

Babies Don't Go to the Doctor By Themselves:

Innovating a Dyadic Behavioral Health Payment Model to Serve the Youngest Primary Care Patients and Their Families

AUTHORS

Kate Margolis, PhD Assistant Professor, UCSF
kathryn.margolis@ucsf.edu

Alex Briscoe Principal, California Children's Trust
alex@cachildrenstrust.org

Jennifer Tracey Senior Director of Growth and Sustainability for HealthySteps, Zero to Three
jtracey@zerotothree.org

Proposal Summary

The caregiving and family context is the most critical factor influencing development for young children ages birth to 3 years old. Pediatric well baby visits—of which there are seven during the first years of life and 12 by the time the child turns 3 years old—comprise the most frequent point of contact with the healthcare system for families with young children. Research shows this to be true even for caregivers, who are notorious for not seeking their own health care during the early years of their child’s life. As a result, much of the caregiver and family surveillance and family-based intervention to support child development (i.e. “dyadic health care services”) occurs within the context of routine well-child care in pediatrics. However, in the absence of a diagnosable mental disorder for the infant (as is the case with most children, even those at risk for future mental disorders as a result of family adversity), the majority of dyadic health care services delivered during pediatric well-child visits are not reimbursable in the current health care payment structure.

The UCSF/Zuckerberg San Francisco General Hospital and Trauma Center Children’s Health Center, in collaboration with The California Children’s Trust, proposes a one-year pilot to include dyadic health care services reimbursement codes under the Mild to Moderate Mental Health Benefit administered by California’s MediCal Managed Care Organizations. This proposal

- A statewide demonstration project to align reimbursement with clinical best practices in early childhood mental health
- Essential support for proven dyadic models
- Improving health outcomes for young children and their caregivers
- Pioneering clinical best practices to inform state-level guidance
- Demonstrating partnership with safety-net clinical leadership
- Improving screening and encounter data collection for key quality indicators

outlines four billing strategies for health plan leadership to consider. The proposal caps the financial exposure of participating plans and is restricted to the CHC.

Concurrent with the pilot’s implementation is a direct advocacy strategy to insure that Department of Health Care Services amends its guidance to plans to provide direct assurance that pilot expenditures will be included in future rate-setting negotiations. The proposal also details the historic challenges that have prevented the provision and reimbursement of dyadic models, the evidence base and health outcomes data associated with these models, and the mechanics of the pilot and associated advocacy strategy.

This proposal to Anthem Blue Cross and San Francisco Health Plan is a one-year pilot in one of San Francisco’s highest volume safety net pediatric clinics. The goal is demonstrate the clinical benefit and impact of aligning reimbursement for mild to moderate mental health services with dyadic models, specifically the evidence-based HealthySteps Model of integrated primary care.

The Children's Health Center at Zuckerberg San Francisco General Hospital

The Children's Health Center (CHC) at Zuckerberg San Francisco General Hospital and Trauma Center (ZSFG) is the largest single primary care clinic serving children on Medi-Cal in San Francisco County. Providing primary, urgent, and pediatric subspecialty care to a majority of the most marginalized children in the county, the CHC conducts approximately 32,000 annual visits for approximately 14,000 unique patients. Of the 7,000 patients who are empaneled to the CHC for primary care, approximately 3,000 are children ages birth to 5 years old.

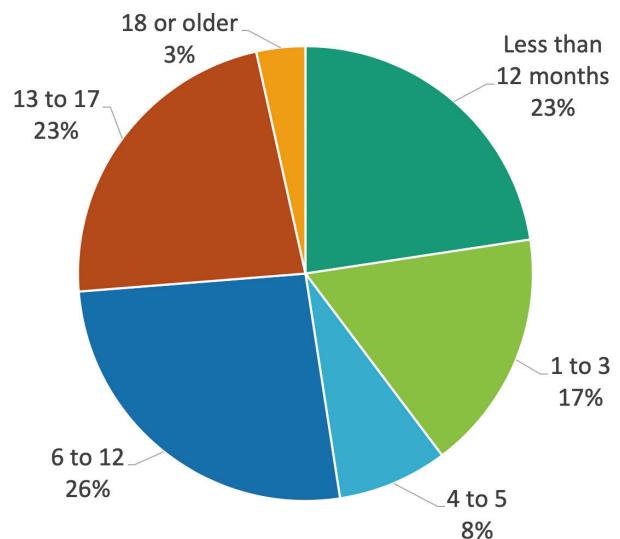
The CHC at ZSFG has an integrated behavioral health team that is funded by the San Francisco Department of Public Health, Primary Care Behavioral Health division (4.0 FTE) and UCSF departments of psychiatry and pediatrics (1.8 FTE). In 2018 the CHC behavioral health clinicians and HealthySteps Specialists provided approximately 1,150 clinical encounters. Of those encounters, 48 percent were services for children ages birth to 5 years old (See Figure 1).

Critical Primary Care-Based Dyadic Services Without a Billing Mechanism

Early childhood is the time when a person is most susceptible to their social and physical environment; it is a time of both risk and opportunity that sets the trajectory for the rest of a person's life. The need for family- and community-centered care is particularly critical in pregnancy and the first five years of life, when the architecture of the brain is established and neural connections grow at the fastest rate of a person's lifetime.

An examination of behavioral health services provided by the CHC-based behavioral health team revealed that 48 percent of services were provided for children and families with children ages birth to 5 years old. Of these 0-5 services, the majority targeted caregiver or family well-being as a mechanism for supporting healthy child development and mental health (see Figure 2). Services of this nature are called "dyadic behavioral health services." Because in the absence of a diagnosable mental disorder in the child there is no current billing model that captures services provided to the family or caregiver during pediatric well-child visits, a majority of the 48 percent of services provided to children birth to 5 years old by the ZSFG CHC integrated behavioral health team were not billable within the current payment structure defined by

FIGURE 1. Overall Age Distribution



A Dyadic Clinical Example

When a HealthySteps Specialist provides a brief intervention to a mother due to a clinically elevated postpartum depression screening score at a two-month well-baby visit, this is considered a dyadic behavioral health service. Because the target of the brief intervention was the mother in the pediatric context with the baby as the patient, the only appropriate diagnosis type that may be assigned is typically a non-billable Z-code (i.e. the diagnosis of postpartum depression, F53.0, is meant to be assigned to the adult patient and there is no existing billable diagnosis for an infant who has a mother with postpartum depression).

DHCS for the mild to moderate mental health benefit. This is in contrast to patients ages 6 and up who were served by the mild to moderate mental health benefit in 2018 whose presenting problems comprised a majority of billable concerns (see Figure 3).

Decades of research in the field of early childhood development points to dyadic models of care being the

FIGURE 2. Top 10 Presenting Problems Ages 0–5

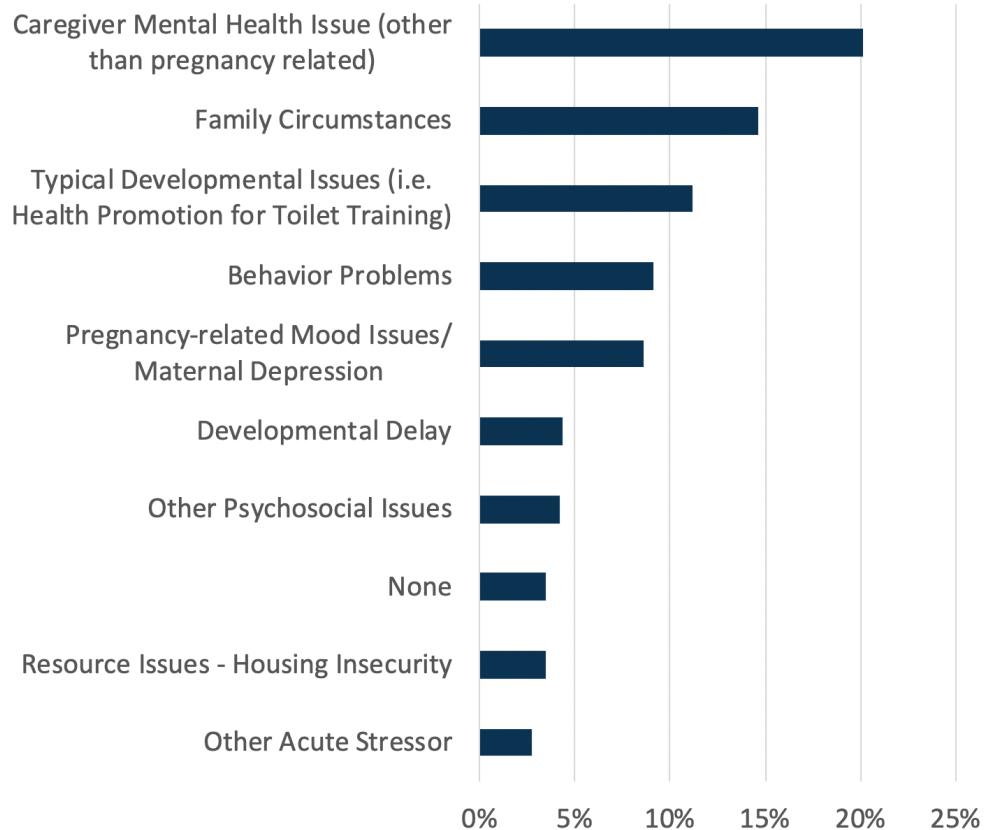
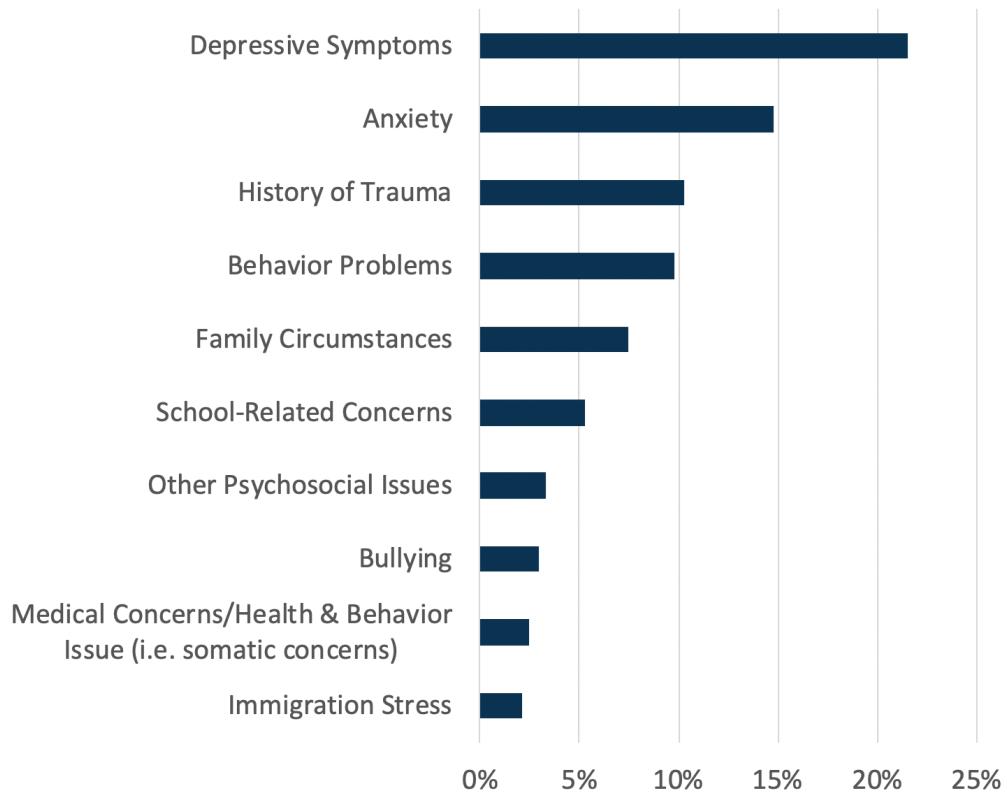


FIGURE 3. Top 10 Presenting Problems Ages 6–24



most effective form of behavioral health intervention for both preventative and acute, problem-based needs for children during infancy and early childhood. While the specialty mental health system has created a pathway for payment of dyadic services, the problem is that the majority of infants and young children will never interface with the specialty mental health system. Given the frequency of contact with primary care for families with children birth to 5 years old, the mild to moderate, non-specialty mental health system is exceptionally positioned to provide both preventative and mild to moderate behavioral health care to these families, thus ensuring they will never need to utilize the specialty mental health system. Without a payment model to support dyadic services in primary care, we are unable to serve these families effectively, and are therefore forced to wait until a mental health diagnosis develops in order to provide a billable service. By the time this happens, the trajectory of mental illness has already set in and it is often too late to stop it.

Fortunately, the evidence-based model of primary care-based dyadic behavioral health care already exists. With over 30 years of evidence, HealthySteps (healthysteps.org; see Appendix A) is a team-based integrated model of care that targets the dyad in order to promote developmental, social-emotional, and family well-being while preventing psychopathology from developing in children. While HealthySteps is recognized as the gold standard of primary care-based dyadic behavioral health care for young children and their families, the siloing of behavioral and medical payment systems has led to challenges sustaining HealthySteps programs. (See Appendix A for a description of dyadic behavioral health models, a summary of the HealthySteps model, and its evidence.)

Providing a pathway to pay for primary-care based dyadic behavioral health services (i.e. “dyadic billing”), programs like HealthySteps could support a workforce that has the ability to transform the way we care for babies, young children, and their families on a population level.

Current Barriers & Benefits to the Health Plans

Under current practice and guidance, both Mental Health Plan (MHP) EPSDT and MCO Mild to Moderate (MCO MM) reimbursement is misaligned with dyadic models. Despite the demonstrated evidence of the importance and effectiveness of these models in improving health outcomes for children and their caregivers, a combination of the narrow state definition of the mild to moderate benefit, narrow diagnostic criteria, confusion regarding assignment of an identified patient, numerous contracting and administrative barriers, and challenges arising from PCP assignment have stymied scalable models of dyadic care in high-volume safety net clinics.

BENEFIT: PARTNERSHIP TOWARDS HEALTHY FAMILIES, HEALTHY CHILDREN

This pilot is meant to serve as a demonstration to state and national policy makers, health system leadership, and clinician advocates. We hope to demonstrate that partnership between managed care plan leadership and clinical leadership can overcome the barriers noted above. Our aim is first and foremost to improve the lives of children and their caregivers, and secondly to change practice statewide in ways that improve data collection and provider certification challenges, and positively impact quality and compliance metrics for payors.

BENEFIT: IMPROVED METRICS

As outlined in Appendix A, HealthySteps has decades of evidence delivering on child development and family outcomes that align with San Francisco MCOs' metrics. For example, HealthySteps' success in improving well-child visit and immunization adherence aligns with the current QIP metric targeting six well-child visits attended by age 15 months. **The local HealthySteps program at the CHC has already made progress in this domain by demonstrating a 94 percent rate of adherence to well-child visits of the 194 visits that were planned for Tier 3 HealthySteps enrollees.** As illuminated in the 2019 audit, SFHP performed relatively better in the prevention domain than the rest of the state; however, many managed care plans struggle to meet the Bright Futures periodicity guidelines.

BENEFIT: IMPROVED COORDINATION & ACCESS TO CARE

The HealthySteps dyadic model offers the potential to reach families during the well-child visit to impact the total cost of care for the family unit through promotion of preventive and routine healthcare. The model ensures a provision of brief behavioral health interventions (including for maternal depression) for families during well-child visits, referrals for substance abuse, family planning, and successful participation in early intervention. HealthySteps places a very heavy emphasis on closed loop referrals where the HealthySteps Specialist works with other clinic- and community-based resources to ensure families are linked with services and actually receive those services.

BENEFIT: REACHING HIGH UTILIZING CAREGIVERS

According to the HealthySteps National Office, there is a growing interest by Medicaid MCOs to think more about team-based care and the benefits of programs like HealthySteps that not only provide critical services to young children but also to their caregivers in a safe and positively stigmatized setting like pediatric care. **There's an untapped opportunity to reach caregivers during the 12 well child visits in the first three years of life and address some of the issues that may be impacting adults and for which they may not otherwise seek care**—oftentimes due to the lack of a primary care provider or stigma associated with their concerns. An MCO in Washington, D.C., ran claims data for families being served in HealthySteps and found that these parents were often the most difficult to reach, had frequent ER visits and behavioral health crises, had substance abuse issues, and were dealing with very significant social needs challenges. While we know that these adults may not seek care for their own concerns, they will take their children to well-child visits.

Dyadic programs like HealthySteps are also of particular interest in Medicaid expansion states where children are often enrolled in the same plan as their caregivers and MCOs can benefit from dyadic service delivery to bring down the total cost of care for the entire family. Delivering HealthySteps in the San Francisco Health Network has the potential to link caregivers to adult services on the same day those concerns are identified through the well-child visits.

Proposed Pilot Structure

CHC Proposes a one-year pilot implemented in close coordination with state level advocacy. CHC has been coordinating carefully with state and philanthropic leadership on the design and development of this pilot. We are laser focused, ensuring that we carefully protect and manage our partners' financial exposure. CHC commits to an advocacy strategy that clearly identifies the steps necessary to ensure that expenditures made by plans become eligible for inclusion in rate setting negotiations as soon as possible.

PROPOSED TERM:

September 1, 2020 – August 31, 2021

FUNDING:

Each Medi-Cal MCO agrees to reimburse services up to the following limits divided proportionately to each plan's respective Medi-Cal membership. Once the billing cap is reached, the plan will continue to process the encounters but at \$0 payment. Philanthropy would be used to offset the costs at that point.

San Francisco Health Plan	Anthem Blue Cross
\$415,000	\$115,000

Mechanics

- CHC will execute a contract amendment with Anthem and SFHP (or their respective behavioral health partner) to expand the array of billable service codes and permissible diagnosis codes.
- CHC agrees to collect provider certification and billable service codes and permissible diagnosis codes. In accordance with the terms of its contract, CHC will complete all required credentialing and submit all required reporting.
- Health Plan partners agree to direct their staff or intermediaries to reimburse these codes consistent with schedule and agreements consistent with reimbursement under the Mild to Moderate Mental Health benefit.

Proposal for code expansion is outlined below.

PROPOSED BILLING AND CODING STRATEGIES

Drawing upon strategies employed by various states using HealthySteps, yielding a 204 percent average annual return on investment for their Medicaid participants, our proposal for code expansion for the local MCOs' consideration is below. These strategies include code expansion and allowing reimbursement for Z-code diagnoses that would support dyadic behavioral health services. (See Appendix B for a list of proposed expanded CPT codes and see Appendix C for a list of Z-codes being proposed to pair with expanded CPT codes. See Appendix D for case examples that employ a variety of these strategies for both a Tier 3 and a Tier 2 HealthySteps enrollee.) Appendix E details a range of billing opportunities for HealthySteps services that was compiled by the National HealthySteps office and showcases what sites are doing nationally.

1. Reimbursement for Z-Codes as a primary diagnosis for currently accepted CPT codes:

There are a variety of CPT codes that are employed in the diagnosis and management of behavioral health concerns. These diagnoses can only be reimbursed when paired with an F-code, and in some cases through SFHP, an R-code, which is assigned when there is a mental, behavioral, or neurodevelopmental disorder. As described above, the majority of HealthySteps services are dyadic behavioral health services, meaning that no "disorder" is present and instead the target is either prevention or a caregiver mental or behavioral disorder. Expanding currently

accepted CPT codes to be reimbursable when paired not only with an F- or R-code but also with a Z-code would enable reimbursement for the majority of preventive and dyadic behavioral health services as are characteristic of the birth- to 5-year-old population seen in primary care. Example Z-codes would include: Z59.1 inadequate housing; Z60.3 acculturation difficulty; Z62.0 inadequate parental supervision and control; and Z71.89 other specified counseling. A list of Z-codes most relevant to HealthySteps services is included in Appendix C.

2. Opening Health and Behavior Assessment and Intervention Codes:

Health and Behavior codes are for the psychosocial treatment of medical problems. In order to bill for these codes the primary diagnosis addressed in the intervention must be a physical health diagnosis, such as insomnia, heart disease, diabetes, psoriasis, etc. While Health and Behavior codes are most commonly used for chronic health problems in the adult health care system, these codes may also be applied when a physical diagnosis for an infant or young child is present and assigned by a primary care provider. Examples of relevant medical diagnoses that may be associated with a Health and Behavior Code include: R68.12 fussy baby, P07.0 extremely low birth weight, R63.5 abnormal weight gain, R62.5 unspecified lack of expected normal physiological development in childhood. Of note: SFHP currently allows for the association of some R- ICD-10 codes with currently accepted CPT codes under the mild to moderate benefit. Expansion of this strategy to other plans would meet a similar goal to opening Health & Behavior Codes.

3. Opening H-Behavioral Health Prevention Codes:

Considering a large proportion of dyadic behavioral health services target a caregiver problem as a prevention mechanism for the infant or young child, the majority of services with the pediatric patient as target would be considered "prevention" services. Consequently, it is most commonly the case that no pediatric diagnosis is present (i.e. for example in the case of a 2-week-old baby with a mother who has postpartum depression). Allowing the use of behavioral health prevention H-codes, such as H0025 (behavioral health prevention education service—delivery of services with target population to affect knowledge, attitude, and/or behavior), would enable the use of dyadic behavioral health services that target a caregiver.

4. Screening for Maternal and Postpartum

Depression:

The Edinburgh Postnatal Depression Scale and the PHQ-2/PHQ-9 are evidence-based tools employed by pediatric primary care to screen for maternal/postpartum depression **during the pediatric well-child visit**. The American Academy of Pediatrics through Bright Futures Guidelines recommends screening for postpartum depression at every well-child visit until the infant is 6 months old. The CHC has a 90 percent screening rate using the Edinburgh scale for all eligible patients through their six months well-child visit. Currently no revenue is being generated for the use of this screening tool and subsequent compliance with Bright Futures Guidelines. Many states offer reimbursement for postpartum depression screening and maternal depression screening **at the pediatric well visit**—newly adopted HEDIS metrics in California. Currently, when done in the pediatric setting (versus the caregiver's medical visit), metrics and payment related to caregiver depression screening **even at the pediatric well visit** are not captured. An example of how this code is used by other states is as follows:

- **CPT Code 96161:**

Administration of a caregiver-focused health risk assessment instrument (e.g., health hazard appraisal) with scoring and documentation, per standardized instrument.

- **ICD10-CM Covered Diagnosis:**

- Z00.110 Health examination for a newborn under 8 days old
- Z00.111 Health examination for a newborn 8 to 28 days old
- Z00.121 Encounter for routine child health exam with abnormal findings
- Z00.129 Encounter for routine child health exam w/out abnormal findings

Defining a Successful Pilot

- CHC develops a scalable and sustainable model for delivery of dyadic services.
- CHC reports on HealthySteps metrics, including postpartum depression screening, developmental screening, rates of immunization of HealthySteps enrollees versus a comparable sample of non-enrollees, rates of attendance at well-child visits of HealthySteps enrollees versus a comparable sample of non-enrollees, and number of members receiving HealthySteps services. Finally, we will report on number of referrals HealthySteps makes to certain key services that drive cost-savings or are a priority, including family planning referrals, oral health, etc.
- CHC enrolls a minimum of 300 children in Tier 3 HealthySteps during the pilot year.
- CHC provides a minimum of 300 encounters for Tier 2 HealthySteps services.
- Health Plan partners are recognized for their leadership in addressing the health and welfare of children and families.
- Health Plan partners collect critical encounter and screening data.
- Health Plan looks at total cost of care for family unit when possible.
- DHCS formally adds the CPT/Z codes to their guidance on qualifying codes for the Mild to Moderate benefit.
- Health Plan partners are assured that pilot expenditures will be considered qualified expenditures in the look-back period for future rate setting.

Data Sources

Boyce, W., Essex, M., Alkon, A., Goldsmith, H., Kraemer, H., & Kupfer, J. (2006). Early father involvement moderates biobehavioral susceptibility to mental health problems in middle childhood. *American Academy of Child Adolescent Psychiatry*, 45(12), 1510–1520.

Campbell, F., Conti, G., Heckman, J., Moon, S., Pinto, R., Pungello, E., & Pan, Y. (2014). Early childhood investments substantially boost adult health. *Science*, 343(6178), 1478–1485. doi:10.1126/science.1248429

Center for Study of Social Policy. (2018). Strengthening Families Framework [PDF File]. Retrieved from <https://cssp.org/wpcontent/uploads/2018/11/About-Strengthening-Families.pdf>

Department of Health Care Services (2015). Medi-Cal Quick Stats. Retrieved from https://calhospital.org/sites/main/files/fileattachments/medi-cal_penetration_brief_ada.pdf

Harvard Center on the Developing Child. (2007). In Brief: The Science of Early Childhood Development [PDF File]. Retrieved from <https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp-content/uploads/2007/03/InBrief-The-Science-of-Early-ChildhoodDevelopment2.pdf>

Health for California. Medicaid Eligibility & Requirements in California. Health for California Insurance Center. <https://www.healthforcalifornia.com/covered-california/health-insurance-companies/medi-cal/eligibility-requirements>

Laura & John Arnold Foundation. (2017). Evidence Summary for the Perry Preschool Project. Retrieved from <https://evidencebasedprograms.org/document/perry-preschool-project-evidence-summary/>

Laura & John Arnold Foundation. (2017). Evidence Summary for the Perry Preschool Project. Retrieved from <https://evidencebasedprograms.org/document/perry-preschool-project-evidence-summary/>

Luo, Y., Hétu, S., Lohrenz, T., Hula, A., Dayan, P., Ramey, S. L., ... Ramey, C. (2018). Early childhood investment impacts social decisionmaking four decades later. *Nature Communications*, 9(1). <https://doi.org/10.1038/s41467-018-07138-5>

Masse, L., & Barnett, W. (2002). Cost-effectiveness and educational policy. Levin H., & McEwan, P. (Eds). Larchmont, NY: American Education Finance Association

National Scientific Council on the Developing Child. (2015). Supportive Relationships and Active Skill-Building Strengthen the Foundations of Resilience [PDF file]. Retrieved from <http://developingchild.harvard.edu/wp-content/uploads/2015/05/The-Scienceof-Resilience.pdf>

Newland, L. (2014). Supportive family contexts: Promoting child wellbeing and resilience. *Early Child Development and Care*, 184, 9-10. doi: 10.1080/03004430.2013.875543

Strathearn, L. (2007). Exploring the neurobiology of attachment. In: Mayes, L., Fonagy, P., & Target, M, (Eds). *Developmental science and psychoanalysis*. London: Karnak Books.

Trust for America's Health and Well Being Trust. (2019). Addressing a Crisis: Cross-Sector Strategies to Prevent Adolescent Substance Use and Suicide. From PAIN IN THE NATION SERIES: Building a National Resilience Strategy.

<https://wellbeingtrust.org/wp-content/uploads/2019/10/Adolscent-Pain-in-the-Nation-Rpt-FINAL.pdf>

U.S. Census Bureau (2019). QuickFacts, Alameda County, California. Retrieved from <https://www.census.gov/quickfacts/alamedacountycalifornia>

Appendix A

Source: [healthysteps.org](https://www.healthysteps.org) and "HealthySteps Evidence Summary," HealthySteps National Office. Available here: <https://www.healthysteps.org/article/healthysteps-outcomes-summary-20> Questions about these data may be directed to HealthySteps Senior Director of Growth and Sustainability Jennifer Tracey (jtracey@zerothree.org).

DYADIC MODELS OF CARE

Clinical models that target the relationship between the infant and their caregiver acknowledge that the caregiving relationship is the single most important developmental context for a young child. In order to ensure positive health and development of an infant and young child, the caregiving relationship and the caregiver's well-being must be the target of clinical interventions during early childhood. Dyadic therapy models, such as HealthySteps and Child Parent Psychotherapy (CPP) have a strong evidence base to support the effectiveness in mitigating the effects of trauma and adversity experienced in early childhood by targeting the dyadic infant/caregiver relationship. Due to their evidence base and strong support in the specialty mental health system, models such as CPP are seen as the gold standard of care for young children who have experienced adversity.

While the specialty mental health system has established payment models for evidence-based dyadic therapy, the managed care system has yet to establish a payment model for similar dyadic clinical services that are delivered as part of primary care, the single most frequent point of contact with the health care system for families with young children.

HEALTHYSTEPS: THE MODEL

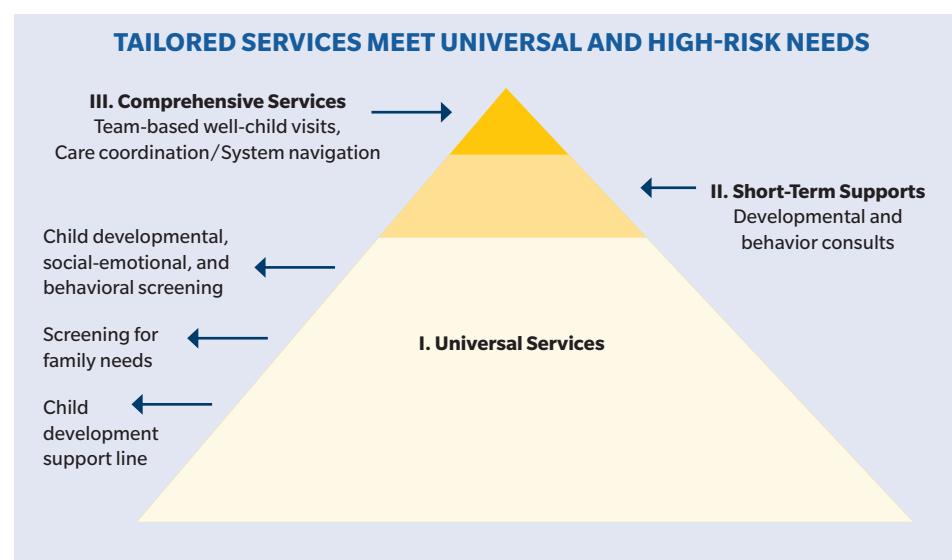
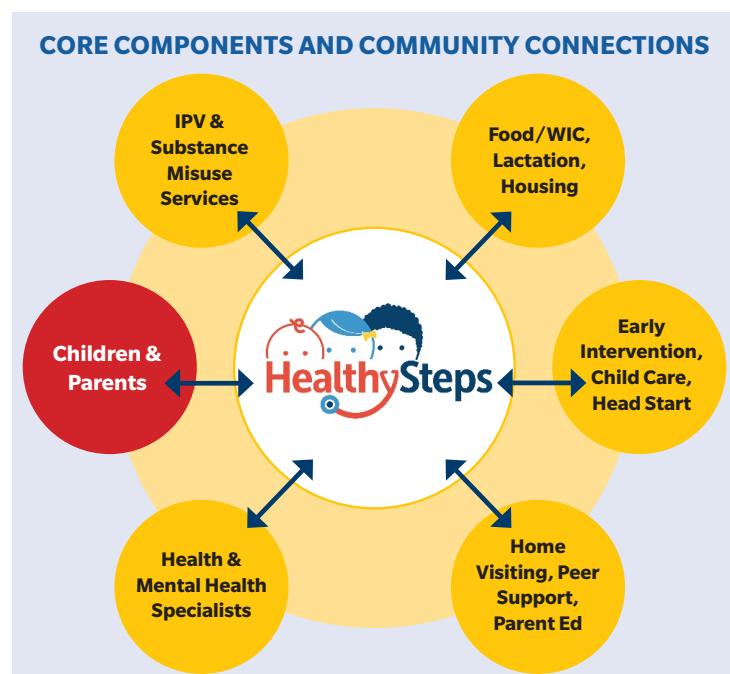
HealthySteps is a population-based, risk-stratified model that helps to operationalize and enhance the American Academy of Pediatrics Bright Futures recommendations.

The HealthySteps Specialist, a child development expert and behavioral health clinician, joins the pediatric primary care team to ensure universal screening, provide successful interventions, referrals, and follow-up to the whole family.

HealthySteps Specialists build strong relationships with families and providers, and the lives of children and families improve.

Because of HealthySteps, families receive early preventive services and the entire practice also benefits: HealthySteps increases the efficiency of the medical system and supports team-based comprehensive care.

Tier 1 involves universal screening for social and mental health needs. Tier 2 refers to short-term support on an as-needed basis from an HSS. Tier 3 is for the highest-risk families and involves an HSS attending all the well-child checks in tandem with the medical



provider, in addition to follow-up between visits for critical needs.

HEALTHYSTEPS: THE EVIDENCE

HealthySteps is an evidence-based model of primary care that provides dyadic support to families with young children during the context of their routine primary care visits. Thirty years of research over numerous clinical sites across a variety of states in the U.S. have consistently demonstrated the positive impact of the HealthySteps model on both infant and caregiver well-being, provider satisfaction, and cost savings to the health care system for both pediatric and adult metrics (See Appendix A for a complete summary of outcomes).

HealthySteps has significant positive outcomes for children, their families, and the physicians and practices that serve them. That was the conclusion, published in 2003, of a National Evaluation of HealthySteps conducted by the Johns Hopkins Bloomberg School of Public Health Women's and Children's Health Policy Center. The evaluation, which studied 15 clinics serving more than 5,500 children and their families across the country and the economic spectrum, included both a randomized controlled trial (RCT) and a quasi-experimental comparison study. An accompanying Affiliate Evaluation showed that HealthySteps could be effectively delivered to low-income and high-risk families. **RCT findings showed that by age 2, HealthySteps children:**

- **were twice as likely as children in the control group to make timely well-child visits**
- **were 1.4 times more likely to be up-to-date on vaccinations**
- **visited the emergency room 23 percent less frequently for injuries**

Overall, HealthySteps significantly reduced income disparities in access to preventive services.

- Children were 1.4 times more likely to have nonmedical referrals, including behavior, speech, hearing, child abuse or neglect, and early intervention.
- Parents received more services.

In 2007, the continuing RCT published findings showing sustained treatment effects when HealthySteps children were 5.5 years old.

Other research has shown additional outcomes:

- A clinical trial published in 2006 found that HealthySteps improved rates of breastfeeding and injury prevention, and reduced television viewing—three American Academy of Pediatrics recommendations.
- A quasi-experimental, longitudinal study published in 2014 in Clinical Practice in Pediatric Psychology found that HealthySteps moderated the deleterious effects that parents who experienced trauma during childhood can have on the social-emotional development of their children.

HEALTHYSTEPS' RETURN ON INVESTMENT

The HealthySteps national office has conducted several statewide business cases to understand the potential cost savings to MCOs for participants who are enrolled in Medicaid. Business cases conducted in New York, Colorado, Arizona, and Kentucky have demonstrated an average annual savings to Medicaid of 204 percent as a result of patients enrolled in HealthySteps. Short-term Medicaid cost savings on child interventions included well-child visit and immunization rates, oral health, and inappropriate use of care for ambulatory sensitive conditions. Short-term Medicaid cost savings for adult-focused interventions included breastfeeding, postpartum maternal depression, intimate partner violence, unhealthy birth spacing, and smoking cessation. It is estimated that the annual Medicaid cost can be as low as \$100 for all children birth to three in a practice and as low as \$450 for children receiving the most intensive Tier 3 services.



HealthySteps Evidence Summary

HealthySteps is supported by a strong evidence base, including a 15-site national evaluation and several more recent site-level evaluations. For more information on key outcomes, please visit our website: <https://www.healthysteps.org/the-evidence>

Child Health & Development

- Children were more likely to receive a well-child visit on time^{1, 2, 3, 4}
- Children were more likely to receive vaccinations on time^{1, 3, 4} and 1.4x more likely to be up-to-date on vaccinations by age 2^{1, 2}
- Children were 8x more likely to receive a developmental assessment at 30–33 months¹
- Continuity of care was better for both total visits and well-child visits^{4, 5}
- Children whose mothers reported childhood trauma scored better on a social-emotional screening after receiving HealthySteps than comparable children who did not receive the program⁶
- One longitudinal analysis indicated that HealthySteps participation was associated with greater security of attachment and fewer child behavior problems⁷

Connections to Resources

- Children were 1.4x more likely to have nonmedical referrals, including for behavior, speech, hearing, child abuse or neglect, and early intervention¹
- Families were 4x more likely to receive information on community resources¹
- Parents received more services^{3, 4, 8} and had longer clinic visits⁴

Breastfeeding & Early Nutrition

- Mothers reported feeling more supported to breastfeed⁹ and breastfed longer than the minimum 6 months recommended by the American Academy of Pediatrics²
- Mothers were 22% less likely to give newborns water and 16% less likely to introduce cereal by 2–4 months old (too young for solid foods)¹
- 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 HealthySteps¹⁰

Child Safety

- Children were 23% less likely to visit the emergency room for injuries in a 1-year period¹
- Mothers were 24% less likely to place newborns on their stomachs to sleep, reducing SIDS risk¹
- Parents scored higher on an injury control index, and families were more likely to use stair gates and have access to the local poison control center's telephone number^{2, 9}



ZERO TO THREE
Early connections last a lifetime

Copyright © 2017 by ZERO TO THREE. All rights reserved.
Developed and powered by ZERO TO THREE www.zerotothree.org



HealthySteps Evidence Summary

Parenting Knowledge & Practices

- Parents were 22% less likely to rely on harsh punishment (yelling, spanking with hand)¹
- Parents were less likely to use severe discipline (face slap, spanking with objects)^{1,2}
- Parents were more likely to notice behavioral cues and provide age-appropriate nurturing^{1,4}
- Families received more anticipatory guidance that matched their needs^{4,11}
- 12 key child development and family-specific topics were discussed more frequently³
- Parents demonstrated a better understanding of infant development⁹

Parent & Physician Satisfaction

- Parents were 2x more likely to report that someone at the practice went out of the way for them, and they were 1.5x more likely to rely on someone in the practice for advice (rather than friend or relative)¹
- Parents were 1.8x more likely to remain with the practice through 20 months¹¹
- Parents rated their provider as more competent and caring⁴ and were more likely to believe that the health plan cared about them as a parent⁹
- Participating physicians indicated they were highly satisfied with the program and with the role of the HealthySteps Specialist with parents⁴

Maternal Depression

- Mothers with depressive symptoms were more likely to discuss their symptoms^{1,2,4}
- Mothers were 1.4x more likely to have a nonmedical referral, including for maternal depression¹
- Providers were more likely to discuss postpartum depression with mothers³
- Mothers with depressive symptoms reported fewer symptoms after 3 months in the program⁹

Early Literacy & School Readiness

- Mothers were 22% more likely to show picture books to their infants every day¹
- Mothers were 12% more likely to have read to their infant in previous week⁹
- Beyond 5 years, families were more likely to report that their child had looked at or read books in the previous week¹¹
- Parents were more successful in establishing routines, reading to children, and limiting television viewing time⁴



ZERO TO THREE
Early connections last a lifetime

Copyright © 2017 by ZERO TO THREE. All rights reserved.

Developed and powered by ZERO TO THREE www.zerotothree.org



HealthySteps Evidence Summary

Citations

1. Guyer, B., Barth, M., Bishai, D., Caughy, M., Clark, B., Burkum, D.,... Tang, C. (2003). *Healthy Steps: The first three years: The Healthy Steps for Young Children Program National Evaluation*. Johns Hopkins Bloomberg School of Public Health, February 28, 2003.
- Johnston, B. D., Huebner, C. E., Anderson, M. L., Tyll, L. T., & Thompson, R. S. (2006). Healthy Steps in an integrated delivery system: Child and parent outcomes at 30 months.
2. *Archives of Pediatrics & Adolescent Medicine*, 160(8), 793–800.
- Buchholz, M., & Talmi, A. (2012). What we talked about at the pediatrician's office: Exploring differences between Healthy Steps and traditional pediatric primary care visits.
3. *Infant Mental Health Journal*, 33(4), 430–436.
- Piotrowski, C. C., Talavera, G. A., & Mayer, J. A. (2009). Healthy Steps: A systematic review of a preventive practice-based model of pediatric care. *Journal of Developmental and Behavioral Pediatrics*, 30(1), 91–103.
- Niederman, L. G., Schwartz, A., Connell, K. J., & Silverman, K. (2007). Healthy Steps for Young Children Program in pediatric residency training: Impact on primary care
5. outcomes. *Pediatrics*, 120(3), e596–e603.
- Briggs, R. D., Silver, E. J., Krug, L. M., Mason, Z. S., Schrag, R. D. A., Chinitz, S., & Racine, A. D. (2014). Healthy Steps as a moderator: The impact of maternal trauma on child
6. social-emotional development. *Clinical Practice in Pediatric Psychology*, 2(2), 166–175.
- Caughy, M. O., Huang, K., Miller, T., & Genevro, J. L. (2004). The effects of the Healthy Steps for Young Children program: Results from observations of parenting and
7. child development. *Early Childhood Research Quarterly*, 19(4), 611–630.
- Huebner, C. E., Barlow, W. E., Tyll, L. T., Johnston, B. D., & Thompson, R. S. (2004). Expanding developmental and behavioral services for newborns in primary care: Program
8. design, delivery, and evaluation framework. *American Journal of Preventive Medicine*, 26(4), 344–355.
- Johnston, B. D., Huebner, C. E., Tyll, L. T., Barlow, W. E., & Thompson, R. S. (2004). Expanding developmental and behavioral services for newborns in primary care: Effects on
9. parental well-being, practice and satisfaction. *American Journal of Preventative Medicine*, 26(4), 356–366.
- Gross, R. S., Briggs, R. D., Hershberg, R. S., Silver, E. J., Velazco, N. K., Hauser, N. R., & Racine, A. D. (2015). Early child social-emotional problems and child obesity: Exploring the
10. protective role of a primary care-based general parenting intervention. *Journal of Developmental and Behavioral Pediatrics*, 36(8), 594–604.
- Minkovitz, C. S., Strobino, D., Mistry, K. B., Scharfstein, D. O., Grason, H., Hou, W., Lalongo, N., & Guyer, B. (2007). Healthy Steps for Young Children: Sustained results at 5.5
11. years. *Pediatrics*, 120(3), e658–e668.

Appendix B

Medicaid reimbursement rates determined in accordance with the following website:

https://files.medi-cal.ca.gov/pubsdoco/Rates/rates_range_display.asp

CPT Code Possibilities with Associated Z-Code or Other Diagnosis Type					
Code	Descriptor	Unit Rate	Basic Rate	Example Diagnosis	Diagnosis Descriptor
90791	Diagnostic assessment with no medical	96.06	96.06	Z60.9	Problem related to social environment, unspecified
90847	Family psychotherapy with patient present	76.77	76.77	Z60.9	Problem related to social environment, unspecified
96156	HB Assessment/Reassessment	102.80	84.30	Z00.12	
96167	HB Intervention Family Present, 1st 30	75.40	61.83	P00.89	Routine health exam
96168	HB Intervention Family Present, each additional	26.76	21.95		
H0025	Behavioral health prevention education service (delivery of services with target population to affect knowledge, attitude, and/or behavior)			Z60.9	Problem related to social environment, unspecified
G0511	20 or more minutes/month of General Care Management, including activities previously billed as Chronic Care Management (99490 or 99487)	45.11	36.99	Z60.9	Problem related to social environment, unspecified
99484	General Behavioral Health integration-care management for behavioral health conditions-20 minutes of care				
96110	Developmental Screener	54.00	54.00		
G9919 or G9920	ACEs Screener – Positive ACEs Screener – At Risk	29.00 29.00	29.00 29.00		

Appendix C

Source: Excerpt from "HealthySteps Billing & Coding Opportunities," HealthySteps National Office. Questions about these data may be directed to HealthySteps Senior Director of Growth and Sustainability Jennifer Tracey (jtracey@zerotothree.org).

HealthySteps Billing and Coding Opportunities

Sample of ICD-10 (International Classification of Disease, 10th edition) Z-Codes for the reporting of Child and/or Caregiver Risk Factors Related to Treatment and Social Determinants of Health

ICD-10 Code	DESCRIPTION
Problems Related to Education, Literacy, Employment and Unemployment	
Z56.0	Unemployment
Z69.6	Low income
Z59.4	Extreme poverty
Z59.7	Insufficient social insurance and welfare support
Z55.0	Illiteracy and low-level literacy
Housing and Economic Circumstances	
Z59.0	Homelessness
Z59.1	Inadequate housing
Z59.4	Lack of adequate food and safe drinking water
Environment	
Z60.3	Acculturation difficulty (problems with migration, problem with social transplantation)
Z62.0	Inadequate parental supervision and control
Z62.21	Child in welfare custody
Z62.22	Institutional upbringing

Appendix D

HS Tier 2 Case Example				
Visit	Intervention	Code	Billed	Other Notes
2 month WCC	Maternal mental health assessment	H0025 G0511	~20.00 45.11	Infant Diagnosis: P00.89 – Newborn affected by maternal condition Care coordination with maternal obstetrics provider to determine appropriate therapy linkage
BH Follow-up at 2 weeks post clinic visit	Assessment and brief intervention targeting maternal mental health impact on breastfeeding	96156 96167 G0511	102.80 75.40 45.11	Maternal mental health assessment Maternal mental health and breastfeeding intervention Care Management/Linkage of mother to primary care medical home for psychiatry and therapy services
BH Follow-up at 4 weeks post clinic visit	Brief intervention targeting maternal mental health impact on breastfeeding	96167 96168 G0511	75.40 26.76 45.11	Postpartum depression counseling and behavioral health breastfeeding support Follow-up on linkage/care coordination with maternal primary care provider
4 months WCC	HS Tier 2 Visit	96167	75.40	Breastfeeding support in context of maternal depression
6 months WCC	HS Tier 2 Visit	H0025 G0511	~20.00 45.11	Infant Diagnosis: P00.89 – Newborn affected by maternal condition Postpartum depression support and discharge planning from HS Tier 2
Reimbursement on clinic-based services		\$576.20 over 4 months (5 encounters)		
1,000 Tier 2 HS Participants x \$576.20		\$576,200 annually		
Other cost savings		Reduced inappropriate ED/UC utilization, dental health		
Other cost savings (maternal)		Reduced inappropriate ED/UC utilization, increased use of maternal primary care, increased breastfeeding success, increased birth spacing		

Healthy Steps Tier 3 Case Example				
Visit	Intervention	Code	Billed	Other Notes
Newborn WCC	HS Tier 3 Enrollment	96156	102.80	
2 week WCC	HS Tier 3 Visit	96167	75.40	
1 month WCC	HS Tier 3 Visit	96167 96168	75.40 26.76	Postpartum depression counseling and behavioral health breastfeeding support
2 months WCC	HS Tier 3 Visit	96167	75.40	
BH Follow up	HS Tier 3 F/up Visit	90791 G0511	96.06 45.11	Postpartum depression support and linkage to maternal care
4 months WCC	HS Tier 3 Visit	96167	75.40	
6 months WCC	HS Tier 3 Visit	96167	75.40	
9 months WCC	HS Tier 3 Visit	96167 96110	75.40 54	ASQ-SE screener
BH Follow up	HS Tier 3 F/up Visit	90847 G0511	76.77 45.11	Social emotional health promotion intervention + linkage support to early intervention
12 months WCC	HS Tier 3 Visit	96167	75.40	
15 months WCC	HS Tier 3 Visit	96167	75.40	
18 months WCC	HS Tier 3 Visit	96167 96110	75.40 54	ASQ-SE screener
BH Follow Up	HS Tier 3 F/up visit	90847 G0511	76.77 45.11	Maternal depression support and linkage with SDoH resources
24 months WCC	HS Tier 3 Visit	96167	75.40	
30 months WCC	HS Tier 3 Visit	96167	75.40	
36 months WCC	HS Tier 3 Visit	96167	75.40	
Reimbursement on Clinic-based services		\$1,527.29 over 3 years (509.10 annually/patient)		
600 Tier 3 HS Participants x \$1,277.69		\$916,374 over 3 years (\$305.458 annually)		
Other cost savings		Reduced inappropriate ED/UC utilization, dental health		
Other cost savings (maternal)		Reduced inappropriate ED/UC utilization, increased use of maternal primary care, increased breastfeeding success, increased birth spacing		

Appendix E

Potential HealthySteps Billing Opportunities for State Medicaid Agencies' Consideration

HealthySteps National Office Policy & Finance Team



Below are some recommendations and examples of billing select HealthySteps services under Medicaid programs in other states. This document can serve as an accompaniment to the HealthySteps National Office Billing and Coding Comprehensive Guide previously created for the HealthySteps site network.

Developmental & Social-Emotional Screening Recommendations and Examples

Overall, ensure that EPSDT screening services do not require Medicaid MCO prior authorization or referrals. Include language in MCO contracts to ensure that providers are promptly paid for preventive EPSDT covered services, including “pay and chase” provisions that do not adversely impact access to preventive services due to lack of timely reimbursement. Require that EPSDT requirements follow AAP Bright Futures guidelines – select states may not reimburse for all well-child visits between 0-3 years of age, as compared to the AAP Bright Futures periodicity schedule.

1. Developmental

- a. In terms of maximum allowed and other usage of CPT code 96110: North Dakota follows the AAP Bright Futures periodicity schedule and many other states including Alaska, Delaware, Idaho, Iowa, Kansas, Kentucky, Massachusetts, Montana, Nebraska, Nevada, New Mexico, Ohio, Oklahoma, Oregon, Rhode Island, South Dakota, Tennessee, Vermont, Virginia, West Virginia, Wisconsin, and Wyoming do not place a maximum allowable number and other usage information on developmental screenings.
- b. Who can bill for 96110 in other states?

As clinical staff typically perform 96110, many states do not have restrictions on types of professionals who administer the screenings.

2. Social-Emotional

- a. States such as Delaware, New York, New Jersey, Ohio, Oklahoma, South and North Carolina, utilize CPT code 96127 for social-emotional screenings.
- b. As with developmental screenings, Delaware’s Medicaid state agency also reimburses for social-emotional screenings when rendered by physicians, physician assistants, and nurse practitioners. They also allow licensed clinical social workers to render the service, when the physician orders the screening. The screening can then be billed under the physician.

3. Autism

- a. An example of how CPT code 96127 can be utilized for autism screening can be seen in Colorado. The state allows CPT code 96127 (Social-Emotional Screening) to be used for the billing of Autism screenings when the CPT code, 96110 (Developmental Delay Screening), is reported on the same day of service, for a different screening (e.g., the ASQ). This allows the state to capture and reimburse for all screenings rendered on the same date of service.

Potential HealthySteps Billing Opportunities for State Medicaid Agencies' Consideration

Maternal Depression Screening

Many states allow, recommend, or require Medicaid coverage for maternal depression screenings as part of a well child visit, rendered by a variety of provider types. This may provide an opportunity to advance states' efforts toward integrated physical and behavioral health including the creation of language that explicitly states that maternal depression screening is a covered Medicaid EPSDT benefit – including language allowing primary care physicians, pediatricians and other clinic staff to screen and receive reimbursement.

1. Michigan, Mississippi, South Carolina, and Washington require and separately reimburse for the service, utilizing CPT code 96161.
2. Delaware, Washington DC, Iowa, Kentucky, Maine, Maryland, Minnesota, Montana, North Carolina, South Dakota, Vermont, and Virginia recommend billing, utilizing CPT code 96161.
3. Alabama, Connecticut, Wisconsin utilizing CPT code 96161 and Nevada utilizing CPT code 96160, allow billing.
4. New York and California also allow billing for separate reimbursement, utilizing CPT codes G8510 and G8431.

ICD-10 Codes for Social Determinants of Health

Some states are initiating efforts to monitor Medicaid claims for the presence of ICD-10 codes for social determinants of health and advising providers to routinely screen for and document the presence of social determinants. While states overall are not allowing these codes to be reported as primary (indicating that the codes may not support medical necessity for a claim if coded on its own) to date, Medicaid agencies should reconsider the value of reimbursement for social determinants of health when it is the only diagnosis that can be reported.

In Philadelphia, behavioral health consultants working in FQHCs raised the potential for reimbursement of social determinants of health Z-codes, in certain instances where the most appropriate diagnosis for billable encounters is a social determinant, with their primary Medicaid MCO (Philadelphia is behavioral health carve out state). The MCO, Community Behavioral Health, recognized the nature of the work and coordinated with the Office of Mental Health and Substance Abuse Services (OMHSAS) to make the accommodation. The result was the use of a non-specific diagnosis code as primary (R69-Illness, unspecified) and the following Z codes were approved for reimbursement (support of medical necessity):

Potential HealthySteps Billing Opportunities for State Medicaid Agencies' Consideration

Z55.9	Academic or education problem
Z60.3	Acculturation difficulty
Z60.4	Social exclusion or rejection
Z60.5	Target of (perceived) adverse discrimination or persecution
Z62.29	Upbringing away from parents
Z62.820	Parent-child relational problem
Z62.891	Sibling relational problem
Z62.898	Child affected by parental relationship distress
Z63.4	Uncomplicated bereavement
Z63.5	Disruption of family by separation or divorce
Z63.8	High expressed emotional level within family
Z64.0	Problems related to unwanted pregnancy
Z69.010	Encounter for mental health services for victim of child abuse by parent
Z69.010	Encounter for mental health services for victim of child neglect by parent
Z69.010	Encounter for mental health services for victim of child psychological abuse by parent
Z69.010	Encounter for mental health services for victim of child sexual abuse by parent
Z69.020	Encounter for mental health services for victim of non-parental child abuse
Z69.020	Encounter for mental health services for victim of non-parent child neglect
Z69.020	Encounter for mental health services for victim of non-parental child psychological abuse
Z69.020	Encounter for mental health services for victim of non-parental child sexual abuse
Z70.9	Sex counseling
Z71.9	Other counseling or consultation
Z72.810	Child or adolescent antisocial behavior

General Behavioral Health Integration

New York will reimburse for general behavioral health integration, including non-physicians, for services rendered within a month, via case management code 99484. Opening this code for use in primary care might be another opportunity to advance states' goal of integrated physical and behavioral health.

Interpretation or Explanation of Results

Oklahoma and South Carolina reimburse for the interpretation or explanation of results for medical examinations and/or procedures or for other accumulated data to a patient's family or other responsible persons utilizing CPT code 90887. This code is important for HealthySteps Specialists as they support families who have children with behavioral health concerns.

Preventive Medicine Counseling and/or Risk Factor Reduction Intervention

In most states, physicians and other qualified healthcare professionals typically bill for preventive medicine counseling and/or risk factor reduction interventions. Via a pilot program, Ohio Medicaid is reimbursing HealthySteps Specialists, who are psychologists, for preventive medicine counseling and/or risk factor reduction interventions utilizing CPT codes 99402-99404 when ICD-10 code Z71.89 (Persons

Potential HealthySteps Billing Opportunities for State Medicaid Agencies' Consideration

encountering health services for other counseling and medical advice, not elsewhere classified) is billed in conjunction with the preventive medicine counseling codes.

In Washington DC, HealthySteps Specialists, who are psychologists, will soon receive reimbursement from a Medicaid MCO for preventive medicine counseling and/or risk factor reduction interventions.

Behavioral Health Prevention Education Service

- Colorado uses Regional Accountable Entities (RAEs) to coordinate behavioral and physical health care. RAEs pay providers for behavioral health services while physical health services are paid on a FFS basis. The RAEs are held to Key Performance Indicators, which are tied to incentive payments that can be passed to providers.
 - One of the RAEs has a pilot with specific HealthySteps sites to reimburse preventive behavioral health visits at a higher rate. This pilot focuses on the use of H0025 for preventive psychosocial education. Several sites are participating (including an FQHC) and using the enhanced payment to fund the full or partial cost associated with HealthySteps Specialists' salaries.
- Kentucky also reimburses for behavioral health prevention education for registered behavior technicians and peer support specialists.

States should consider opening H0025 to those individuals who possess a bachelor's or master's degree in a behavioral health field.

- New York and Massachusetts allow the work provided by those who possess a bachelor's or master's degree in a behavioral health field to be considered towards the compliant reporting of a reimbursable code. CPT code 99484 (Care management for a behavioral health condition for at least 20 minutes of clinical staff time, directed by a physician or other qualified health care professional, per calendar month) is reimbursable and allows the work of clinical staff time, supervised by either a physician, psychologist or licensed clinical social worker, to be integrated into the time and care that is incorporated into this reimbursable code.

Sources:

1. American Academy of Pediatrics: Standardized Screening/Testing Coding Fact Sheet for Primary Care Pediatricians: Developmental/Emotional/Behavioral. 1/1/2020. https://www.aap.org/en-us/Documents/coding_factsheet_developmentalscreeningtestingandEmotionalBehviorassessment.pdf