R.A., & O'Donnell, K. (2021). Effect of a universal postpartum nurse home visiting program on child maltreatment and emergency medical care at 5 years of age: A randomized clinical trial. JAMA, 4(7), e2116024. https://doi.org/10.1001/jamanetworkopen.2021.16024

# How and why do comprehensive screening and connection programs vary across states?

In the absence of an evidence-based state policy lever to ensure the services effectively provide children and families the support they need, we present several choices that states can make to more effectively implement comprehensive screening and connection programs. We identify states as leaders in the implementation of comprehensive screening and connection programs if they:

- Have a high percentage of families who access the programs relative to other states;
- Enact legislation to reach families across the state; and/or
- Invest deeply in evidence-based programs.

We performed outreach to each of the three evidence-based comprehensive screening and connection program models — DULCE, Family Connects, and HealthySteps — to collect which states the programs operate in, how many sites in each state, and the number of families served in each state by the program model. To assess if a state serves a high share of families, we calculated the percentage of families served using service data from the three program models, total births data from the CDC Vital Statistics, and population estimates for the number of children under age 3 from the Census Bureau. Additional details on the calculation of this measure can be found below (see Measure 2). States identified as serving a high share of families are those that were in roughly the top ten states for a specific program model.

We also collected information on the types of federal, state, and local funding sources used by each program model to implement the comprehensive screening and connection program in each state they have a presence. Although the most effective way for states to implement and support comprehensive screening and connection programs is unclear from the evidence base, we relied on the expertise and experience of the three evidence-based program models to provide information on states who had provided substantial support to the implementation of the program, as well as a general history of implementation of the program in each state.

We also identified states in which alternative comprehensive screening and connection programs operate. These programs are similar in design, implementation, and goals to the three evidence-based models

included in the Roadmap, however, they have not yet been rigorously evaluated. We drew upon our relationships with state implementers and researchers to identify states where an alternative model is implemented. We also used program websites to determine what states known programs operate. To determine if a state-based program model meets our criteria to be considered an alternative comprehensive screening and connection model, we used program model materials available online such as program recruitment flyers and program annual summary reports to determine the activities offered, eligibility criteria, implementation status, and goals of the program model. When online materials were unclear, we supplemented our online research with targeted outreach to program models themselves.

We also performed an electronic search using Quorum State between July 1, 2021 and September 14, 2022 to assess legislative progress pertaining to comprehensive screening and connection programs, which are commonly referred to in legislation as "universal home visiting" programs. The main search strategy used combinations of keywords for proposed bills related to comprehensive screening and connection programs ("family connects" OR "healthy steps" OR comprehensive screening OR comprehensive referrals OR screening & referral OR "Durham Connects" OR "help me grow" OR "Project DULCE" or postpartum WITHIN 5 OF "home visit" OR "universal postpartum visit" OR "universal home visiting" OR "universal home visit"). Research staff conducted searches, analyzed results for relevant state legislation, and summarized state's efforts around comprehensive screening and connection programs at the state level.

This section also contains the sources for the information presented in the individual state Roadmaps.

### Sources:

State	Source
All States	<ol> <li>Census Bureau, Population Division. (2022). Annual state resident population estimates for 6 race groups (5 race alone groups and two or more races) by age, sex, and Hispanic origin: April 1, 2020 to July 1, 2021 – sc-est2021-alldata6.csv [Data Set]. Retrieved August 31, 2022 from 33Thttps://www.census.gov/data/tables/time-series/demo/popest/2020s-state-detail.html</li> <li>DULCE: P. Hampton, Center for the Study of Social Policy, personal communication, February 26, 2021 and August 1, 2022.</li> <li>Family Connects: C. Gest, Family Connects International, personal communication, July 20, 2022.</li> <li>HealthySteps: R. Briggs, ZEROTOTHREE, personal communication, July 12, 2021 and July 13, 2022.</li> <li>Help Me Grow: Help Me Grow. (n.d.). Affiliates – Help me grow national center. Retrieved on July 20, 2022, from https://helpmegrownational.org/affiliates/list/.</li> <li>Hamilton, Brady E., Martin, Joyce A., Osterman, &amp; Michelle J.K. (2022, April 24). Births: Provisional data for 2021. Vital Statistics Rapid Release Report Number 20. National Center for Health Statistics, Hyattsville, MD. https://dx.doi.org/10.15620/cdc:116356</li> </ol>
Alabama	1. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
Alaska	(no additional sources)
Arizona	1. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
Arkansas	1. K. Friedman, Family Connects International, personal communication, July 22, 2021.
California	1. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.

State	Source
	2. First 5 LA. (n.d.) Strengthening Network: Welcome Baby and Home Visiting. Retrieved on
	July 20, 2022. http://welcomebaby.labestbabies.org/about-welcome-baby-and-home-
	<u>visiting/</u>
	3. K. Friedman, Family Connects International, personal communication, July 22, 2021.
	4. P. Hampton, Center for the Study of Social Policy, personal communication, June 16, 2021.
	1. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
	2. K. Friedman, Family Connects International, personal communication, August 3, 2022.
Colorado	3. Illuminate Colorado. (2022). Family Connects Colorado to Offer Free Home Visiting to All Families Starting Late 2022. https://www.illuminatecolorado.org/family-connects-colorado-
	to-offer-free-home-visiting-to-all-families-starting-late-2022/  1. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
Connecticut	2. S.B. 1202, 2021 Leg., June Spec. Sess., (Conn., 2021).
Connecticut	3. K. Friedman, Family Connects International, personal communication, August 3, 2022.
Delaware	(no additional sources)
District of	(110 additional sources)
Columbia	1. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
	1. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
Florida	2. P. Hampton, Center for the Study of Social Policy, personal communication, June 16, 2021.
	3. H.B. 4213, 124 <sup>th</sup> Leg., Reg. Sess., (Fla. 2022).
Georgia	(no additional sources)
	1. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
Hawaii	2. State of Hawaii, Department of Health. (n.d.) Healthy Start Program. Retrieved on July 20,
	2022. https://health.hawaii.gov/mchb/home/healthy-start-program/
Idaho	(no additional sources)
Illinata	1. A. MacDonald, Family Connects International, personal communication, June 16, 2021.
Illinois	2. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
Indiana	(no additional sources)
	1. A. MacDonald, Family Connects International, personal communication, June 16, 2021.
lowa	2. Iowa Department of Public Health. (n.d.). Welcome to 1st Five. Retrieved on July 20, 2022.
	https://idph.iowa.gov/1stfive
Kansas	(no additional sources)
	1. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
и	2. The Kentucky Cabinet for Health and Family Services. (n.d.). HANDS-Health Access
Kentucky	Nurturing Development Services. Retrieved on July 20, 2022.
	https://chfs.ky.gov/agencies/dph/dmch/ecdb/Pages/hands.aspx
Louisiana	(no additional sources)
Maine	(no additional sources)
	J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
	2. K. Friedman, Family Connects International, personal communication, July 22, 2021.
	3. The Office of Governor Larry Hogan. (2021). Governor Hogan announces launch of \$72 million
Maryland	maternal and child health care initiative.
	https://governor.maryland.gov/2021/07/06/governor-hogan-announces-launch-of-72-
	million-maternal-and-child-health-care-initiative/
Massachusetts	J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
r lassacriusetts	i. j. Hacey, Zerro Fort Mee, personal communication, August 3, 2021.

State	Source
	2. The Commonwealth of Massachusetts Department of Health. (n.d). Welcome Family.
	Retrieved on July 20, 2022. https://www.mass.gov/welcome-family
Michigan	(no additional sources)
	1. A. MacDonald, Family Connects International, personal communication, June 16, 2021.
Minnesota	2. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
	3. First Born. (n.d.) Welcome to the First Born Program. Retrieved on July 20, 2022.
	https://firstbornprogram.org/
Mississippi	1. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
Missouri	1. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
Montana	(no additional sources)
Nebraska	(no additional sources)
Nevada	(no additional sources)
New Hampshire	(no additional sources)
Newlead	1. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
New Jersey	2. S.B. 690, 219th Leg., Reg. Sess., (N.J. 2021).
	1. First Born. (n.d.) Welcome to the First Born Program. Retrieved on July 20, 2022.
New Mexico	https://firstbornprogram.org/
	2. S.B. 48, 55 <sup>th</sup> Leg., Sec. Sess., (N.M. 2022).
	1. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
New York	2. A. 8611, 204 <sup>th</sup> Leg., Reg. Sess., (N.Y. 2022).
	3. A. 9140, 204 <sup>th</sup> Leg., Reg. Sess., (N.Y. 2022).
North Carolina	1. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
North Carolina	2. K. Friedman, Family Connects International, personal communication, July 22, 2021.
North Dakota	(no additional sources)
Ohio	1. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
Oklahoma	1. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
Oktanoma	2. K. Friedman, Family Connects International, personal communication, July 22, 2021.
	1. A. MacDonald, Family Connects International, personal communication, June 16, 2021.
Oregon	2. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
Oregon	3. S.B. 526, 80th Leg., Reg. Sess., (Or., 2019).
	4. C. Wilcox, Family Connects International, personal communication, August 12, 2022.
Pennsylvania	1. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
Rhode Island	1. State of Rhode Island Department of Health. (n.d.) First Connections. Retrieved on July 20,
	2022. https://health.ri.gov/find/services/detail.php?id=34
South Carolina	1. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
South Dakota	(no additional sources)
	1. Tennessee Department of Health. (n.d.). Welcome Baby. Retrieved on July 20, 2022.
Tennessee	https://www.tn.gov/health/health-program-areas/fhw/early-childhood-program/welcome-
	<u>baby.html</u>
Texas	1. A. MacDonald, Family Connects International, personal communication, June 16, 2021.
	2. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
Utah	(no additional sources)
Vermont	1. P. Hampton, Center for the Study of Social Policy, personal communication, June 16, 2021.
Virginia	(no additional sources)

State	Source
Washington	1. J. Tracey, ZEROTOTHREE, personal communication, August 5, 2021.
vvasnington	2. A. MacDonald, Family Connects International, personal communication, June 16, 2021.
West Virginia	(no additional sources)
Wisconsin	1. A. MacDonald, Family Connects International, personal communication, June 16, 2021.
Wyoming	(no additional sources)

Data were collected for two different measures to assess how states vary in their implementation of comprehensive screening and connection programs. The datasets, calculations, and sources referenced for each state are listed below. The 2021 Prenatal-to-3 Roadmap relied on data for comprehensive screening and connection programs from 2019, due to the concerns about the COVID-19 pandemic on 2020 service data. In the 2022 Roadmap, we rely on data from 2021 due to the same concerns. 2020 data are not included in any Roadmap.

Measure 1: Number of program sites

#### Definition:

The number of program model sites serving families in each state

#### Notes:

Data were provided by DULCE for sites as of 2021, by Family Connects for sites as of 2021, and by HealthySteps for sites as of May 2021.

### Sources:

- DULCE: P. Hampton, Center for the Study of Social Policy, personal communication, February 26, 2021 and August 1, 2022.
- 1. Family Connects: C. Gest, Family Connects International, personal communication, July 20, 2022.
- 2. HealthySteps: R. Briggs, ZEROTOTHREE, personal communication, July 12, 2021 and July 13, 2022.

## Measure 2: Percentage of children/families served

#### Definition:

The percentage of children/families served in one of the three evidence-based comprehensive screening and connection programs out of all children/families in the state, by program model

#### Notes:

- 1. Numerator: The number of children or families served by the evidence-based comprehensive screening and connection program
- 2. Denominator: The total number of births/children through age 3 in each state in which the evidence-based comprehensive screening and connection programs operates.
- 3. Number served data were provided by DULCE, Family Connects, and HealthySteps as of 2021.

- 4. The percentage of families served by DULCE is calculated by dividing the number of participants in DULCE in the state in 2021 by the number of all births in the state in 2021. The total number of births in a state in 2021 is determined from CDC Vital Statistics provisional birth data.
- 5. The percentage of families served by Family Connects is calculated by dividing the number of participants in Family Connects in the state in 2021 by the number of all births in the state in 2021. The total number of births in a state in 2021 is determined from CDC Vital Statistics provisional birth data.
- 6. The percentage of children served by HealthySteps is calculated by dividing the number of participants in HealthySteps in the state in 2021 by the number of children under age 4 in the state in 2021. The total number of children in a state in 2021 is determined from Census Bureau's Population Estimates dataset (2021 vintage). In 2021, HealthySteps asked sites, "Approximately how many children birth 3 are seen at this practice annually?" Children up to age 4 can be included in this count, so we included children up to age 4 in the denominator of this measure.<sup>1</sup>

#### Sources:

- 1. DULCE: P. Hampton, Center for the Study of Social Policy, personal communication, February 26, 2021 and August 1, 2022.
- 2. Family Connects: C. Gest, Family Connects International, personal communication, July 20, 2022.
- 3. HealthySteps: R. Briggs, ZEROTOTHREE, personal communication, July 12, 2021 and July 13, 2022.
- 4. Children through age 3: Census Bureau, Population Division. (2022). Annual state resident population estimates for 6 race groups (5 race alone groups and two or more races) by age, sex, and Hispanic origin: April 1, 2020 to July 1, 2021 sc-est2021-alldata6.csv [Data Set]. Retrieved August 31, 2022 from <a href="https://www.census.gov/data/tables/time-series/demo/popest/2020s-state-detail.html">https://www.census.gov/data/tables/time-series/demo/popest/2020s-state-detail.html</a>
- 5. Number of Births: Hamilton, Brady E., Martin, Joyce A., Osterman, & Michelle J.K. (2022, April 24). Births: Provisional data for 2021. Vital Statistics Rapid Release Report Number 20. National Center for Health Statistics, Hyattsville, MD. <a href="https://dx.doi.org/10.15620/cdc:116356">https://dx.doi.org/10.15620/cdc:116356</a>

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<sup>&</sup>lt;sup>1</sup> R. Briggs, ZEROTOTHREE, personal communication, August 24, 2022.