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RUHS is a Federally Qualified Health Center (FQHC)

Sarah Nolan, MA Rady Children's Hospital San Diego Children's Primary Care Medical Group

RCHSD/CPCMG is a private hospital and network with both capitation and fee for service





- Medical Provider
- Mental Health Provider
- SLP
- PT
- OT
- Early Care and Education
- Early Intervention
- Public Health Nurses
- Administrators
- Others



#### **SESSION OUTLINE**

### Model Overview

Outcomes & Emerging Evidence

Local Impact

Sustaining the Program

State Opportunities

Appendix



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An evidence-based, interdisciplinary pediatric primary care program that promotes nurturing parenting and healthy development for babies and toddlers, particularly in areas where there have been persistent inequities for families of color or with low incomes.

HealthySteps Specialists are integrated into the pediatric team to provide short-term behavior/development consultation and referrals, intensive services when needed, and support practice screening efforts.





## **Pediatric Setting**

**ACCESS** 

Almost all families take their babies to see a pediatric primary care provider

**TRUST** 

Parents trust their pediatric primary care provider

**ACCEPTED** 

The pediatric office is a non-stigmatizing setting

FREQUENT

New parents attend 12-13 wellchild visits within the first 3 years of life; half occur in the first year



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## Tiers of Service Delivery

#### TIER 3

COMPREHENSIVE SERVICES

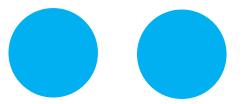
FAMILIES MOST AT RISK



#### TIER 2

SHORT-TERM SUPPORT

MILD CONCERNS



## TIER 1

**UNIVERSAL SERVICES** 







#### **SERVICES INCLUDE**

Ongoing, preventive team-based well-child visits

Child development & behavior consults
Care coordination & systems navigation
Positive parenting guidance & information
Early learning resources

Child developmental, social-emotional & behavioral screenings

#### Screening for family needs

- -MATERNAL DEPRESSION
- -OTHER RISK FACTORS
- -SOCIAL DETERMINANTS OF HEALTH

#### Family support line

-PHONE, TEXT, EMAIL, ONLINE PORTAL







Child Developmental, Social-Emotional & Behavioral Screenings



Care Coordination & Systems Navigation



Screenings for Family Needs e.g., PPD, other risk factors, SDOH



Positive Parenting Guidance & Information



Family Support Line e.g., phone, text, email, online portal



Early Learning Resources



Child Development & Behavior Consults



Ongoing, Preventive Team-Based Well-Child Visits



## HealthySteps Video

• HealthySteps: Our Impact - YouTube



## HealthySteps Advances Health Equity



Ensures more frequent screenings, creates more opportunities for prevention



Provides ageappropriate nutritional guidance



Strengthens early social-emotional development



Connects families to early intervention services



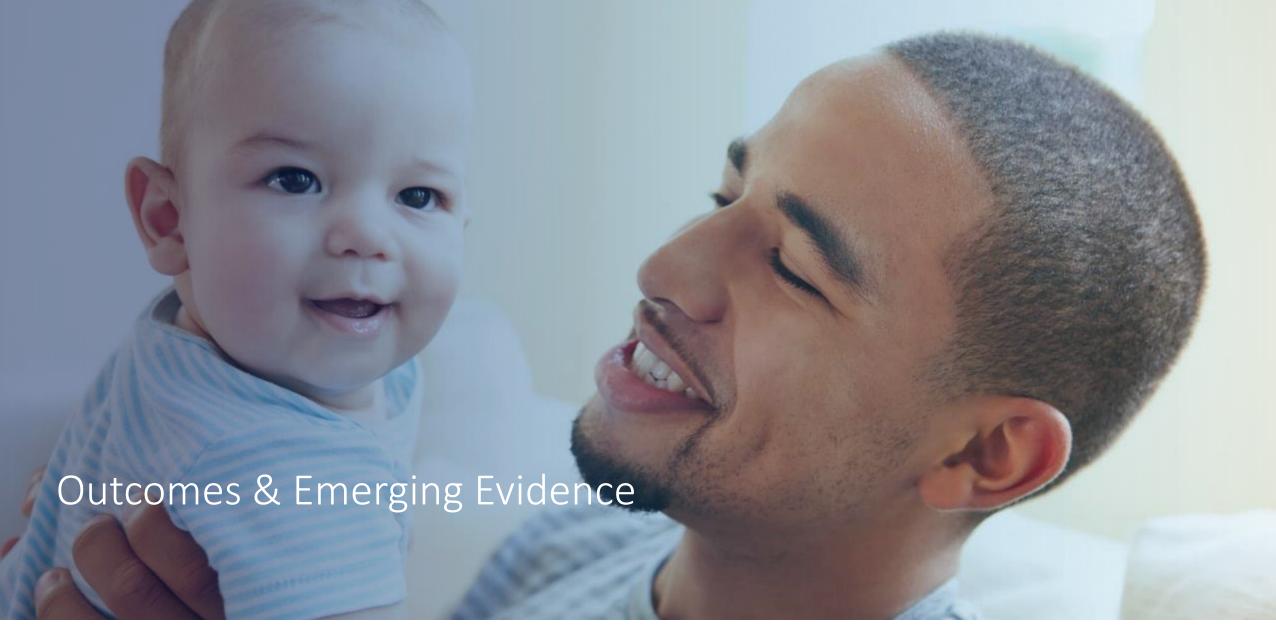
Helps mothers find success with breastfeeding



Ensures timely screenings and referrals for autism







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## History of Evidence Building

**Evaluation** has been integral to HealthySteps' growth since its inception



**HealthySteps** is piloted

1995

The Commonwealth Fund supported a replication effort and a national evaluation conducted by Johns Hopkins University

grew slowly with limited national infrastructure from Boston University.

Over two decades, the HealthySteps network sites

**231** sites

HealthySteps becomes a program of ZTT

Since 2015, the network has grown quickly

2015

2016 - 2019

#### The national evaluation

including an RCT, a quasi-experimental comparison study, and an affiliated nonexperimental evaluation are conducted.

1996 - 2003

#### Small-scale studies

using quasi experimental and non-experimental methodologies are completed.

2004 - 2014

#### An implementation study

across 65 HealthySteps sites is conducted.







## **Screening and Connection to Services**



- ✓ Early identification of child and family needs
- ✓ Improved connection to services



#### **ADDRESSING CHILD NEEDS**

- Children were **8x more likely to receive a developmental assessment** and had significantly **higher rates of developmental and other nonmedical referrals**<sup>1,2,3</sup>
- One HealthySteps site with a dedicated family services coordinator quadrupled its Early Intervention successful referral rate after implementing HealthySteps<sup>4</sup>

#### ADDRESSING FAMILY NEEDS

- Mothers had significantly higher rates of maternal depression referrals and were 4x more likely to receive information on community resources<sup>1</sup>
- A network of three HealthySteps sites (two with dedicated community health workers) found nearly 90% of families were successfully connected with needed community services<sup>5</sup>



## Timely/Continued Care and Vaccinations



- ✓ Timely and complete wellchild visits
- ✓ Timely and up-to-date vaccinations
- Better continuity of care

#### TIMELY AND COMPLETE WELL-CHILD VISITS

- Children were more likely to attend all of the first 10 recommended well-child visits and were twice as likely to attend specific visits and for visits to be on time<sup>1,7,12,13,14</sup>
- Three HealthySteps sites found a reduced disparity between well-child visit attendance and insurance coverage; attendance rates for sites serving high proportions of children with Medicaid were on par with rates for children with commercial insurance<sup>10</sup>

#### TIMELY AND UP-TO-DATE VACCINATIONS

Children were up to 1.6x more likely to receive **timely vaccinations** and 1.4x more likely to be up to date on vaccinations by age  $2^{1,7,12}$ 

#### **BETTER CONTINUITY OF CARE**

Continuity of care was significantly better for both total and well-child visits and families were nearly twice as likely to remain with the practice through 20 months<sup>15,16</sup>







## **Breastfeeding and Early Childhood Obesity Prevention**



- ✓ Mothers sustain breastfeeding longer
- ✓ Lower child obesity rates at age 5



#### IMPROVED BREASTFEEDING SUPPORT & CONTINUATION

Mothers felt significantly more supported to breastfeed and had higher rates of continued breastfeeding (longer than 6 months)<sup>6,7</sup>

#### EARLY CHILDHOOD OBESITY PREVENTION

- Mothers were significantly less likely to prematurely give newborns water or introduce cereal<sup>1</sup>
- One HealthySteps site with integrated maternal mental health treatment demonstrated a reversal of concerning infant weight loss<sup>8</sup>
- One HealthySteps site used quality improvement methodology and saw improved use of tools to address childhood obesity and significantly increased follow-up visit attendance<sup>26</sup>
- Two HealthySteps sites serving high proportions of children with Medicaid found a lower prevalence of childhood obesity at age 3 compared to state-level rates<sup>10</sup>
- HealthySteps children "at risk" of social-emotional challenges had significantly lower rates of obesity at age 5 than comparable children not participating in HealthySteps<sup>9</sup>



## Child Safety and Risk Factors for Child Abuse and Neglect



- ✓ Fewer injury-related ER visits
- ✓ Reduced risk of SIDS
- ✓ Less likely to use harsh or serve discipline
- ✓ Greater security of attachment and fewer behavior problems

#### **KEEPING CHILDREN SAFE**

- Children were 23% less likely to visit the emergency room for injuries in a 1-year period<sup>1</sup>
- Families were 24% less likely to place newborns on their stomachs to sleep, reducing SIDS risk<sup>1</sup>
- Families scored higher on an injury control index and were significantly more likely to use stair gates and have access to a number for poison control<sup>6,7</sup>

#### REDUCING RISK FACTORS FOR CHILD ABUSE AND NEGLECT

- Families were significantly less likely to report harsh punishment (yelling, spanking with hand) and severe discipline (face slap, spanking with objects)<sup>1,7</sup>
- Two HealthySteps sites found HealthySteps participation was significantly associated with greater security of attachment and fewer child behavior problems<sup>20</sup>

## **Early Literacy and School Readiness**



✓ Parents more likely to share books with children, limit TV time

#### **PROMOTING SCHOOL READINESS**

- Families were significantly more likely to share picture books to and play with their infants daily<sup>1</sup>
- Families were significantly more likely to report their child looked at or read books weekly<sup>16</sup>
- Families were significantly more successful in **establishing routines** and limiting television time<sup>24</sup>



## **Social-Emotional Development**



- ✓ Improved screening and higher referral rates for social-emotional concerns
- ✓ Better understanding of infant development
- ✓ Improved socialemotional development

#### IMPROVED SCREENING AND HIGHER RATES OF REFERRALS

One HealthySteps site increased social-emotional screening from 17% to 51% during a one-year period<sup>i,10</sup>

#### BETTER UNDERSTANDING INFANT DEVELOPMENT

- Families received significantly more anticipatory guidance on child development topics and reported that the guidance matched their needs  $^{12,16,22}$
- Families demonstrated a significantly better understanding of infant development<sup>6</sup>
- Families were significantly more likely to notice behavioral cues and provide ageappropriate nurturing<sup>1,23</sup>

#### IMPROVED SOCIAL-EMOTIONAL DEVELOPMENT

Children whose mothers reported childhood trauma scored better on a social-emotional screening after receiving HealthySteps than comparable children<sup>11</sup>





## **Maternal Depression**



- ✓ Improved maternal depression screening and follow-up
- ✓ Mothers more likely to share symptoms
- ✓ Providers more likely to discuss postpartum depression
- ✓ Fewer reported symptoms

#### **INCREASED SCREENING & FOLLOW-UP**

- Two HealthySteps sites used quality improvement methodology and increased maternal depression screening from 41% to 92% in just 19 weeks at one site and from 31% to 60% in just 11 weeks at the other 17,18
- One HealthySteps site used quality improvement methodology and increased maternal depression referral follow up from 49% to 67%; another site reported a 70% follow up visit rate for mothers with maternal depression 19,20
- 96% of HealthySteps mothers in one site were screened at least three times for maternal depression by six months postpartum compared to 73% of comparable mothers not participating in HealthySteps<sup>3</sup>

#### MORE DISCUSSION & FEWER SYMPTOMS

- Mothers were significantly more likely to discuss their depressive symptoms and pediatric providers were significantly more likely to discuss postpartum depression with mothers<sup>1,7,12</sup>
- Mothers with depressive symptoms reported significantly fewer symptoms after receiving HealthySteps and that symptoms decreased at a faster rate than comparable mothers<sup>6,21</sup>





## **Practice and Provider Impacts**



- ✓ Parents more satisfied with their care
- ✓ Physicians highly satisfied
- ✓ Equitable care
- ✓ Lower costs

#### **INCREASED PATIENT SATISFACTION**

- Families were significantly more likely to report practice staff went out of the way for them, that they relied on practice staff for advice (rather than a friend or relative) and that they received needed emotional support<sup>1,22</sup>
- Families **rated their provider as more competent and caring** and were significantly more likely to believe that the **health plan cared** about them and to **recommend their clinic** to a friend or family member<sup>6,22</sup>

#### INCREASED PROVIDER SATISFACTION

- Physicians reported significantly **higher satisfaction** with HealthySteps and that they **felt emotionally supported** by the HealthySteps Specialist<sup>1,25</sup>
- Physicians were over 5x more likely to be very satisfied with the ability of clinical staff to meet children's developmental and behavioral needs<sup>1</sup>

#### **MORE EQUITABLE CARE**

• One HealthySteps site with integrated behavioral care found that **families received equitable advice regardless of race, ethnicity, or language**, suggesting that HealthySteps can help mitigate existing disparities in the quality of pediatric primary care<sup>27</sup>

#### **LOWER COSTS**

 One HealthySteps site serving a diverse pediatric population found that estimated costs averted exceeded program operating costs (\$641-\$959 compared to \$575 per child)<sup>28</sup>

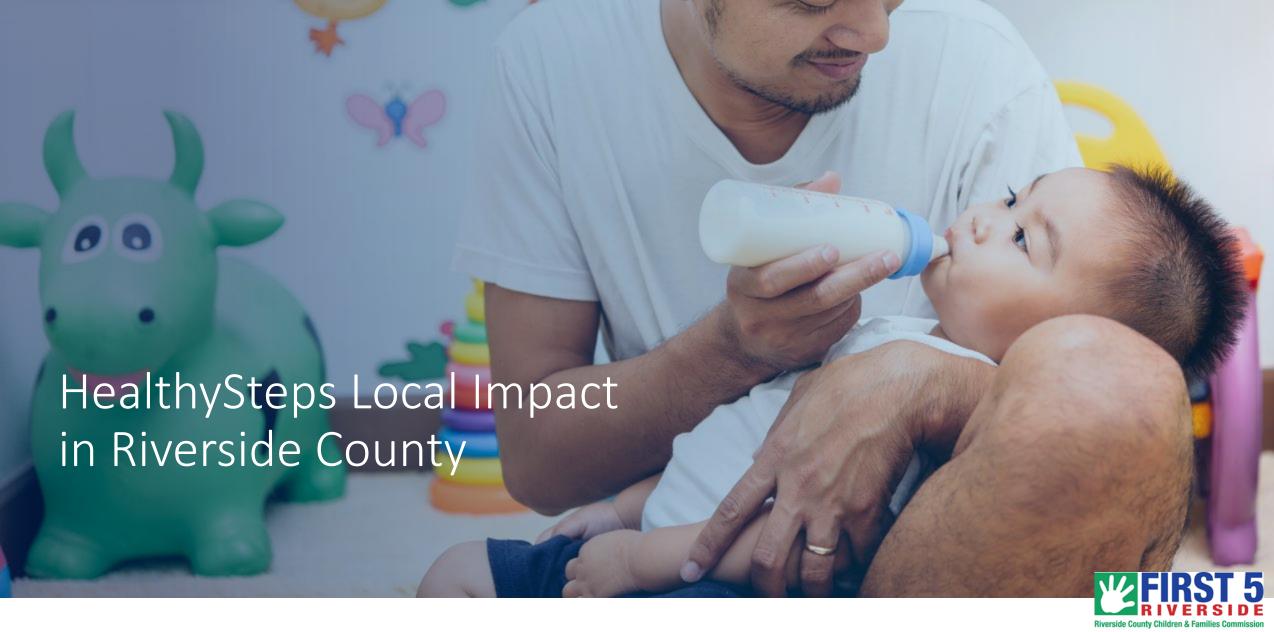
## What are Providers Saying About HealthySteps?

"HealthySteps are invaluable to our visits — they guide our patients with their developmental needs after our provider visit. This resource is amazing for our patients but also so helpful to our providers because it's often hard to spend the needed time with the patient to address all their developmental needs and follow up on their progress. "

"HealthySteps specialists have been a great asset to the team! I cannot see our patient's care being complete without the involvement of our HealthySteps team – they really are an integral part of our patients' early development. "

"The teamwork between HealthySteps specialist, myself as a provider, and the parents have been impeccable. The HealthySteps team has been so great with closed loop communication between myself and parents – with frequent communication and touching base with our patients between visits have been an amazing experience for our parents. "



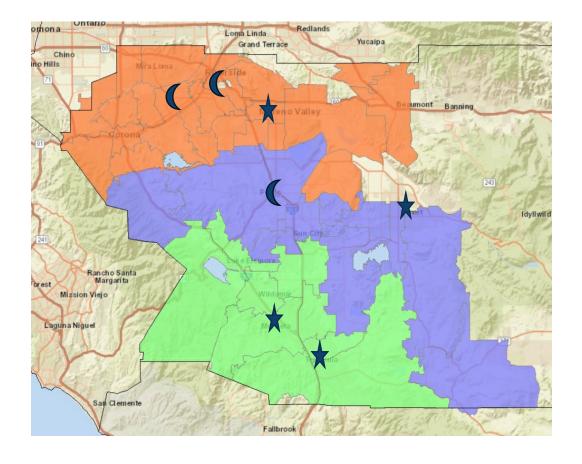






## HealthySteps Riverside County

Site Name(s)	Clinic Type(s)
RCHSD/CPCMG	Private Pediatric Clinic
RCHSD/CPCMG	Private Pediatric Clinic
RCHSD/CPCMG	Private Pediatric Clinic
RUHS CHC-Moreno Valley	FQHC
RUHS CHC-Jurupa Valley (coming soon)	FQHC
RUHS CHC-Perris (coming soon)	FQHC
RUHS CHS-Riverside Neighborhood (coming soon)	FQHC







## **Demographics RCHSD\***





#### **HEALTHYSTEPS FAMILIES SERVED BY RACE AND ETHNICITY**

7,639 children ages 0-3

- 1.2% American Indian or Native Alaskan
- <1% Native Hawaiian or Pacific Islander

- 8.6% Black
- 52.6% White
- 33.5% Hispanic or Latino
- 3.4% Asian

#### **HEALTHYSTEPS FAMILIES BY INSURANCE TYPE**

- 46% Medi-Cal
- 11% Tricare
- 42% Commercial
- 1% Uninsured





## **Demographics RUHS\***



#### **HEALTHYSTEPS FAMILIES SERVED BY RACE AND ETHNICITY**

2,297 children ages 0-3

- <1% American Indian or Native Alaskan
- <1% Native Hawaiian or Pacific Islander
- 13.4% Black

- 54.8% White
- 4.1% Asian
- 24.8% Multiracial
- 1.7% Unknown

#### **HEALTHYSTEPS FAMILIES BY INSURANCE TYPE**

- 95.2% Medi-Cal
- 0.1% Tricare
- 0.7% Commercial
- 4% Uninsured





## **HealthySteps Families Served by RCHSD\***





#### **TIER 1 UNIVERSAL SCREENING**

- 7,343 children received Developmental, Social-Emotional and Autism screenings
- 3,019 families were screened for SDOH
- 2,074 mothers were screened for maternal depression

#### **TIER 2 SHORT TERM SUPPORT**

336 families were provided short-term support

#### TIER 3 ONGOING, PREVENTATIVE TEAM-BASED WELL CHILD VISITS

2,221 children received team-based well child visits



## **RUHS Tier Data\***



#### **TIER 1 UNIVERSAL SCREENING**

- 2,043 children received Developmental, Social-Emotional and Autism screenings
- 2,297 families were screened for SDOH
- 1,609 mothers were screened for maternal depression

#### **TIER 2 SHORT TERM SUPPORT**

424 families were provided short-term support.

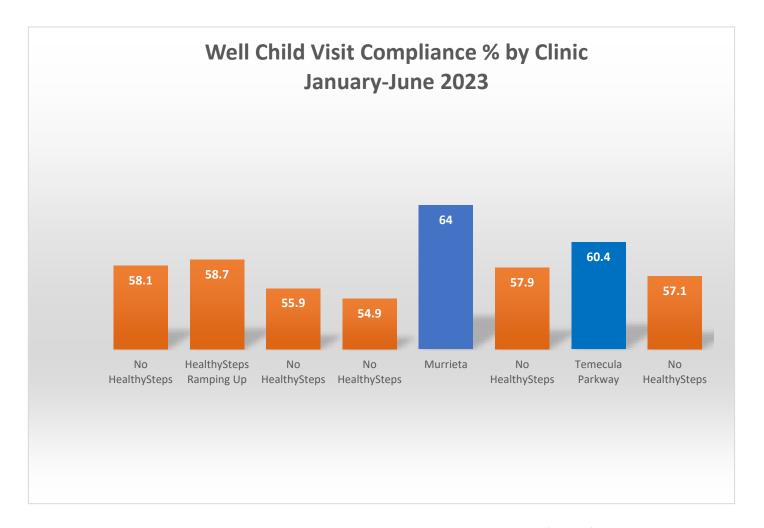
#### TIER 3 ONGOING, PREVENTATIVE TEAM-BASED WELL CHILD VISITS

629 children received team-based well child visits





## **RCHSD Visit compliance data**



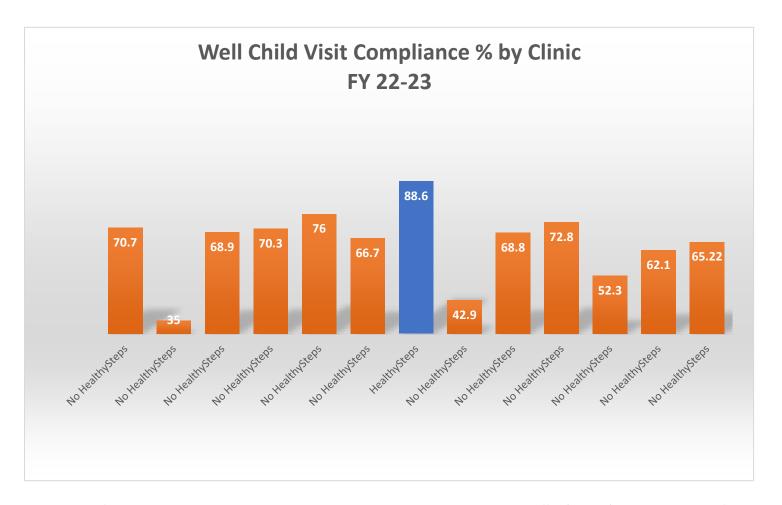






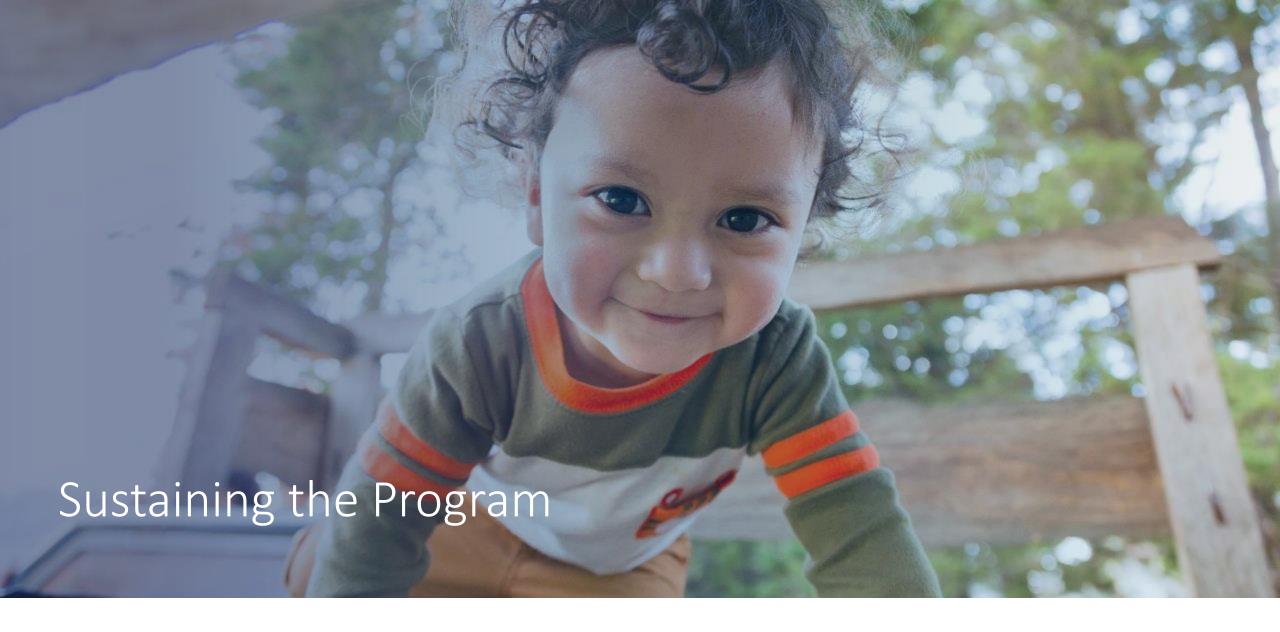
## **RUHS visit compliance data**









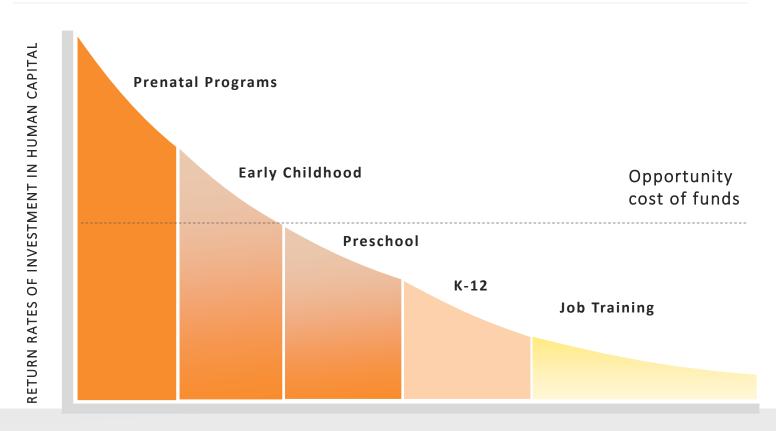






## Early Investments, Greatest Gains

#### Rates Of Return To Human Capital Investment



#### **Benefits of Early Investment**

## INCREASES IN

- Children's cognitive and social-emotional development
- Educational performance and graduation rates
- Parental involvement
- Job training and earnings

# REDUCTION IN

- Iuvenile and adult crimes
- Cases of abuse and neglect
- Intimate partner violence
- Welfare dependency
- Special education







## Potential Opportunities in California for Start up and Sustainability

1

#### **Grant Opportunities**

- Payment for dyadic services, particularly for children and caregivers enrolled in same MCO
- Focus on reducing total cost of care for entire family
- Value-based payment options, including new HEDIS measure on maternal depression
- SDOH synergies

2

#### **Billing Opportunities**

 Funds to support site expansion, trainings, and/or and state sustainability efforts

 National Office can provide support 3

#### **Pediatric billing and coding opportunities**

- Explore HealthySteps current billing and coding opportunities and best practices from other states
- Opportunities around maternal depression screening, SDOH/family risk screening, care coordination, and systems navigation



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## Our Traditional Fee-for-Service Health Care System Pays for Behavioral Health Problems, Not Prevention

#### Continuum of behavioral health services and supports for children

Prevention:
Typically not available or covered

Problems:
Provided and covered

#### Insurers and payers usually:

- Only pay for diagnosis-driven services
- Focus on short-term saving opportunities
- View young children as healthy and low-cost, so new investments in prevention are not prioritized
- Lack an understanding around the early brain science and importance of dyadic services for young children and caregivers



Advocating to California Medicaid for First-Time Ever **Dyadic Benefits** Statewide Dyadic Medi-Cal \$800M San Francisco **Dyadic Medi-Cal Benefits Health Plan Share Our Benefit Based on** Available **Creates Dyadic** Value **HealthySteps Payment Proposition** with Payers **Benefits effective** Medi-Cal benefits passed **Dyadic payment proposed** True parity realized **January 1, 2023** 

2019 2020 2020-2021

- ✓ University of California San Francisco HS sites, HS National Office, and California Children's Trust co-create Medicaid health plan payment proposal
- ✓ Visits can be in conjunction or separate from physical health well-child visits
- ✓ Allows focus on both preventive physical and behavioral health of child and caregiver
- ✓ San Francisco model creates opening to discuss statewide dyadic payments with Medi-Cal
- ✓ Passage of first-ever dyadic benefits for preventive behavioral health
- ✓ Benefits include dyadic behavioral health well-child visits, comprehensive community supports, family training & counseling for child development, and psychoeducational services

2023



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## HealthySteps Alignment with California's Dyadic Benefit

#### TIER 3

COMPREHENSIVE SERVICES

**FAMILIES MOST AT RISK** 

Dyadic Behavioral Health Well-Child Visits (H1011)

#### **SERVICES INCLUDE**

Ongoing, preventive team-based well-child visits

#### TIER 2

SHORT-TERM SUPPORT MILD CONCERNS Comprehensive Community Supports (H2015)
Family Training & Counseling for Child Development (T1027)
Psychoeducational Services (H2027)
Psychotherapy when risk factors present (Dx code Z65.9)\*

Child development & behavior consults
Care coordination & systems navigation
Positive parenting guidance & information
Early learning resources

## TIER 1 UNIVERSAL SERVICES

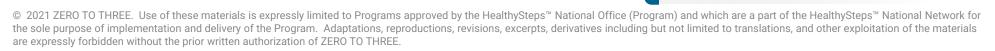
FFS reimbursement for screenings on top of well child visit payment (i.e., Developmental, ACES, Substance Misuse, Depression)

Child developmental, social-emotional & behavioral screenings

#### Screening for family needs

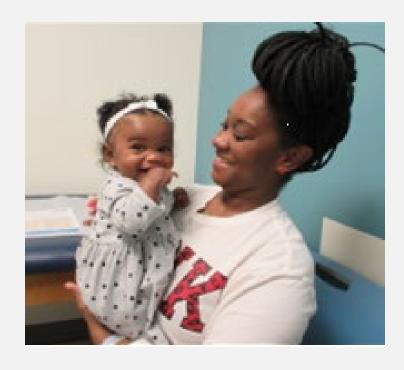
- -MATERNAL DEPRESSION
- -OTHER RISK FACTORS
- -SOCIAL DETERMINANTS OF HEALTH

Child development support line
-PHONE, TEXT, EMAIL, ONLINE PORTAL





## **Sustaining in Different Settings**



#### PRIVATE CLINICS (FEE FOR SERVICE MODEL)

- Screening revenue
- Dyadic Care benefit
- Community Health Worker
- Family Psychotherapy

#### **FQHC (PROSPECTIVE PAYMENT SYSTEM)**

- Dyadic Care benefit
- Family Psychotherapy
- Increased compliance in attending well child visits



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## Short-Term Medicaid Cost Savings



#### CHILD-FOCUSED INTERVENTIONS

- Oral health
- Asthma\*
- Appropriate use of care for ambulatory sensitive conditions
- Flu vaccine



#### **ADULT-FOCUSED INTERVENTIONS**

- Breastfeeding
- Postpartum maternal depression
- Intimate partner violence
- Healthy birth spacing
- Smoking cessation

Annual Savings to Medicaid

163% AVERAGE ANNUAL ROI

Includes analyses at state, health system, and site levels with both well-established and new sites, leveraging the HealthySteps cost savings model developed by Manatt Health.

For every \$1 invested in HealthySteps, an estimated \$2.63 in savings is realized by state Medicaid agencies each year.

\*Asthma is a recently added cost savings intervention and therefore is not captured in the 163% annual ROI calculation.



## HealthySteps Helps Support Select HEDIS Measures

HEDIS Measure	HS Area of Focus/Relevant RCT Outcomes
Children and adolescents' access to PCPs (12-24 mo., 25 mo. to 3 years)	<ul> <li>Well-child visits and immunization rates</li> <li>Children were more likely to receive a well-child visit on time<sup>1, 2, 3, 4</sup></li> <li>Children were more likely to receive vaccinations on time<sup>1, 3, 4</sup> and 1.4x more likely to be up-to-date on vaccinations by age 2<sup>1, 2</sup></li> <li>Continuity of care was better for both total visits and well-child visits<sup>4, 5</sup></li> </ul>
Childhood immunizations (total 2 years old) all combinations	
Well-child visits first 15 months	
Well-child visits (3 years)	
Annual dental visits (children 2-3)	<ul> <li>Oral health and care coordination/systems navigation</li> <li>Children were 1.4x more likely to have nonmedical referrals, including for behavior, speech, hearing, child abuse or neglect, and early intervention<sup>1</sup></li> </ul>
Weight assessment/counseling for nutrition and physical activity (3 yo)	<ul> <li>Parent education/support: Breastfeeding</li> <li>Mothers reported feeling more supported to breastfeed<sup>9</sup> and breastfed longer than the minimum 6 months recommended by the American Academy of Pediatrics<sup>2</sup></li> <li>Children identified as being "at risk" of social-emotional challenges demonstrated lower rates of obesity at age 5 than comparable children who did not receive HealthySteps<sup>10</sup></li> </ul>





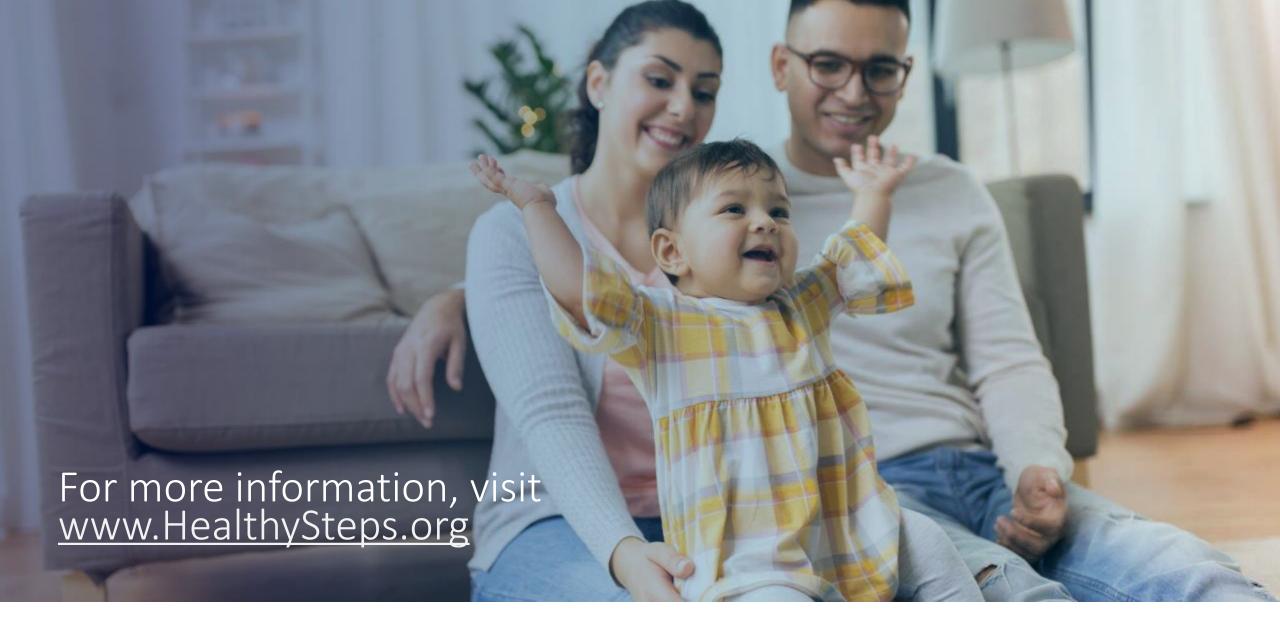
## HealthySteps Helps Support Select HEDIS Measures

HEDIS Measure	HS Area of Focus/Relevant RCT Outcomes	
Ambulatory care – emergency department visits	<ul> <li>Parental education/support: Appropriate use of care</li> <li>Children were 23% less likely to visit the emergency room for injuries in a 1-year period<sup>1</sup></li> </ul>	
Adults' access to preventative/ambulatory health services		
Postpartum care	Parental education: Unhealthy birth spacing	
	<ul> <li>Mothers were 1.4x more likely to have a nonmedical referral, including for maternal depression<sup>1</sup></li> </ul>	
	<ul> <li>Mothers with depressive symptoms were more likely to discuss their symptoms<sup>1, 2, 4</sup></li> </ul>	
	<ul> <li>Providers were more likely to discuss postpartum depression with mothers<sup>3</sup></li> <li>Mothers with depressive symptoms reported fewer symptoms after 3 months in the program<sup>9</sup></li> </ul>	
Flu vaccines for adults	Parental education: Prevention and tobacco, alcohol, and substance use	
Initiation & engagement alcohol and other drug dependence treatment	• Families were 4x more likely to receive information on community resources <sup>1</sup>	
Medical assistance with smoking and tobacco cessation (18+)		





HealthySteps A Program of ZERO TO THREE









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## HealthySteps Outcomes Citations

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- <a href="https://www.researchgate.net/profile/Cynthia-Kelly-3/publication/12527826">https://www.researchgate.net/profile/Cynthia-Kelly-3/publication/12527826</a> Outcomes Evaluation of a Comprehensive Intervention Program for Asthmatic Children Enrolled in Medicaid/links/0912f5089d09f8f06b000000 /Outcomes-Evaluation-of-a-Comprehensive-Intervention-Program-for-Asthmatic-Children-Enrolled-in-Medicaid.pdf

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#### **Intimate Partner Violence**

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1497667/pdf/15504447.pdf

#### Healthy Birth Spacing

- https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5830a1.htm
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#### **Smoking Cessation**

• <a href="http://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0029665&type=printable">http://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0029665&type=printable</a>



## Source List—Broader or Longer-Term Impacts

#### Substance Abuse

https://www.shvs.org/wp-content/uploads/2018/03/SHVS Medicaid-Opioids Final.pdf

#### **Continuous Enrollment**

https://www.macpac.gov/publication/ch-2-promoting-continuity-of-medicaid-coverage-among-adults-under-age-65/

#### **Housing Insecurity**

• <a href="http://childrenshealthwatch.org/wp-content/uploads/Unstable-Housing-and-Caregiver-and-Child-Health-in-Renter-Families.pdf">http://childrenshealthwatch.org/wp-content/uploads/Unstable-Housing-and-Caregiver-and-Child-Health-in-Renter-Families.pdf</a>

#### **Nutrition & Food Insecurity**

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