ADVANCING THE QUADRUPLE AIM IN MEDI-CAL MANAGED CARE: PROVIDER AND HEALTH PLAN LEADER PERSPECTIVES REGARDING THE INCLUSION OF PARAPROFESSIONALS ON CARE TEAMS FOR DEVELOPMENTAL SCREENING AND CARE COORDINATION

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ABSTRACT

Lindsey Anne Angelats**:** Advancing the Quadruple Aim in Medi-Cal Managed Care: Provider and Health Plan Leader Perspectives Regarding the Inclusion of Paraprofessionals on Care Teams for Developmental Screening and Care Coordination
(Under the Direction of Sandra B. Greene)

Problem

Approximately 25% of Medi-Cal enrollees receive a developmental screening in the first three years of life, a rate below the 33% national benchmark (DHCS 2020). Medi-Cal providers cite limited time as a barrier to completing developmental screenings (First 5 LA 2017). Literature supports inclusion of unlicensed paraprofessionals on teams to increase developmental screening and service referral rates (Minkovitz 2003, Warmels 2017). An understanding of facilitators and barriers to adding paraprofessionals such as community health workers (CHWs) and care coordinators to teams can inform pediatric transformation initiatives. Research regarding workforce transformation strategies is pivotal as California advances a CHW Medi-Cal benefit in 2022 and prepares for a physician shortage (Chapman 2017, LAO 2021, Spetz 2017). Pediatric paraprofessionals could advance the "quadruple aim"- improving population health, enhancing patient experience, reducing per capita cost of health care, and improving clinician work life (Bodenheimer 2014). As the majority of Medi-Cal enrollees face health disparities, ensuring pediatric members with developmental concerns are routed to services could address the "quintuple aim," which includes improving health equity (Nundy 2022).

Methodology

This mixed methods study analyzed 10 Medi-Cal providers' and 10 Medi-Cal plan clinical leaders' perceptions of facilitators and barriers impacting timely developmental screening and coordination to services and supports. The study then identified facilitators and barriers to shifting developmental screening and care coordination tasks to paraprofessionals.

Results

Medi-Cal provider and health plan informants were receptive to incorporating paraprofessionals on teams to perform select developmental screening and care coordination tasks. Facilitators included leaders committed to early identification and intervention (EII), a training and supervisory infrastructure, and software optimized for screenings and referrals. The major barrier was a perception of inadequate reimbursement. Few respondents perceived health plans as drivers of successful EII, suggesting an opportunity for California regulators to enforce screening and coordination requirements, fund pediatric workforce transformation, and route families to care coordination resources.

Recommendations

The research suggests major reimbursement needs to adequately support of developmental screening and care coordination tasks. Study findings can inform leaders pursuing pediatric workforce transformation initiatives in Medi-Cal. Additional qualitative research with paraprofessionals and families is warranted to refine workforce transformation approaches.

This dissertation is dedicated to my mother, Linda Neilsson. As a longtime 1st grade teacher, her passion for investments to ensure young children's school readiness, well-being, and capacity to thrive fueled my interest in early identification and intervention. Additionally, this dissertation is dedicated to my wonderful family- husband Rafael Angelats and children Sofia and Christian Angelats, who have always supported my wildest dreams. And finally, this dissertation is dedicated to front-line health care workers serving low-income children, especially those who work tirelessly to ensure young children have the best possible start in childhood and in life.

It is no longer a question of who will get child health care, but rather, how can appropriate health services be provided for all children. The health care manpower crisis, however, makes this impossible to achieve this goal without modification of the methods by which health care is provided…reallocation of tasks among personnel of varying skill-levels is the only practical alternative.

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LIST OF ABBREVIATIONS

AAP	American Academy of Pediatrics
ACES	Adverse Childhood Experiences Survey
ASQ	Ages and Stages Developmental Screening Tool
ASQ-SE	Ages and Stages Social-Emotional Screening Tool
CalAIM	California Advancing and Innovating Medi-Cal, an 1115 Waiver framework
CBO	Community Based Organization
CHW	Community Health Worker
CMO	Chief Medical Officer
CMS	Centers for Medicare and Medicaid Services
DDS	California Department of Developmental Services
DHCS	California Department of Health Care Services
EHR	Electronic Health Record
EII	Early Identification and Intervention
EPSDT	Early and Periodic Screening, Diagnostic and Treatment Program
FERPA	Family Educational Rights and Privacy Act
FQHC	Federally Qualified Health Center
HEDIS	Healthcare Effectiveness Data and Information Set
IEP	Individualized Educational Plan
IPA	Independent Practice Association
NCQA	National Committee on Quality Assurance
NHIS	National Health Interview Survey
MCO	Managed Care Organization
M-CHAT	The Modified Checklist for Autism in Toddlers
PCMH	Primary Care Medical Home
PEDS	Caregivers Evaluation of Developmental Status Surveillance & Screening tool

PEARLS The Pediatric ACEs and Related Life Events Screener

PPS Prospective Payment System

LIST OF TERMS

Task Shifting: Rationale redistribution of tasks among workforce teams (WHO 2008).

Task Sharing: A considered action involving health professionals working together in teams to deliver a task or service that they may not have carried out before (Dawson 2014).

Care Coordination: Care coordination involves deliberately organizing patient care activities and sharing information among all of the participants concerned with a patient's care to achieve safer and more effective care. This means that the patient's needs and preferences are known ahead of time and communicated at the right time to the right people, and this information is used to provide safe, appropriate, and effective care to the patient. (Agency for Healthcare Research and Quality 2019).

Caregiver: Term used for an adult raising a young child. Caregiver is used throughout the paper, given the rates of young children being raised by someone other than a caregiver. As of 2017, almost 3.1% of children in California were living in a grandparents' home (US Census Bureau 2020). Additionally, another .053% of children in California were in foster care (Webster 2019).

Community Health Worker: A Community Health Worker is a frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the worker to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery (American Public Health Association 2022).

Early Start: Early Start is California's Early Intervention Program for Infants and Toddlers with Disabilities, enacted in 1986 under the Individuals with Disabilities Education Act (IDEA; 20; U.S.C., Section 1431 et seq.). This program is California's response to Federal legislation ensuring that early intervention services for infants and toddler with disabilities and their families are provided in a coordinated, family-centered system of services that are available statewide. (CA Department of Developmental Services 2022).

Enhancing Developmentally Oriented Primary Care: EDOPC provides evidence-based educational sessions and technical assistance to health care providers and their office staff on developmental screening (Berry 2014). The project was developed as an alternative to the Healthy Steps practice model for practices without the financial resources for full Healthy Steps implementation.

Healthy Steps: Healthy Steps is a unique program based in a pediatrician's office that helps families identify, understand and manage parenting challenges like feeding, behavior, sleep, development and adapting to life with a young child (Zero to Three 2022).

HIPAA: The Health Insurance Portability and Accountability Act of 1996 (HIPAA) is a federal law that required the creation of national standards to protect sensitive patient health information from being disclosed without the patient's consent or knowledge (CDC 2018).

Medical Assistant: Medical assistants are unlicensed individuals who perform non-invasive routine technical support services under the supervision of a licensed physician and surgeon, podiatrist, physician assistant, nurse practitioner, or nurse midwife in a medical office or clinic setting without the need of receiving a certification.

Medical Legal Partnership: Medical Legal Partnerships function as a patient care team that includes medical, social services, and legal professionals through which an attorney is located at a health

care facility to help the patient's team address legal conditions that affect patient health (American Bar Association 2022).

Paraprofessional: A trained aide who assists a professional, but who is not licensed to practice as a fully qualified professional (Merriam Webster 2022).

Project DULCE: Project Dulce, a national model pioneered at Boston Medical Center, incorporates aspects of Family Strengthening and the Healthy Steps models with a Medical Legal Partnership, and embeds a paraprofessional called a Family Specialist in pediatric practices to support families with infants through age six months (Sege 2014).

Qualified Medical Assistants: Medical assistants who meet specific qualifications and pass an examination given by a certifying organization in order to obtain certification as a qualified medical assistant (California Medical Board 2022).

Regional center: Regional centers are nonprofit private corporations that contract with the Department of Developmental Services to provide or coordinate services and supports for individuals with developmental disabilities (CA DDS 2022).

First 5: California Children and Families Commission, funded by California's Tobacco Tax. Eighty percent of annual revenues are allocated to the 58 First 5 county commissions, while the remaining 20 percent fund the state's overall guiding programs and administrative cost (CCFC 2022).

CHAPTER 1: INTRODUCTION

It is a public health priority to identify and reduce the severity of a child's functional limitations as early as possible (CDC 2014). The American Academy of Pediatrics (AAP) recommends that developmental screening with a valid screening tool occur at 9, 18, and 30- month visits (Hagan 2017). Data from the National Health Interview Survey (NHIS) indicates that one in six children are at risk for a developmental delay (Boyle 2011).

In 2017, Los Angeles-area pediatricians participating in focus groups conducted by First 5 LA, the county's Children and Families Commission, cited lack of time as a major barrier to complying with developmental screening and service referral requirements (First 5 LA 2017). Identifying a relatively low-cost intervention to support providers with screening and care coordination could advance the "quadruple aim"- improving the health of pediatric populations, enhancing the patient (and family) experience of care, reducing the per capita cost of health care, and improving the work life of clinicians and staff (Bodenheimer 2014). Furthermore, as the majority of children enrolled in Medi-Cal are from populations with well-documented health disparities, ensuring children are routed to timely services and supports by a trusted provider could also address the nascent "quintuple aim," which includes advancing health equity (Nundy 2022).

Developmental issues such as behavioral concerns are more prevalent in low-income families, which can adversely impact development (Duncan 1994). Accordingly, to further public health goals, it is imperative to screen lower income, publicly-insured young children at American Academy of Pediatrics (AAP) recommended intervals. While rates of developmental screening increased considerably between 2002 and 2009, national data indicates that over half of pediatric primary care providers report not using standardized developmental screening instruments in their clinics (Radecki 2011). Low screening rates contribute to low intervention; national data indicates that only 2%–3% of all children receive public

early intervention services by age three years, compared with approximately 15% who are estimated to have a developmental disability during childhood (CDC 2014).

Federal law requires that states assure the timely identification of developmental delays and provision of services under Part C of the Individuals with Disabilities Education Act (US Dept. Education 2011). Reimbursement for developmental screening is covered by Medicaid's Early and Periodic Screening, Diagnostic and Treatment (EPSDT) program, a benefit that provides comprehensive, preventative, diagnostic, and treatment services to eligible children under the age of 21, as specified in Section 1905I of the Social Security Act (CMS & National Health Law Program 2014). While each state reports EPSDT rates to the Federal government on an annual basis, states have considerable latitude regarding how to deliver, reimburse, and monitor developmental screening services to children enrolled in public coverage (CMS & National Health Law Program 2014).

As of 2021, 40% of all Medi-Cal enrollees are children, the vast majority of whom are enrolled in managed care (CHCF 2021). As of 2021, 93% of children enrolled in Medi-Cal – 5.1 million - were served by a managed care plan (DHCS 2021). Despite this level of coverage and access to EPSDT, only 4% of children in California were identified with a developmental delay prior to entering kindergarten vs. the 15% expected, given national prevalence data (First 5 LA, 2017). Notably, children who qualify for Medi-Cal outside of family linkage represent 17% of all Medi-Cal enrollees, but just 6% of spending (CHCF 2021). While this phenomenon is due in part to carving out special needs children to the California Children's Services program, as illustrated in **Figure 1**, annual child enrollee spending in Medi-Cal is just $2,566 per enrollee per year, well below the US average of $3,146 (CHCF 2021). Capitation rates to Medi-Cal health plans are as low as $50 per month, in select CA counties (CHHS 2022). Notably, as shown in **Figure 2**, children's access to primary care in Medi-Cal has declined over time, as Medi-Cal coverage has expanded (CHCF 2021).

Figure 1: MEDICAID SPENDING PER FULL-TIME EQUIVALENT ENROLLEE: CALIFORNIA VS US, FY2018 (CHCF 2021)

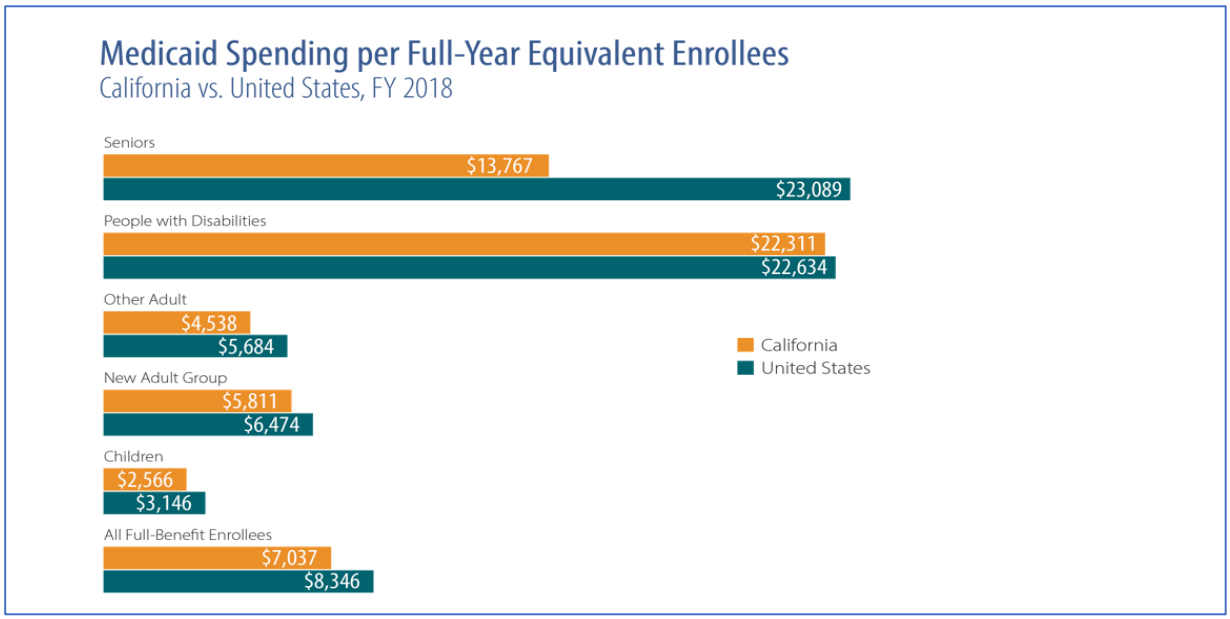
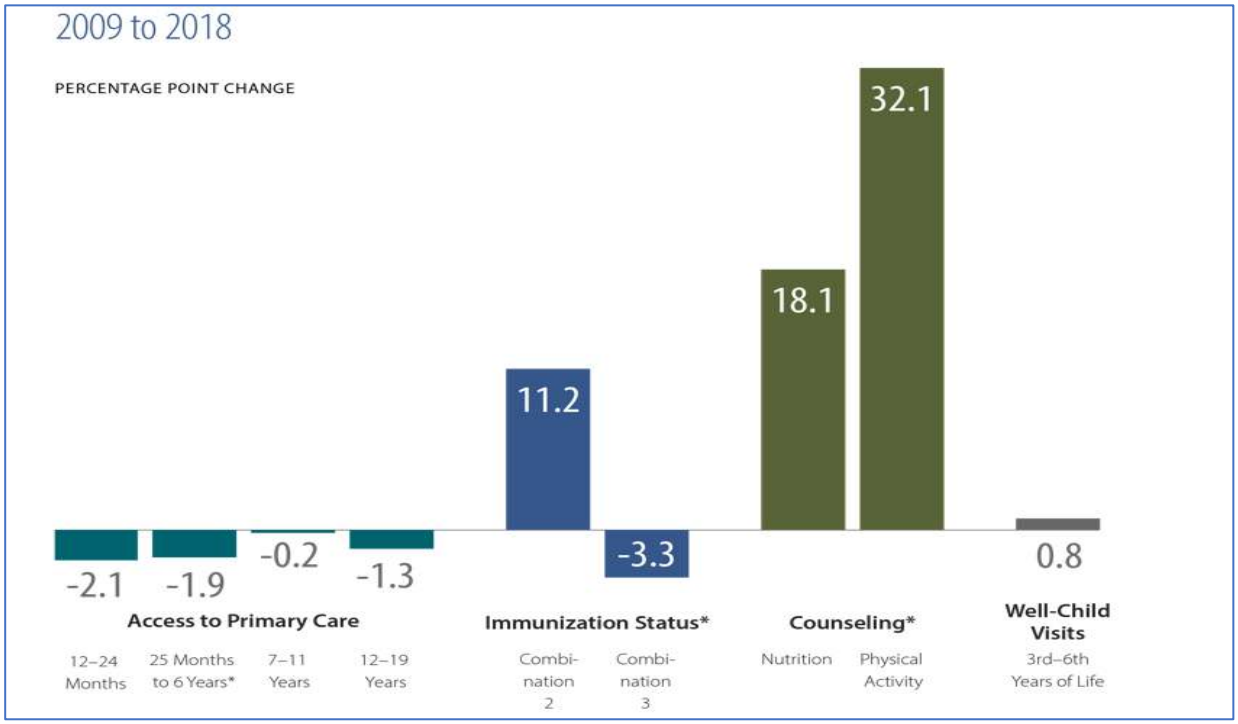


Figure 2: MEDI-CAL MANAGED CARE QUALITY, CHILDHOOD MEASURES (CHCF 2021)



California's Department of Health Care Services (DHCS), the agency responsible for overseeing the Medi-Cal requires contracted health plans to cover and ensure the provision of screening, preventive, and medically necessary diagnostic and treatment services for individuals under the age of 21, including

EPSDT Supplemental Services (DHCS 2014). The Centers for Medicare and Medicaid (CMS) identified *Developmental Screening within the First 3 Years of Life* as required Core Child Measure for States by 2024; DHCS eventually adopted this metric in 2020, although select states such as Oregon added developmental screening and referral quality metrics to their Medicaid programs several years prior (DHCS 2020) (OHA 2018). More significantly, in Massachusetts, as a result of a class-action lawsuit in 2007, pediatric visits are not reimbursed by Medicaid unless a developmental screening is performed during a well-child visit (Van Cleave 2013). After implementing a development screening reporting requirement in the Managed Care Accountability Sets (MCAS), DHCS found significant gaps in developmental screening; as shown in **Table 1**, the 2020 Preventative Services Report indicated only 22% of Medi-Cal managed care plan enrollees received a developmental screening in the first three years of life (DHCS 2020).

This relatively new CA metric is designed to ensure accountability for timely developmental screening and services, as delegated to Medi-Cal managed care plans in California. Historically, oversight of developmental screening in CA was limited to a county public health department audits under the legacy Child Health Disability Program (CHDP) and then managed care plan chart audit oversight after the benefit moved to managed care; providers who failed to document developmental screening in chart reviews could still score sufficiently high to pass quality standards as plan providers. The Department of Health Care Services now receives electronic encounter data from the plans, but there is known underreporting for services, given the reduced incentive to code with pre-payment for care, or capitation vs. fee-for-service. Until the state implemented a $59.90 incentive payment funded by Proposition 56 Tobacco Tax revenues in 2020, there was little provider and plan incentive for accurate reporting on developmental screening encounters (DHCS 2019). As of 2022, there is still no mechanism to indicate if developmental screenings are actually resulting in timely care coordination or linkage to appropriate services and supports.

Table 1: MULTI-YEAR STATEWIDE MEDI-CAL MANAGED CARE WEIGHTED AVERAGE PERFORMANCE MEASURE RESULTS FOR FULL SCOPE MANAGED CARE PLANS (DHCS 2020)

Measure	2017	2018	2019	2020
Adolescent Well-Care Visits*	--	--	--	52.95%
Childhood Immunization Status—Combination 10*	--	--	--	38.32%
Children and Adolescents' Access to Primary Care Practitioners—12–24 Months	93.14%	92.99%	93.39%	93.69%
Children and Adolescents' Access to Primary Care Practitioners—25 Months–6 Years	83.92%	84.43%	84.92%	85.75%
Children and Adolescents' Access to Primary Care Practitioners—7–11 Years	86.29%	86.85%	87.18%	87.88%
Children and Adolescents' Access to Primary Care Practitioners—12–19 Years	83.50%	84.44%	85.02%	85.88%
Developmental Screening in the First Three Years of Life—Total*	--	--	--	25.42%
Immunizations for Adolescents—Combination 2**	26.89%	37.84%	41.65%	43.57%
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents— BMI Percentile Documentation —Total ***	--	–	–	86.71%
Well-Child Visits in the First 15 Months of Life — Six or More Well-Child Visits*	--	--	--	54.62%
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life	73.90%	75.44%	73.68%	75.07%

Ensuring children are screened with evidence-based tools and successfully referred to effective interventions to address developmental, social-emotional, or behavioral needs necessitates a way to promote and monitor compliance with existing screening requirements (Hagan 2017). There is urgency associated with working with Medi-Cal providers to support practice improvement and transformation initiatives associated with high rates of developmental screening and referral to needed services and supports. In recent years, there has been a concern among physicians and policymakers regarding how to incorporate developmental screening and referral functions in a busy pediatric or family practice.

More research was needed to determine barriers to developmental screening and care coordination in pediatric-serving practices. And finally, while developmental screening can occur in community settings to enhance screening rates, the relatively high child engagement rate in preventative well-child care suggests the value of providing developmental screening in a clinical setting; national surveillance data indicates that patients receiving care in a Patient Centered Medical Home (PCMH) model are substantially more likely to have received a developmental screen, whereas the small number

of children who have not received a past-year preventative health care visit were 60% less likely to have received a developmental screen (Hirai 2018).

Enhanced Pediatric Care Models

One intervention to support practices with early identification and intervention functions is adding a paraprofessional to the care team or expanding the responsibilities of an existing paraprofessional, such as a medical assistant. Literature supports inclusion of unlicensed staff on pediatric teams to increase developmental screening and service referral rates (Minkovitz 2003, Warmels 2017). An improved understanding of facilitators and barriers to integrating paraprofessional staff in pediatric-serving practices - such as Community Health Workers (CHWs), Navigators, Enhanced Medical Assistants, Care Coordinators - can guide policymakers, providers and plans seeking to improve care while preparing for California's looming pediatric provider shortage in 2025 (Spetz 2017). A paraprofessional is defined as a trained aide who assists a professional, but who is not licensed to practice as a fully qualified professional (Merriam Webster 2022).

Select enhanced pediatric care models with paraprofessionals include Healthy Steps, a model espoused by the childhood organization Zero to Three (Minkovitz 2003). Another, Project DULCE, a national model pioneered at Boston Medical Center, incorporates aspects of Family Strengthening and the Healthy Steps models with a Medical Legal Partnership, and embeds a paraprofessional called a Family Specialist in pediatric practices to support families with infants through age six months (Sege 2014). First 5 LA invested in additional paraprofessional workforce interventions to support providers with early identification and intervention in pediatrics. First Connections, a model developed by Children's Hospital of Los Angeles (CHLA), trains paraprofessionals in community clinics who ensure children are screened for autism and successfully referred to the local Regional center, the non-profit organizations responsible for determining eligibility for IDEA Part C developmental services in California (Williams 2014).

Integrating paraprofessionals into the pediatric medical home to support developmental screening and care coordination requires purposeful implementation, including identification of specific tasks appropriate for this workforce. In the First Connections model, an Ages and Stages Questionnaire (ASQ)

developmental screen is completed by caregivers in the waiting room, reviewed by providers with families, with the paraprofessional taking the lead to coordinate referrals to the regional center. In this capacity, select tasks are shifted from a physician, nurse, or caregiver to the paraprofessional.

Task Shifting to Optimize Roles

The World Health Organization (WHO) defines task shifting as the "rational" redistribution of tasks among health workforce teams where specific tasks are moved, where appropriate, from highly qualified health workers to health workers with shorter training and fewer qualifications in order to make more efficient use of available human resources for health (WHO 2007). Research in both high and low resource international settings suggests tasks can be shared or shifted without adversely impacting the quality of care (Agyapong 2016). Various other terms are found in the literature to communicate the task shifting concept, including "task sharing," "substitute health worker," "skills substitution," "task delegation," and "optimizing health worker roles" (Deller 2015). To date, the term *task sharing* is almost exclusively found in international vs. U.S. domestic health services research. However, there are domestic examples of areas with serious shortages of qualified health personnel, compromising timely access to health care. For example, according to an analysis funded by the California Health Care Foundation, the overall ratio of full-time equivalent physicians in California's Medicaid program per 100,000 Medi-Cal enrollees is now below national and state recommendations (CHCF 2017). Demand for primary care-including pediatric care - in the State is projected to exceed the supply of physicians by the year 2025 (Spetz 2017). Delegating roles can reduce the health system's reliance on highly technical and specialized providers, which may be in short supply (Jennings 2011). This delegation may go beyond support for simply developmental screening but include additional complex and time intensive care coordination activities associated with routing a child to needed services and supports outside their family practice doctor or pediatrician's office.

Medi-Cal Managed Care Case for Paraprofessionals in Pediatric Care

Well-child care redesign research suggests incorporating non-medical providers to the team has the potential to advance the experience and outcomes of children and caregivers with limited means, who have developmental and behavioral concerns (Coker 2013). An expended care team is the foundation of the PCMH model, a model defined by the AAP in 1992 for children with special health care needs, and updated in 2002 to highlight the criticality of rendering coordinated, accessible and family-centered care to all children (AAP 2002). Studies illustrate the value of this model to children without special needs, including an association with increased preventative care and decreased emergency room use (Long 2012). There is a clear quality rationale for accelerating task sharing in pediatrics through collaborative care, in which the clinician has a diagnostic and treatment role and is supported by a larger team supporting clinical workflow, patient education, and care coordination, due to time and resource constraints. This is increasingly imperative, giving the primary care provider shortage in CA (Spetz 2017).

Several notable economists including James Heckman emphasize the societal and economic value of investments in early childhood (Conti 2013). Evidence shows that children identified by a screening tool as having a developmental concern are more likely to perform poorly on measures of school success and to have greater psychosocial risk factors than his or her peers (Glascoe 2001). Therefore, a child who fails an instrument and is not connected for evaluation and services at the time of the failure is at risk of having unmet developmental needs (Kavanagh 2012). Generally, the return-on-investment prospects of the medical home model for health care financers center around improved outcomes and significant reduced utilization of high-cost services (Center for Health Care Strategies 2011). The business case for change promoted by early childhood advocates often emphasizes averting longer-term cost savings to health and educational systems but is more nuanced when trying to implement in a state where managed care is the dominant model, focused on a one-year horizon for rate setting and performance. A second challenge in accelerating the adoption of enhanced pediatric care models in Medicaid managed care in CA relates to differing reimbursement structures, including high rates of capitation and variance in

practice settings. The care coordination burden is further challenging for providers, given that the Medi-Cal program is still a fragmented system with numerous carve-outs from participating health plan contracts and multiple systems and programs providing services to recipients (ITUP 2019).

Providers who complete developmental and trauma screening can receive incentive additional revenue (DHCS 2019). However, pediatric practices receive no additional revenue for time intensive care coordination and effectively linking children to needed supports in a siloed system, as care coordination tasks are presumed to be covered by the capitation paid by the plan. Ultimately, practices may require a potential pay-for-performance metric for effective care coordination to warrant investing in workforce expansion. Alternatively, some may be left to partner with care coordinators funded by a Local Educational Agency using non-managed care streams such as Medi-Cal Administrative Activities (MAA) or Targeted Care Management (TCM) funds, to offset the cost of paraprofessional who perform critical referral and linkage tasks. *(At this time, reimbursement rates for a potential 2022 CHW benefit in Medi-Cal are unknown).*

Despite modest quality incentives and incentives for additional plan enrollment, high rates of capitation can complicate incentives for timely pediatric preventative care. If paraprofessionals support outreach and engagement resulting in increased well-child visits overall, select practice sites such as Federally Qualified Health Centers (FQHCs), may benefit. FQHCs which enjoy additional per encounter "wrap-rate" revenue tied to their clinic's approved Prospective Payment System (PPS) rate. Employing a paraprofessional can generate revenue, if the paraprofessional is empowered conduct outreach that will bolster the clinic's service volume. Under the "Flipped Visit" concept, clinics can bill for their enhanced PPS rate for a visit with a paraprofessional, working under the supervision of a clinician (CHCF 2018). The paraprofessional first sees the patient, provides patient education, screening, and referral support, all documented in the electronic health record (EHR). The visit concludes with a brief meeting with a clinician who briefly reviews and updates the case and discharges the case as the rendering provider. Many FQHCs use this model for diabetes or blood pressure visits; it may be possible to employ this strategy for screening visits, provided physicians still provide a physical exam and order vaccinations, key

components in a well-child visit (CHCF 2018). In addition to garnering information on barriers and facilitators to successful incorporation of paraprofessionals in pediatrics, there is a need to assist practices in evaluating the financial impact of enhanced pediatric care team models designed to promote effective early identification and intervention (EII) services; these models require services which beyond the scope of the traditional medical assistant role. For example, successful EII work may include coordination with the area regional center to ensure children with developmental concerns can be routed to services, as well as coordination with the county health department to serve children with behavioral health concerns.

Significance

Physicians identify a number of barriers to the use of developmental screening tools, including insufficient time to administer screens during health visits; inadequate compensation and lack of, or perceived lack of, assessment and treatment resources (Sices 2007). Following a pilot to support implementation of AAP practice guidelines at 17 diverse practice sites, researchers noted that most pediatric practices were unable or unwilling to adhere to the three specific recommendations of the AAP guidelines; to implement a 30-month visit; to administer a screen after surveillance suggested concern; and to submit joint referrals both to medical subspecialists and early intervention programs for children who failed office-based screening (King 2010).

There is a need to study factors that influence adoption of relatively low-cost workforce intervention shown to facilitate timely and quality pediatric developmental screening and referral to needed services and supports. The ultimate objective is to transform pediatric care to improve compliance with screening and referral practices recommended by the AAP, required by DHCS, and Federally required under EPSDT. The researcher hypothesized that there are adoption and implementation considerations for pediatric practices seeking to task share developmental screening and care coordination obligations with paraprofessionals. And finally, there was a need to provide managed-care oriented guidance to practices weighing an investment in lay personnel to assist with developmental screening and care coordination tasks. A decision tool was needed that can weigh the trade-offs associated with hiring, training, and supervising a paraprofessional, and any gains associated with improved throughput,

compliance, or cost avoidance. In addition, the tool may be able to guide practices with a decision to invest in a new workforce vs. train existing staff such as medical assistants to assume new tasks related to EII.

This research aimed to broaden the emerging literature base on team-based care by gaining payor and provider feedback on how best to help providers task share with paraprofessionals in pediatric practices. In addition, the research findings can inform ways to optimize teams to include paraprofessionals focused on child development and functional wellness in the safety net in CA. This aspect touches on the "Quadruple Aim," which goes beyond the traditional Triple Aim to incorporate improving the work life of clinicians and staff, a key area of concern given rising rates of physician burnout, due in part to the increasing administrative burden in the practice of medicine (Bodenhemier 2014). Additionally, given the diversity of the population served by Medicaid providers, this research can inform the Quintuple Aim, which incorporates health equity as another key element necessary to truly achieving improved patient care, outcomes, and costs (Nundy 2022). And finally, the research aimed to inform practice redesign efforts by drawing from implementation science to examine workflows, roles, and infrastructure.

This study can guide a workforce strategy that will support the early identification and intervention of children's developmental, behavioral, and social-emotional conditions. Expanding workforce capacity in a sustainable manner could support patient access and fulfill payors' expectations for population health screening and management in pediatrics. Data from this study could guide practices considering shifting screening tasks to paraprofessionals for other required or recommended assessments, such as the Staying Healthy Assessment (SHA), a screening required in the first 120 days of Medi-Cal enrollment, or the Adverse Childhood Experiences Survey (ACES), a trauma history screening.

Collectively, without a workforce innovation strategy, burgeoning screening requirements, however well-meaning, will compromise patient throughput, and adversely impact both access to clinical care and financial sustainability. Improving screening and referral rates, a key aspect of care management, without compromising patient throughput in an access-constrained safety net system, is imperative.

Notably, research on acceptance of paraprofessionals in pediatrics was published as early as 1969. An article by Patterson indicated patients in all socioeconomic groups accepted "pediatric assistants" performing select tasks, including assistants with on the job training (Patterson 1969). Indeed, the authors noted:

> It is no longer a question of who will get child health care, but rather, how can appropriate health services be provided for all children. The health care manpower crisis, however, makes this impossible to achieve this goal without modification of the methods by which health care is provided…reallocation of tasks among personnel of varying skill-levels is the only practical alternative (Patterson 1969).

With the inclusion of a potential CHW benefit in CA's 2022/2023 State budget and the forthcoming implementation of the CalAIM 1115 Medi-Cal Waiver requiring health plans to become National Committee on Quality Assurance (NCQA) accredited, there is a critical need to provide implementation guidance to pediatric-serving sites considering non-traditional staff to support robust population health functions. Ultimately, screening alone is insufficient; and providers and plans seeking to change the developmental trajectory for young children, consistent with the intent of EPSDT, must better route children to care to ensure the narrow window for early intervention, does not close.

CHAPTER 2: LITERATURE REVIEW

Methods

A literature review was conducted to obtain peer-reviewed and grey literature that reflects current knowledge about delegating or task sharing select developmental screening and referral functions with paraprofessionals. The ultimate goal of the literature review was to answer the question: *What are the barriers and facilitators to successful delegation of developmental screening and referrals tasks to paraprofessionals in pediatric practices?* While the term "task sharing" is prolific in international health services research, it is rare within U.S. health service research. Accordingly, the synonyms "delegate" and "delegation" were included in the term. Similarly, the term paraprofessional or non-clinician was supplemented with several terms. The literature search was impeded by the fact that there is no universal domestic definition for a non-clinical, non-professional health care resource who supports clinical activities by collecting and providing information to patients and providers. Accordingly, the final search string was broad, including the terms "paraprofessional," "non-clinician," "worker," "lay," "promotora," and "medical assistant." While medical assistants may undergo some certification and training, they are considered to be non-clinicians for the purposes of this study.

To constrain the search to explore the role of paraprofessionals on outpatient pediatric care teams for well-child visits, terms were included to denote the setting and specialty area: (office OR practice OR clinic) AND (pediatric OR family). As not all children are cared for by pediatricians, the term "family practice" was included. In summary, the full Boolean operator adopted was (office OR practice OR clinic) AND (pediatric OR "family practice") AND (task-shifting OR task-sharing OR delegate OR delegation) AND ("paraprofessional" OR "non-clinician" OR "worker" OR "lay" OR "promotora" OR "assistant" OR "coordinator" OR "navigator"). These terms were entered into three electronic databases:

PubMed, Cochrane Reviews, and Scopus. Additional appropriate articles were hand-culled from one additional electronic database, Google Scholar.

The first output of this string with no restrictions resulted in 32 articles in PubMed, 65 in Scopus, and one in Cochrane reviews. An additional electronic filter was used to only include articles from 2014 and on. Limiting the articles to full text only yielded 23 articles in PubMed, 63 in Scopus, and one in the Cochrane Review. The search was limited to the most highly relevant articles by hand-culling to limit to only those articles focused on developmental or behavioral screening, yielded three articles in Scopus, three in PubMed, and zero in the Cochrane Review.

And finally, there is considerable "grey" literature on task sharing or delegation in clinical care, as well as on paraprofessionals. A secondary search of Google Scholar, which includes grey literature, resulted in 16,500 articles. After patents and citations were excluded, 16,300 articles were retrieved. Accordingly, an additional search term was added to constrain the search, of "developmental." Additional hand-culling continued as follows to exclude:

- Articles regarding pediatric inpatient care
- Articles regarding maternal vs. child screening
- Articles regarding physician training in medical school
- Articles regarding using paraprofessionals for acute care vs. screening or prevention
- Articles published prior to 2014

The PI reviewed titles of the first 400 articles only, to prioritize the "best fit" articles, culling articles down by reviewing the abstracts.

Inclusion and Exclusion Criteria

Articles were included if they targeted the primary outcomes- task sharing or delegating pediatric screening functions to non-physicians. Articles were only included if they focused on applications of paraprofessionals as a workforce to support prevention activities, versus assisting with acute care, such as in surgery or in an inpatient setting. And finally, articles were excluded if they did not have an explicit

focus on practice; this eliminated those articles focusing on physician or nurse training in medical school, vs. on direct patient care. This culling yielded ten articles. And finally, the primary investigator reviewed the references from included articles, and included seven additional articles based on knowledge of the field. These include one salient article about Community Health Worker (CHW) adoption considerations in primary care in California, a presentation created by Dr. Marianne Williams of Children's Hospital Los Angeles regarding the pilot First Connections program supporting a paraprofessional model for autism screening, and a 1969 article seeking feedback on the use of role of allied health workers. A total of 17 articles were initially included in the literature review submitted for the proposal. Later, an additional two articles published between 2019 and 2022 were added- Rubin's article regarding task shifting from nurses to medical assistants in pediatrics, and Miralles' research study on German family physician's rates of task shifting to enhanced medical assistants (Rubin 2020). A reference manager (*Mendeley*) was used to deduplicate articles. Following the electronic search, included articles were logged on a modified PRISMA diagram and reviewed for themes.

Results

Seven articles were relevant domestically focused research studies on developmental screening and task shifting, with the other thirteen policy or practice briefs or non-US based models. Key themes regarding barriers and facilities of successful workforce enhancement for developmental screening included 1) system and regulatory facilitators 2) physician and nurse receptivity to collaborative care 3) clear roles and responsibilities for the staff, 4) task analysis, process analysis mapping, and workflow, 5) informatics and 6) supervision and training. Articles focused on task-sharing or team-based care, in which the clinician partnered with a team to complete all of the various voluminous tasks – including care coordination, documentation, and patient and family engagement- associated with successful linkage to developmental services. A summary of the seven pediatric workforce enhancement research studies is provided below; frequently, the workforce enhancement was coupled with practice improvements to improve linkage to developmental or behavioral screening (text reminders, electronic health record enhancements):

Table 2: ABSTRACTION TABLE

Author	*Model*	*Enhanced Role*	*Setting*	*N*	*Metrics*	*Impact on Metric vs. Pre-intervention*
Sprecher 2018	NA	Bachelors' Level Patient Navigator	Urban Children's Hospital	1,109	- Navigator's referral completion rate	65%
Talmi 2014	NA	Psychology Fellow	Hospital teaching clinic	2610	-Early intervention (EI) referral rate	43% vs. 13% pre-intervention (PI)
Guevara 2013	NA	Office Staff	Urban pediatric practices	2,103	-Developmental screening -Early intervention (EI) referrals -EI referral completion -EI eligibility	88% vs. 81.4% (PI) 9.8% vs. 8.5% (PI) 19.9% vs. 17.5% (PI) 7% vs. 5.3% (PI)
Minkovitz 2003	Healthy Steps	Specialists (nurses, nurse practitioners, early childhood educators, social workers)	Multiple sites	5,565	-Developmental screening rate	81.1% vs. 64.4% (PI)
Allen 2010	Enhancing Develop-mentally Oriented Primary Care (EDOPC)	Office Staff, Medical Assistant	18 Sites	NA	-Developmental screening rate	68% of sites vs. 12% (PI) of sites screening 85% +of patients
Coker 2016	Caregiver-Focused Redesign for Encounters, Newborns to Toddlers (CAREGIVER)	Masters Level Health Educator	2 peds practices in LA	251	-Developmental screening rate -Devel/Behavioral concerns addressed	92.2% vs. 81.1% (PI) 90.2% vs. 73.8% (PI)
Sege 2015	DULCE, The Developmental and Legal Understanding for Everyone	College graduates with training in child development	Boston Medical Center	330	-8-month immunization rate -Retention at clinic site -6-month ED utilization rate -# of Public Benefits received	89% vs. 78% 93% vs. 86% 36.% vs. 49.7% 3.7 vs. 3.2

Theme #1: System and Regulatory Facilitators Impact Adoption

Chapman and Miller, researchers at the University of California at San Francisco, established a conceptual framework to support the adoption of CHWs in medical homes in California (Chapman 2017). CHWs work within and outside clinics in communities to connect patients to health and social services (CHCF 2018). The authors posit that enablers of CHW long-term integration in the medical home and sustainable employment in California include ensuring that 1) care delivery organizations are primed to integrate a paraprofessional into a medical home model, 2) improved role definition and 3) providers and payors integrate paraprofessionals into the cost of care. The ability to delegate is influenced by scope of practice legislation in each state, liability considerations, as well as contractual concerns and local health facility and managed care organization regulations.

Lessons learned from international settings with high use of paraprofessionals due to an undersupply of physicians, echo similar themes for health system readiness. An evidence brief by Sewankambo inventoried facilitators and barriers of task shifting to CHWs in Uganda to address the shortage of human resources for maternal and child health. A theme is that health care should be delivered by the least specialized health care worker, at the lowest cost of care, without compromising quality, which requires implementing task shifting as a workforce strategy. The author notes that successful task shifting is facilitated by effective training and incentives for health workers to provide those services, adequate resources and materials, a need for increased supervision of less specialized health workers by health professionals, modifications in referral processes, and sufficient resources to pay for these supports (Sewankambo 2011). Barriers include lack of adequate reimbursement for health workers, which compromises the impact of any incentives. In addition, task shifting is impeded by subpar systems for human resources management to monitor quality, as well as low electronic health record adoption rates. Ultimately, researchers determined that the country would be a successful environment for optimizing health workers' roles to deliver effective maternal and child health care at scale in Uganda, due to the following enabling conditions highlighted in **Table 3**:

Table 3: SYSTEM ENABLERS TO OPTIMIZING LAY HEALTH WORKERS ROLES IN UGANDA (Sewankambo 2011)

1. Uneven distribution of health professionals and demand for care is unmet.
2. Health facilities are widely available, and the hierarchical organization of the health system provides a structure for delegating tasks to less specialized health workers, referring patients who need more specialized care, and providing supportive supervision.
3. Mothers feel more comfortable with health workers with less training.
4. People in rural areas prefer free public health services that are close to home.
5. Successful task shifting is already occurring in Uganda and internationally.
6. Widespread support for improving maternal and child care.

Theme #2: Pediatrician Receptivity to Collaborative Care

The AAP's 2017 *Policy Statement on Guiding Principles for Team Based Care* affirms that optimal pediatric health care depends on a team-based approach with supervision by a physician leader, preferably a pediatrician (Katkin 2017). The AAP does not oppose paraprofessionals but is assuredly on the side of ensuring that they work under clear supervision. The organization espouses the medical home model of care, to enable reduce duplication of clinical effort, promoting the appropriate and timely use of all health care providers on the team, and ensuring that the care provided is accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective. According to the AAP, "learning to work in teams should begin in pediatric residency training, where collaborative learning with non-physician clinicians can expose future pediatricians to the benefits of team-based care" (AAP 2013).

Early provider receptivity to task sharing with allied health workers in pediatrics was captured in a 1969 study published in the *American Journal of Public Health* (Yankauer 1969). A precoded questionnaire was mailed to all Fellows of the American College of Pediatrics, yielding 4,208 replies, an 88% response rate. The survey asked respondents to indicate the frequency with which 40 specific tasks representative of all tasks in ambulatory pediatric care were performed by pediatricians, nurses, and other allied health workers in their practice. Respondents indicated that allied health workers other than nurses performed developmental screening 8% of the time; notably, between 12-20% of practices indicated that developmental screening was not provided at all. While the utilization of allied health workers was low,

physician receptivity to the use of allied health workers for screening functions was high; over 70% favored the use of allied health workers to gather the family's social history and 25% favored the use of allied health workers for well-child visit tasks (Yankauer 1969). While nurses were preferred to other allied health workers for clinical care tasks, there was no preference between nurses and allied health workers for clerical tasks. The vast majority of respondents indicated they would hire trained personnel and delegate patient care tasks, if such personnel were available, and that their utilization could increase the volume or quality of pediatric care. And finally, the study noted that the frequency of physician task delegation increases in direct relationship to the number of workers employed (Yankauer 1969). Notably, physician respondents perceived greater utilization of allied health workers as the most important practice that could lead to efficiency in pediatrics.

Receptivity to the use of paraprofessionals to support preventative care in pediatric practices is highlighted in international settings as well. In 2014, Germany adopted the Prevention Act to strengthen cooperation on health promotion and diseases prevention measures, including routine health check-ups. In light of German pediatricians' workload and their own wishes and demands (and for a targeted implementation of the German Prevention Act) there was a push to delegate preventive services to trained paraprofessionals (Schoierer 2016). A study of Prevention Assistants, or medical assistants with enhanced training in German medical practices, found over time that trained Prevention Assistants successfully assumed select tasks in pediatrics to support prevention, including screening tasks. The report found that the involvement of a trained prevention assistant contributed to the transformation and re-establishment of prevention service uptake in pediatrician's offices and reduced physician workload. Forty-four percent of physicians felt that the time saved by the Prevention Assistant was very good or good; 80% of physicians surveyed also indicated that Prevention Assistants carried out preventive consultations in the doctor's office.

Theme #2 Value of Completing Task and Workflow Analysis and Process Mapping

Deller et al. provide a comprehensive summary of facilitators of task-shifting to paraprofessionals based on a literature review of maternal and newborn health studies and experience implementing task-

shifting models in Africa (Deller 2015). Task shifting without clear roles or processes can undermine the team. Optimally, programs conduct a task analysis prior to implementing a task shifting or sharing program, which can inform scope of practice and training requirements for paraprofessionals. A task analysis is the evidence-based practice of breaking a complex task down into smaller, more teachable steps.

The literature review highlighted the importance employing quality improvement cycles to continuously inventory all functional tasks required to ensure that a child with an identified need actually receives early intervention services. Articles highlighted how practices implementing team-based pediatric care engaged in Plan Do Study Act cycles and often added new tasks as a result of better understanding the full cycle of administrative process and coordinating steps to route a child to treatment. Talmi et al. successfully deployed a workflow prompting developmental screening in the electronic medical record and deployed staff to assume select care coordination and follow-up tasks (Talmi 2014). Barry et al. noted that practices who train together to implement an improved process tend to be more successful (Berry 2014). While these will vary based on specific physician practice environments, the PI's literature review inventories and categorizes the following tasks shown in **Table 4** required for developmental and behavioral screening and linkage:

Table 4: TASK ANALYSIS IN DEVELOPMENTAL AND BEHAVIORAL SCREENINGS, BY DOMAIN TYPE

Non-MD Domains	**Either**	**Physician Domains**
• Assist caregiver completion of validated screening tools • Scoring of completed questionnaires • Educate caregivers about child development and behavior • Distribute patient/family education materials selected by the team • Identify and maintain referral lists to ensure currency • Document screening task in EHR • Record screening findings in EHR • Record referral status in EHR	• Educate caregivers about child development and behavior • Develop care plan • Document care plan in EHR • Translation support	• Identify and select validated screening tools • Interpret results • Assessment of appropriate services • Sign off on care plan • Referral to treatment services • Oversight over paraprofessionals • Educate health care staff on instrument and scoring use
Payor Domains • Screen for eligibility for services • Authorize patient for services (IDEA Part C provider, health plan or Independent Practice Association (IPA), County Behavioral Health) • Provide case management		**Care Coordination Domains** • Seek referral status • Seek authorization status • Follow-up to confirm linkage • Document disposition in system • Refer to medical subspecialist • Refer to local early intervention and identification services

Theme #3: Clearly Defined Paraprofessional Roles and Responsibilities

Roles and responsibilities of non-clinicians varied significantly among the profiled models. Activities ranged from simply supporting the caregiver with developmental screening completion, to referral navigation, to patient education. Select models provide training to a practice's full staff, allowing sites to design workflow and roles. Enhancing Developmentally Oriented Primary Care (EDOPC) provides evidence-based educational sessions and technical assistance to health care providers and their office staff on developmental screening (Berry 2014). The project was developed as an alternative to the Healthy Steps practice model for practices without the financial resources for full Healthy Steps implementation. EDOPC assists practices with a team approach to developmental screening, advising practices to identify a lead person for screening, empower all staff, and develop a plan in anticipation of staff turnover. After the first three years of project implementation, including 336 trainings at 164 sites, it

was found that EDOPC education results in significant practice change after the intervention (Allen 2010). Findings from these data found a significant increase in screening at the visits conducted at one year from 33% to 85% of children screened, with the percentage of sites performing screening increasing from approximately 25% of sites to 69%.

Paraprofessionals can be ideal in ensuring that a referral to developmental services is successful. A retrospective descriptive cohort analysis was conducted assessing referrals to Patient Navigators (PNs) in one urban academic pediatric primary care practice (Sprecher et 2018). The role was formalized to focus on assisting families with adherence to follow-up visits and subspecialty referrals and accessing developmental services, and also to work with children and families to support patients with overcoming transportation barriers. The study found that referrals for process-oriented needs were significantly more successful than those for other issues, such as adherence concerns, and Patient Navigators were successful in supporting referral uptake. One model of enhanced pediatric care provided in the months before a child is eligible for AAP developmental screening at nine months is Project DULCE, The Developmental and Legal Understanding for Everyone. The intervention tests the hypothesis that the inclusion of a trained, bachelors-prepared paraprofessional can both support families and improve quality metrics. DULCE adopts a family strengthening approach, incorporates elements of the Healthy Steps model and a Medical Legal Partnership (MLP), and embeds a Family Specialist on the care team to provide enhanced support to families, including 1) collaborative visits with the physician, 2) home visits, and 3) e-mail, text, phone support over the six-month period. One evaluation reported that the Family Specialist offered a median of five hours of educational and navigational support over an average of 14 in-person, home-based, or virtual (phone, text, e-mail) encounters. The Family Specialist also a participant in regular interdisciplinary care team meetings with the clinician team and the legal professional serving as the MLP. On average, the Family Specialist and physician had three collaborative visits, with the additional encounters occurring outside of the standard clinical visit. A workflow analysis indicated that participation by the Family Specialist during physician visits had no adverse impact on patient flow. The infants in participating families were more likely to have visited the doctor for prevention visits and less

likely visited the emergency room (Sege et al. 2015) . Additionally, participating families were more likely to have received access to concrete supports, with an average of 3.2 vs. 3.7 resources received, such as income, utility, food and housing support. Unlike other models, the Family Specialist provides not only a needs assessment, but leverages a longer-term support relationship to assist with benefits acquisition and navigation. DULCE, by being embedded in the primary care setting, maximizes the value of the patient's office visit, by complementing the roughly 20 minutes the physician spends with the patient to provide enhanced family-centered pediatric care. The model is an effective home visiting alternative and has the potential to provide front line triage into higher cost services, such as social work and legal support.

Theme #4: Importance of Access to Technology and Well-Designed Informatics

Optimally, the design of the templates, workflow and fields embedded into a practice's EHR supports task sharing or collaborative care for developmental and behavioral screening. Ideally, technology provides a potential platform to enable a care team to support the same family by accessing and documenting in the same record. Facilitators to successful adoption of paraprofessionals in California include ensuring that paraprofessionals have access to and training in clinical information systems so their work in the clinic and in the community can be documented and incorporated into the patient's care plan (Chapman 2017). While a well-designed workflow which embeds clinician reminders into the EHR can support improved developmental screening, it does not negate the need for workforce expansion. A quality improvement intervention in an academic pediatric clinic aimed to increase compliance with developmental screening, guidance, referral, and follow-up by embedding screening templates into EHRs (Talmi 2014). The EHR changes increased screening rates but did not impact provider follow-up; a chart review found no substantial increase in provider referrals and almost no documentation of outcomes or community-based services. The clinic's enhanced data tracking found providers engaged in passive monitoring, only recording outcomes if a family happened to return to the clinic. *Often, despite the referral, the family was not connected to needed services.* As a second intervention, the clinic instituted phone follow-up plus the screening template; psychology fellows

conducted phone calls as part of care coordination and referrals; this function was later shifted to office staff, due to cost. With phone follow-up, providers documented 31% of early intervention disposition rates, an increase from 15%. In addition, 50% of the abnormal screenings were referred to community resources, including 43% to Early Intervention (EI) services, in contrast to 20% community referrals and 13% EI referrals with simply the screening template only.

Theme #5: Criticality of Supervision and On-Going Training

The challenge of paraprofessionals is that they do not often come from a formal training program, which calls for greater supervision; recognizing this, when delegating authority to non-physician clinicians, physicians should consider the proper method of delegation and oversight responsibilities for delegated duties (Pediatrics 2013). The Joint World Health Organization/Office of the US Global AIDS Coordinator Technical Consultation on Task Shifting noted that task shifting is an intervention conceptualized to address human resource shortages, but may generate new tasks and responsibilities, particularly in the area of supervision (WHO 2007). Early research noted a positive relationship between practice size and use of allied workers in expanded roles (Yankauer et al.1969); this may be in part due to the ability to have supervisory staff to monitor the performance and training of non-clinical staff.

There is evidence that lay health providers can provide similar quality of care as licensed nurses for select maternal and child health tasks, provided they have adequate training and support. The literature supports the need for material support in the form of written or electronic job aids for lay or paraprofessional workers who assume new tasks (Deller 2015) (Jennings 2011). An initiative to accelerate task shifting in maternal and child health found that job-aids contributed to the success of task shifting antenatal counseling to lay nurse aides in Benin. (Jennings 2011). A quasi-experimental design was used to compare the counseling performance of lay nurse aides to nurse midwives using identical performance supports, as part of a task shifting initiative to expand their role. Notably, with the help of job aids, lay nurse aides exhibited superior performance for communication on general prenatal care (b = 23.8, 95% CI: 15.7, 32.0), birth preparedness (b =12.7, 95% CI: 5.2, 20.1), and danger sign recognition (b = 8.6, 95% CI: 3.3, 13.9). Notably, a more recent study examining registered nurse (RN) overlap with

other team members, such as nurse practitioners, physicians, and medical assistants found RNs spent more time on tasks that overlapped with MA roles than tasks that overlapped with physician/nurse practitioner roles. Accordingly, the authors concluded that opportunities exist to optimize RN pediatric primary care roles, for example by delegating certain tasks to MAs or other lower-level providers. This workforce optimization may reduce costs, while improving quality, patient experience, and staff satisfaction (Rubin 2020). Similarly, German study of over 2,000 family practice providers found a third delegated key tasks to enhanced MAs, and those physicians who did were more likely to be younger, and less likely to be working in an individual practice (Miralles 2020).

Possible Limitations in Existing Research That Should be Remedied

Notably, many of the articles discussed enhanced pediatric care team models in large, urban pediatric practices associated with a research hospital. This nuance is expected, given the challenge of doing community-based research, but may indicate that findings cannot be translated to smaller practice lacking the enhanced resources of an academic medical center or an integrated delivery system. Additionally, the most straightforward models for enhanced pediatric paraprofessionals with broad prevention roles responsibility were found outside the United States, specifically in Germany and in the UK (Bezem 2017, Schoierer 2016). In the US, assistants who supporting developmental screening processes included trained office staff with a more limited scope, in part due to scope of practice considerations unique to the US, perhaps due to the influence of professional societies, and concerns regarding malpractice risk (Guevara et al. 2013). Using a higher cost resource like a psychology fellow to conduct referral tasks and provider patient follow-up calls proved financially unstainable for Talmi et al. There is an opportunity to define an entry or midlevel role to support early identification and intervention linkage functions. More information is required to ascertain whether bachelor's prepared staff are critical or if trained, non-college graduate staff can help caregivers complete screening forms, document key tasks in the EHR, provide health education support, and support care coordination functions. There is evidence lay health providers can provide similar quality of care as licensed nurses for select maternal and child health tasks, provided they have adequate training and support (Lewin 2010).

Drawing thematic conclusions from workforce enhancements implemented in concert with other quality improvement activities, such as patient text messaging or EHR changes is challenging, as it is impossible to attribute improvements to a single intervention. And finally, the literature review did not capture issues pertaining to financing or liability, critical adoption and sustainability issues for an unlicensed field-based role. Generally, paraprofessionals in the seven profiled models are employed staff of the profiled practice or health system, often grant-funded. In all U.S based-cases, sustainability is a challenge. Although some health systems and plans have begun financing roles such as CHWs for short-term interventions with high-cost patients, longer-term sustainable financing is not yet widely available for CHW services where cost-savings take longer to achieve, such as health promotion, maternal and infant health, disease prevention, and self-management (Lapedis 2018). Recently, California passed legislation to fund CHWs, but there is no guarantee that the reimbursement for the role will cover the full cost of care and practices will elect to deploy this resource, in support of pediatric patients and EII (DHCS 2022).

CHAPTER 3. METHODOLOGY

Dissertation Aims and Research Question

My overarching research question is: ***How can policymakers support the adoption of paraprofessional models in pediatric practices to improve developmental screening and linkage to recommended services and supports?***

Aim 1. What are the facilitators and barriers to adopting paraprofessionals in pediatric practices in order to support developmental screening and care coordination tasks, according to Medi-Cal managed care plan clinical leaders?

Method: Key informant interviews with Medi-Cal managed care clinical leaders

Aim 2. What are the facilitators and barriers to task sharing developmental screening and care coordination functions with paraprofessionals, according to Medi-Cal physicians serving young children?

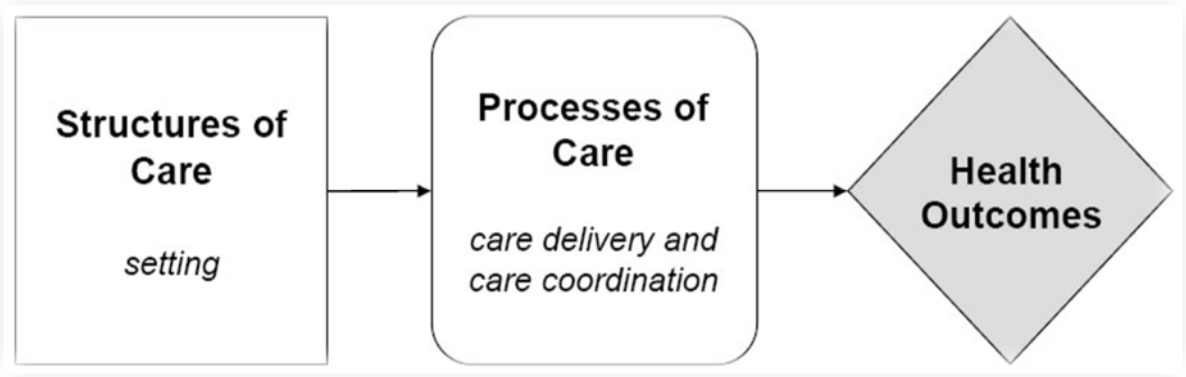
Method: Key informant interviews with Medi-Cal physicians

The first two aims are intended to gain insight regarding facilitators and barriers beyond financial considerations.

Conceptual Model

The PI used three interrelated models referenced in the literature to develop a single conceptual framework shared in **Figure 5**, of the barriers and facilitators to adoption of paraprofessionals in pediatrics for developmental screening and care coordination functions. This final framework was used to create two qualitative interview guides and to thematically code data from the key informant interviews. The first model which informed the conceptual model is Donabedian's Quality Framework, in which health care outcomes are determined by the structure and processes of care (McDonald 2007).

Figure 3: DONABEDIAN QUALITY FRAMEWORK (McDonald 2007)



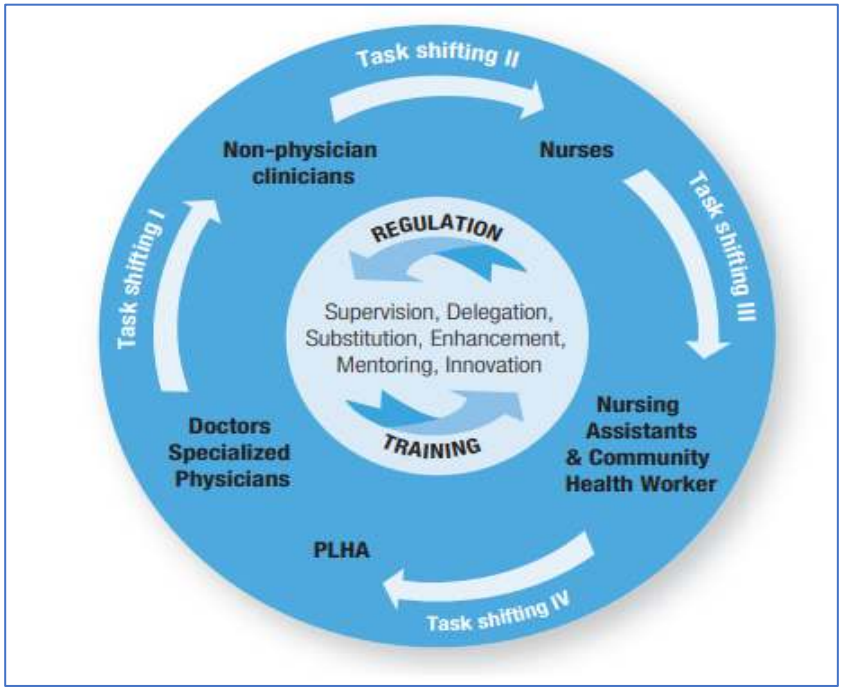
This is critical, as it is an input to framing the value proposition of paraprofessionals on a well-child care team - to support tasks tied to prevention, early intervention, and quality.

The second input is **Table 5**, which displays inputs for the structure of care drawn from the *Key Components that Facilitate Effective Task-Shifting Model* (Deller 2015). The third input is **Figure 4**, the World Health Organization's *Task Shifting Model* (WHO 2007), which highlights levels of health system task shifting (e.g. MD to nurse vs. nurse assistant or community health worker) and facilitators of task shifting. While these are key components that facilitate effective task-shifting in international maternal and child health projects, they resonate with domestic pediatric preventative service concerns, and informed the development of the conceptual model.

Table 5: KEY COMPONENTS THAT FACILITATE TASK SHARING (Deller 2015)

1. Policy and regulatory support
2. Definition of roles, functions, and limitations
3. Determination of requisite skills and qualifications
4. Education and training
5. Service delivery support
    - Including management and supervision
    - Incentives and/or remuneration
    - Material support (e.g. commodities)
    - Referral systems

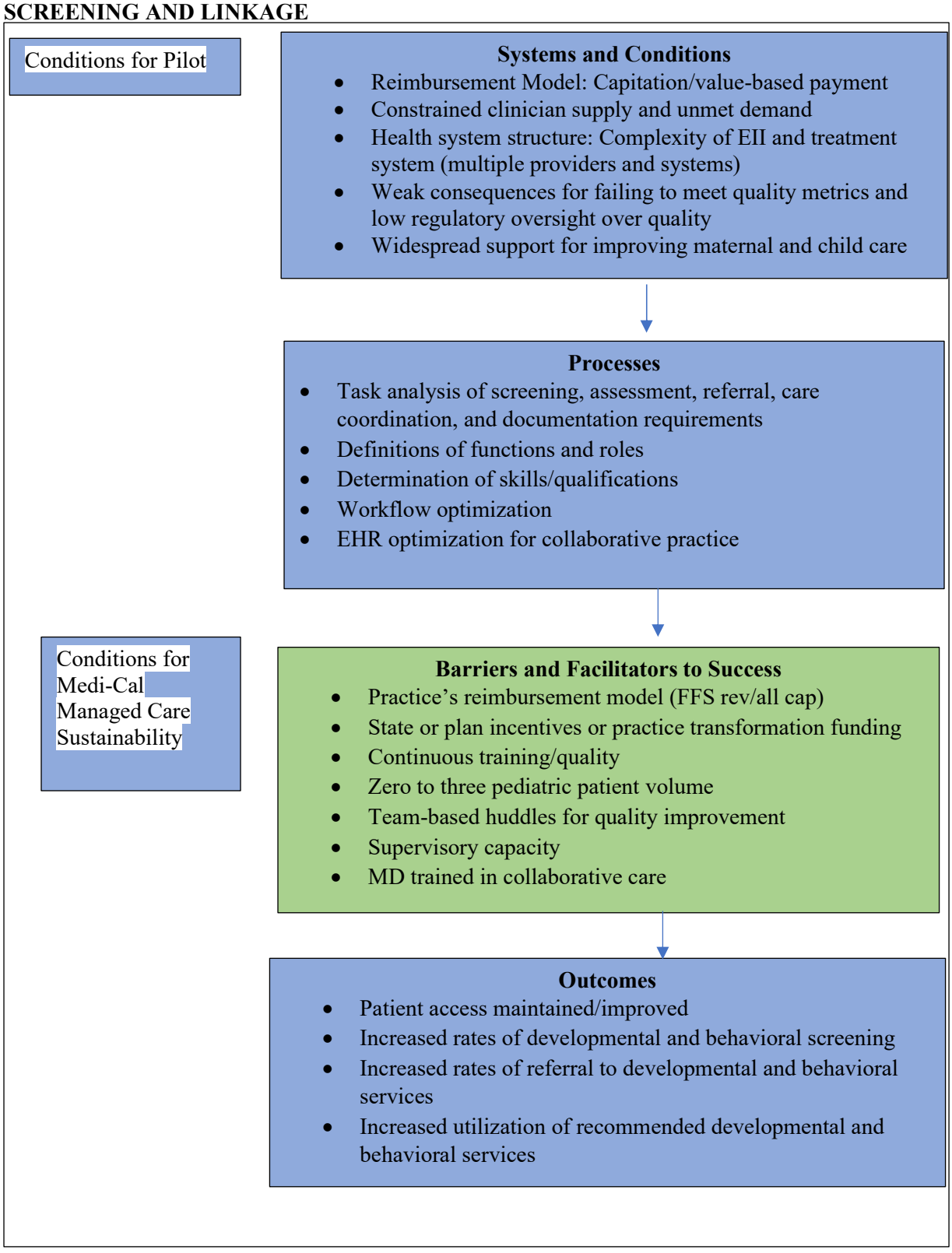
Figure 4: TASK SHIFTING (WHO 2007)



In regard to policy and regulatory support, notably, in CA, for many years incentives and/or remuneration for EII were minimal. While Oregon specifically assesses and rewards plans for developmental screening rates and development referral rates, CA did not for many years (OHA 2018). Although CA leveraged tobacco tax funds to create a Medi-Cal provider incentives for pediatric screening, screening does not necessarily translate into incenting provider practices and systems to expend the time and effort to route a child to an appropriate EII system for services and supports (DHCS 2020). Additionally, there is less regulatory oversight in CA as there is in Massachusetts, where payment is not provided if a developmental screening is not performed. Provided plans are required to demonstrate effective population health management practices in preparation for NQCA accreditation, plans may be receptive to investing in solutions which can mitigate the complexity in the siloed delivery system serving children with an identified behavioral or developmental concern. With the advent of potential CHW reimbursement, pediatric practices aware of all required functional tasks to ensure young children receive timely services may be more receptive to deploying paraprofessionals or enhancing an MA role. And finally, the conceptual model's outcomes include desired clinical metrics (increased rates

of developmental screening, increased documentation of said screening, increased rates of referral to community based or out of practice services, and optimally, increased documentation of a successful linkage) as well as a balancing metric to maintain access.

Figure 5: CONCEPTUAL MODEL: FACILITATORS AND BARRIERS TO SUSTAINABLE INTEGRATION OF PARAPROFESSIONALS FOR DEVELOPMENTAL AND BEHAVIORAL SCREENING AND LINKAGE



Key Informant Inclusion and Exclusion Criteria

Cohort 1: Managed Care leader inclusion and exclusion criteria

Managed care leaders were selected according to inclusion and exclusion criteria. Informants must have served as Medical Director, Assistant Chief Medical Officer (CMO), or Chief Medical Officer (CMO) of a Medi-Cal health plan or Independent Practice Association (IPA) in CA, to ensure they had sufficient exposure to Bright Futures/DHCS requirements. Additionally, this was also needed to ensure they understood practice improvement, reimbursement models, compliance considerations, and quality measures. Plans could be for-profit or non-profit, provided they were contracted with State to serve Medi-Cal members in at least one CA county. Managed care clinical leaders could be board-certified in any area; some were medical doctors, while others were doctors of osteopathy. One interviewee was no longer employed at a Medi-Cal plan at the time of the interview but had a deep and current knowledge of regulation. The PI was receptive to CMOs or Medical Directors from a variety of different counties in CA but via snowballing, ended up focusing on those with plan experience in larger, more populated counties. In summary, inclusion criteria include:

*Administrative Leadership Role***-** Interviewee must have some current or previous clinical administrative leadership role at a health plan or IPA to ensure exposure to practice transformation opportunities and key constraints to transformation, such as reimbursement or regulation**.**

Employed at a Medicaid Health Plan- Interviewee must be employed or have worked at a risk-baring entity serving Medicaid members. The health plan could have more than one line of business, or a commercial product and a Medicaid plan, but must be contracted with DHCS to serve Medi-Cal members. In some cases, the health plan was a subplan of another health plan in the County or a risk-baring IPA financially at risk for health care expenses incurred by assigned members. This included a staff model HMO which owns its own facilities and employ physicians, given the number of Medicaid members served by this entity in CA.

Clinical Experience- Respondents must be clinicians who have served Medi-Cal members in California. While administrative leaders may have similar perspectives regarding paraprofessionals and integration, the Bright Futures guidelines from the AAP are directed at clinical leaders.

Exclusion criteria included employment at a health plan only serving commercial HMO/PPO members, physician extenders (e.g. NP/PAs), and providers located out-of-state. Knowledge of California's Medi-Cal managed care system was pivotal to ensure interviewees faced similar opportunities and constraints in meeting pediatric provider and member needs.

Cohort Two: Provider Inclusion and Exclusion Criteria

Pediatric providers were on the front-line serving patients, and all had some experience with clinical practice transformation. Providers were selected based on the following criteria:

Clinical Experience- Respondents were clinicians currently serving or have served pediatric Medi-Cal managed care members in CA. While administrative leaders may have similar perspectives as clinicians regarding paraprofessionals and integration on care teams, the Bright Futures guidelines on developmental screening from the AAP are directed at clinical leaders.

Medi-Cal Managed Care Provider- Interviewees must serve or have served children at or under the age of three, who are supposed to receive developmental screenings at periodicity according to Bright Futures guidelines. Providers were from a variety of practices, including FQHCs, an integrated delivery system affiliated with a group-model practice, and a county system. These key informants represent a variety of different perspectives from varying types of organizations serving low-income children.

Exclusion criteria included limited service to children enrolled in Medi-Cal managed care, and providers located out-of-state. Basic familiarity with California's Medi-Cal managed care system and EII system, and AAP guidelines, was pivotal to ensure interviewees faced similar opportunities and constraints in meeting pediatric patient needs.

Recruitment and Selection

Ten key informants were recruited by email, using rolling recruitment; select informants suggested other potential interviewees in their professional network. All interviewees were assessed for fit based on their experience working in a clinical leadership position for a Medi-Cal health plan or serving Medi-Cal members as a front-line clinician (Cohort 2). The researcher's original goal was to interview only CMOs from CA Medi-Cal health plans for the managed care cohort of interviewees. This goal was modified to include Medical Directors, who have responsibility for implementing quality initiatives, transformation efforts, and providing clinical oversight over IPAs via utilization management or quality improvement leadership. Medical Directors may have less financial oversight than CMO peers but can assess the feasibility of transformation strategies in different types of practice settings (e.g. large practices vs. small community clinics). In all cases, key informants were clinicians, which was important given their knowledge of the clinical team power dynamics and the professionalization of care extender roles. As they have personal experience practicing medicine, they were able to assess the feasibility of sharing workflows with unlicensed staff, as well as the infrastructure (technology, exam rooms) required for effective collaborative care. After inclusion and exclusion criteria were met, the researcher identified 10 managed care leaders as key informants for telephone interviews. One of the leaders was a practicing consultant who was formerly a health plan CMO, another was a practicing pediatrician with joint administrative responsibilities for pediatric screening initiatives in a group model HMO, and one was a former pediatric leader at a large risk-bearing IPA. The other seven managed care plan interviewees were currently employed as clinical executives at health plans at the time of the interview. Clinical specializations varied, including family practice, pediatrics, and internal medicine. The 10 clinicians represented 10 different practice locations, although two clinicians worked at two different clinics in the same multi-site FQHC.

Table 6: KEY INFORMANT ROLES

Managed Care: Cohort 2	
Chief Medical Officers	*6*
Medical Director	*2*
Retired Chief Medical Officer	*1*
Administrative Director	*1*
Providers: Cohort 2	
Pediatrician	*10*

Interview Structure

Qualitative data for the facilitators and barriers component came from the semi-structured interviews with key informants. The researcher used the final Interview Guides in the **Appendix 5** and **Appendix 6**, to guide discussions. This research study design was reviewed and approved by the UNC Institutional Review Board (IRB). The questions for each cohort were intended to obtain feedback on barriers and facilitators to the use of paraprofessionals in pediatrics to support developmental screening and care coordination. The managed care leader interview focused on the following domains: incentives for including paraprofessionals on care teams, experience with paraprofessionals on care teams, perceptions regarding the value of paraprofessionals on care teams, as well as the health plan's sense of their role vs. providers in ensuring timely developmental screening. The physician interviews were designed to assess what infrastructure and workforce might be needed to support developmental screening and care coordination.

Key respondents were sent a notice of informed consent and an IRB approved list of questions via email, in advance of the scheduled interview phone call. These documents are included in **Appendix 8** and **Appendix 9**. The researcher pre-tested the interview guides (**Appendix 3** and **Appendix 4**) with two managed care leaders and two physicians to assess the clarity of interview questions and the interview duration. This resulted in reducing the number of interview questions to 23 (providers) and 24 (managed care). Final versions of the Interview Guides are in **Appendix 5** and **Appendix 6**. A total of 20 respondents were included in the study. 18 respondents were interviewed privately, and two clinician respondents who worked two different clinics in the same FQHC network were interviewed together.

There were a total of 19 interviews conducted between March 2019 and June 2019. The average interview length was approximately 35 minutes (range: 20 to 70 minutes). All interviews were conducted over the telephone in English.

Analysis

Detailed interview notes were taken during interview sessions. The PI used the categories in the Conceptual Model as the coding template for thematic analysis. The transcripts were stored on a password-protected computer for further analysis and thematic coding using Microsoft Excel. The transcripts were scrubbed for spelling errors, finalized, and formatted for review. The initial codebooks for each cohort were created based on themes gleaned from a review of responses and sent to a qualified secondary coder for refinement. Four interviews for each cohort (managed care and physicians) were also coded by the secondary coder, who had experience with qualitative interview coding. The PI and secondary coder compared results to support concordance, and further refined themes and subthemes. After the initial thematic coding was completed, select subthemes were further eliminated and refined. Results of the analysis will be shared in Chapter 4 and final codebooks are available in **Appendix 11** and **Appendix 12**.

Protection Against Conflicts

I did not approach or interview anyone that works at organizations where I was employed during this research (a children's and family commission and a pediatric hospital in Southern California), nor did I share key findings from my dissertation with anyone from my current or previous organization(s).

CHAPTER 4. RESULTS

Two groups of key informants - health plan leaders and pediatric providers - addressed two research aims: 1) to assess barriers and facilitators to completing developmental and behavioral screenings and coordinating access to needed services and supports and 2) to discern receptivity to the potential use of a paraprofessional on the care team to support screenings and coordination for children enrolled in Medi-Cal.

First, interview respondents shared several general barriers and facilitators relevant to complying with current State requirements to ensure the delivery of developmental and behavioral screenings to pediatric members, and to coordinate linkage to needed services and supports. Managed care clinical executive respondents provided insight regarding the relative prioritization of compliance with developmental and behavioral screenings requirements vs. other tasks at their plan, and barriers and facilitators. Providers at medical practices serving pediatric members shared barriers and facilitators related to incorporating pediatric screening and referral tasks into workflows and care teams. Secondly, interviewees from both cohorts reflected on barriers and facilitators of leveraging paraprofessionals as a workforce to support developmental and behavioral screenings and care coordination functions for pediatrics members.

The chapter shares findings general to all respondents' perceptions regarding the feasibility of using paraprofessionals as a workforce for care management services within their organizations or at contracted provider organizations, then focuses more narrowly on the potential of using paraprofessionals for specific tasks, such as screenings, referrals, and health education. The chapter shares common themes identified by respondents related to the implementation of developmental and behavioral screenings. Later, the chapter provides a discussion regarding elements impacting the plan's or practice's ability to

fulfill developmental and behavioral screenings. The chapter concludes with a short synthesis of themes and recommendations highlighted during interviews.

Facilitators Ensuring of Developmental Screening and Care Coordination for Pediatric Members: Managed Care and Provider Respondents

Table 7: FACILITATORS TO ENSURING DEVELOPMENTAL SCREENING AND CARE COORDINATION

Managed Care		Provider	
Theme	**Weight**	**Theme**	**Weight**
1. Perception that plan should play a key role in supporting access to and the quality of pediatric preventive care	Often	1. Practice has on-site support staff dedicated to screening and coordination	Often
2. Plan is engaged in partnerships with key organizations to improve provider, member and community knowledge of developmental and behavioral screening	Occasionally	2. Practice optimized E.H.R for screening and coordination workflow	Often
3. Plan and/or provider has a direct network of behavioral or developmental services	Occasionally	3. Practice has relationships with developmental/behavioral service providers	Occasionally
		4. Provider values and prioritizes early identification and intervention	Occasionally

Managed Care

Some respondents were aware of or participating in partnerships to bolster screening rates and member linkages to services and supports, in conjunction with pediatric-focused organizations. Other respondents pointed to an increased ability to connect children to appropriate services and supports when specialty providers are in the same delivery system as the pediatric provider, or the plan directly manages behavioral health services. And finally, other respondents highlighted the importance of EHR infrastructure and connectivity at the provider, plan, and County level, to help coordinate a member's access to care.

1. Perception that plans can play a role in supporting access to and improving the quality of pediatric preventive care

Almost all participants felt that there were avenues where a managed care plan could better support pediatric preventative care, provided developmental and behavioral screening was prioritized and resourced by the State. These areas included greater enforcement of and provider education regarding existing APL requirements regarding screening and coordination, creating additional partnerships with child-focused organizations, or supporting provider infrastructure. Respondents identified opportunities for technology and workflow optimization, including helping providers embed developmental screenings in EHRs, creating electronic referral pathways to in-system, in-network, and out-of-network, and community services and supports, and ensuring a closed loop of information back to the referring provider after a child receives services or supports. However, in most cases, technology was not viewed as a panacea for getting the member screened and routed to appropriate services or supports by the plan or provider.

> "We need to get developmental screenings into EHRs. We need to solidify a reimbursement model to support clinics and support practices. The training should be a practice-level obligation, or a plan-level, but not exclusively, the plan and the County should react."

Giving limited resources, informants noted plans are selective about focus areas for quality improvement, and often prioritize members requiring complex care vs. those at risking-risk, such as many children. For plans relying on contracted providers to manage care coordination functions for EPSDT, there was ambiguity regarding the best oversight mechanism to ensure screenings are occurring and children are receiving needed services and supports. Participants expressed that workforce and workflow optimization is a critical element to executing screenings and care coordination at the practice level. One leader planned on sending plan staff to contracted practices to help with training on the well-child check and developmental screening.

These reflections highlighted Medi-Cal plan clinical leaders' support of workforce transformation as a vehicle to aid both pediatric practices and plans in fulfilling screening and coordination obligations.

Additionally, this highlights the tension between the hub and spoke model and a practice-based model, from a financially sustainability point of view.

2. Plan is engaged in partnerships with key organizations to improve provider, member and community knowledge of developmental and behavioral screening

Select health plan respondents were aware of active plan partnerships with community-based organizations or public sector partners for pediatric practice improvement, including a county First 5, or the local chapter of their AAP. Others plans employed staff to work directly with members at the health plan's Family or Community Resource Center. One interviewee, a former health plan CMO, had prioritized pediatric provider and health plan education on EII during her tenure, in collaboration with the AAP. This included providing basic education on the screening process as well as an orientation to child development programs and EII services for children in CA. The respondent noted that while child-serving programs and services reside both in and outside of the Medi-Cal managed care system, the plan still retains accountability for ensuring the member's successful linkage (e.g. regional center) to needed developmental services or supports; carve-outs do not remove the plan's accountability to ensure succession EPSDT care coordination.

> "I put in a pitch for doing an early intervention training. Early on when I was at the health plan (as CMO), we had a relationship with the AAP and did some learning collaboratives around trainings for developmental screening. We did a few waves of exposures for providers, as well as education on the programs that existed for children, some carved out."

Select plans invested in Family or Community Resource Centers in their service areas as a way to provide health education or some direct services to plan members. One key informant highlighted the plan's focus on caregiver education as a vehicle to bolster awareness of the importance of developmental screening in the community.

> "We are encouraging members to get screening. We have a whole class on circle time, which trains caregivers in the ASQ screening at our Community Resource Centers."

3. Plan and/or provider has a direct network of behavioral or developmental services

The second theme pertained to network strategy and integration. Select plans were able to route children with a mild to moderate developmental or behavioral concern if they have a close provider

connect, via a directly managed behavioral health network (vs. a contracted managed behavioral health organization). Additionally, a staff model HMO plan which employed specialists such as developmental pediatricians was advantaged. While these are separate observations, they are interrelated as linkages to needed services may be more successful when the plan has greater control of a supply of developmental or behavioral providers. Respondents noted referring a child out of their pediatrician's network for services whether covered or carved-out or using a contracted third party to manage behavioral health care access creates additional barriers and adds to administrative complexity.

Another participant stressed how connecting patients to specialists within the same integrated delivery system can promote timely referrals for children with a developmental need. In contrast, when referrals must go out of the system, the respondent has concerns about the quality of care and the likelihood of receiving any outcome data. Providers at this staff model HMO benefit from a closed loop of information regarding the patient.

> "We are (affiliated with an) integrated delivery system, which helps. We give them a phone number for our health system's developmental clinic for an extensive evaluation, and those pediatricians go from there and delegate and (the child can) be followed. But I think even for us, it is a priority to get greater access to resources in the community."

In all cases, respondents implied that members could access their health plan's care management or member services teams for assistance accessing provider recommended developmental services or supports, but this rarely occurred. They seldom received referrals from either members or providers seeking assistance in accessing either carved in or carved out developmental services, with the exception of Applied Behavioral Analysis (ABA), a covered Medi-Cal benefit effective 2014. The plan may not be known or seen as a resource by the pediatric community or caregivers to assist in bridging gaps in care or be accessible.

Providers

The second cohort of informants- clinicians serving children enrolled in Medi-Cal- brought a different perspective regarding the facilitators of incorporating pediatric screening and care coordination into workflows. Almost every respondent had a MA, and many respondents worked with

paraprofessionals who supported at least one element of the screening or care coordination workflow. These roles included CHWs (3), Project DULCE family specialists (2), care coordinators (4), case workers (1), navigators (2), care managers (2), and caregivers with lived experience (1).

1. Practice has on-site support staff dedicated to screening and coordination

Practices with non-clinical staff with responsibilities for screening intake and coordination tasks reported greater ease with adhering to developmental screening and care coordination responsibilities. The specific breadth of their responsibilities varied but they played a role in ensuring that developmental screenings were completed, and the family was connected to services. Most often, these staff were not MAs, but worked alongside pediatricians, nurses and MAs to complete tasks, and in some cases, to directly engage the family. In a minority of cases, staff were MAs who played an enhanced coordination function. Integrating additional staff into the EII workflow allowed the provider to increase their bandwidth for other tasks and provide support to families navigating a complex EII services and support system.

> "Do I work with paraprofessionals? Yes, I do- they are called care gap coordinators, at one point they were called navigators, and medical assistants as well. The care gap coordinator does the work I don't have time to do. Typically, the front desk will give the ASQ to the client to fill out. They are seasoned MAs- they used to do rooming, but they are repurposed now."

In many cases, the interviewees inventoried the specific tasks performed by support staff, noting their managed care-related functions, including working on service authorizations and approvals. Additionally, some of the staff were noted as having a particular educational attainment, in service of a higher-complexity suite of responsibilities. Occasionally, respondents referenced that a paraprofessional interacts directly with the family to support access to the regional center. Additionally, they provide educational support for families who may benefit from context regarding the referral process, recommended services, or rationale for the referral. In one case, a respondent noted their CHW visits the family at home and in the community to help steward referral and service linkages to developmental or behavioral services. The CHW can help demystify the results of a developmental screening, but typically is more focused on coordination, vs. conducting the actual screening.

> "We are the only pediatrics pilot with a CHW supporting care coordination in all of our safety net system. The CHW is not so much the screener, but the coordinator- when she visits with the family, she observes the child in their natural environment. If they do need a more formal evaluation, she helps them connect to the regional center. A lot of the families are hesitant to access the services, and she helps them understand."

In select cases, the practice reported multiple types of unlicensed support staff working in concert to support screening and care coordination workflows. In some cases, these roles were funded through time-limited grants, or piloted in one practice in a larger health system to provide proof of concept for expansion. In one practice with a grant from a local First 5, paraprofessionals included Project DULCE family specialists, as well as maternal home visitors who performed some prenatal and postpartum support in the field for both mothers and infants.

Providers with direct experience working with paraprofessionals were adamant these roles were essential to successfully linking a child to developmental services and supports. In many cases, the effort to ensure the caregiver could connect their child to recommended services required significant parental support. This raises the question as to whether the true service intensity of pediatric care coordination tasks are factored in reimbursement rates from payors. One respondent asserted that successful pediatric care coordination required a full FTE other than the MA to ensure young children are successfully linked to care.

> "The MAs will give the caregivers the screening before the caregivers come in the room, and the parent will complete. It's ok. In terms of care coordination, and getting people connecting to resources, it depends on the clinic. It takes another person. I have parent navigators who are connecting parents to the regional center."

2. Practice has established relationships with developmental/behavioral service providers

Physicians perceived personal relationships with service providers outside of their system as a care coordination advantage. Given the siloed nature of the EII for in CA, providers may benefit from participation in a practice improvement collaborative. In certain counties, there are multiple regional centers which have distinct protocols. Participation in practice improvement networks involving the regional center may aid in refining access pathways. One practice noted that it was necessary to know the appropriate individual to contact, if and when a care coordination effort required refinement. This helped

to bolster the provider's confidence that screenings would in fact result in receipt of timely services or supports.

> **"**The diversity of the coordination team is important and knowing the community. We have had the County Care Coordination Collaboration group and had a seat at the table. We know who to call and have a key informant for organizations and someone you need to know for process improvement, vs. just (someone at) the organization."

The regional center maintains a provider network for various services, such as speech therapy or occupational therapy. The regional center is responsible for evaluating and connecting the child to the appropriate service provider for their presenting need. In other cases, the child may require services from pediatric subspecialist for a physical issue, autism, or another concern. And finally, the child may require behavioral health services, creating a more intense challenge for navigation for caregivers with children with multiple needs for service or support; practices with co-located services had a significant benefit.

> "We do have the people to refer them to in our clinic for behavioral health. If you do those (screening) questions and have (on-site) support to address the issue, it's more doable."

3. Practice leverages EHR for optimized screening and coordination workflow

A developmental screening and referral requires a multi-step workflow and inherently dynamic as new requirements emerge. Some practices did not have ASQ or other screening tools embedded in their EHR to support seamless data collection. However, most respondents entered data into the EHR, or scanned screenings as an attachment to ensure documentation was accessible to team members. This approach facilitated a greater ability to distribute screening and care coordination tasks across an interdisciplinary team.

> "We focused on workflow. Before we had an EHR, we made sure the forms were in there, and the educational materials. The developmental screening is hard if you don't integrate it into the routine and the staff training. It was shocking to learn how few people are doing the developmental screening."

Developmental screening begins with determining which instrument to use and how to incorporate this into the patient's well-child visit. This also requires the practice to ensure the child comes in at the appropriate periodicity, and configures their EHR to both record score data, and to aid in needed documentation and coding for billing and reimbursement. The optimal workflow includes a return receipt

of data back from the EII provider to the pediatrician. This approach ensures the patient's chart captures information regarding whether they qualified for particular services, or if the client was effectively connected to appropriate or needed care. In select cases, the CHW enjoyed access to the record to allow them to assist the nurse in recording key linkage data.

Another provider highlighted the potential to have caregivers complete a developmental screen using a tablet or via a web link sent prior to their child's appointment, with the data feeding into the provider's view in the EHR. Optimally, before completing the tool, the family is given some education regarding the purpose of the screener, and directions regarding how to complete the form. This process could eliminate the manual step of data entry for a provider, nurse, medical assistant, or paraprofessional.

> "Definitely screenings should be electronically completed, and task shifted from the moment the patient arrives or before. Ideally, patients should fill out screening tools. This flies in the face of the AAP guidance that it should be a conversation tool, but for efficiency's sake, technology should allow them to complete the screening in advance. Once the results are in, and it's normal, (the MD) can provide anticipatory guidance."

One respondent noted that a more sophisticated workflow would reduce redundancy for families completing multiple pediatric screens requiring similar information. This view of optimizing informatics for patient experience and efficiency, and eliminating waste, may be easier for technology providers building screening tools outside of the traditional EHR.

> "When (X company's) mobile tool adds on autism screening or depression screening to their workflow, it has the information all combined so caregivers do not have to answer redundant questions. I haven't seen any EHR do this, or are that sophisticated, and we are not using our EHR for this, where this analytics and question phasing from multiple screenings occurs."

A more sophisticated system could score the results, and automatically highlight key areas for provider discussion.

4. Provider values and prioritizes early identification and intervention

In select cases, the respondent indicated that developmental screening and successful linkage to services and support occurred because of their own commitment to EII as leaders. These informants indicated that amidst other competing priorities, investing time in development screening and care coordination was pivotal to their mission as pediatric providers.

> "We are beyond the point where anyone should disagree that every mother and baby must be care managed, but there has to be a sustainable business model."

Specifically, the clinicians believed that EII services could favorably change the trajectory of a child's development. In these cases, interviewees assumed a significant role in ensuring patients received a screening at the appropriate periodicity. Many noted the consequences of failing to identify and address developmental delays were significant. Select providers had a focus on child development in the context of family protective factors, trauma, and social determinants of health, in the spirit of ensuring the child gets off to the best possible start.

> "(Developmental screening priority is) a 10. Having patients not take on maladaptive approaches which can exacerbate issues, which means caregivers get stressed out and get violent with their kids, as to how they shape (their) child's behavior. It reduces frustration with the family."

> "Problems are much easier to treat during critical periods in development, vs. later ones. The kid who is four with a speech delay, is very different in how they present and show up. Same with autism. They will be easier to help and have a better long-term prognosis; these are the kids who get kicked out of preschool and their caregivers are so stressed. The global delays that didn't get caught early lead to grade levels two or more behind. These kids who show up to school aren't ready to learn."

> "We've seen 2- and 3-year-olds who are so behind, and they are sent to us; the really early years are so important, and they may be at home or in a low-quality childcare. Public education is needed about normal child development, all those things that can impact the developmental disability."

Ultimately, many providers work in a larger system where they are dependent on administrative leadership support for resources, such as staffing and configuration of EHRs for pediatric concerns. During the course of this research, almost all physicians referenced a need to compete for scarce resources, due to their systems' focus on higher-utilizing adult patients. A successful cycle of developmental screening and care coordination is dependent on the larger prioritization of pediatrics members served by the practice, system, or clinic.

> "With current resources, it's really about the priorities of people in leadership. Within the FQHCs, they tend to be family medicine-focused, and a lot depends on priority of pediatrics in the clinic. It was high priority for me, and so I made it happen."

When asked about the priority of developmental screening, many respondents indicated it was a major priority, despite awareness of continued opportunities for process improvement. Several key

informants developed care teams for screening and care coordination purposes, seeking philanthropic support when reimbursement from payors was insufficient.

Barriers to Ensuring the Delivery of Pediatric Developmental Screening and Care Coordination: Managed Care and Provider Respondents

Table 8: BARRIERS TO ENSURING DEVELOPMENTAL SCREENING AND CARE COORDINATION

Managed Care		Provider	
Theme	**Weight**	**Theme**	**Weight**
1. Medi-Cal plan quality metrics do not require minimum performance on screening, or reporting on care coordination	*Often*	1. Lack of access to EII supports and services in the community	*Often*
2. Insufficient State financing to ensure members receive screening and care coordination to developmental services and supports	*Often*	2. Complexity of navigating administrative barriers to access to EII services	*Often*
3. Confusion regarding plan's pediatric care coordination role and accountabilities	*Occasionally*	3. Low adoption of technology for developmental screening and coordination tasks	*Often*
		4. Limited manpower and time to complete developmental screening and care coordination tasks	*Occasionally*
		5. Developmental screening tool is not cultural/socially/ linguistically appropriate	*Occasionally*

Managed Care

Interviewees reported core barriers impeding a plan's facilitation of developmental screenings and service linkage, including insufficient CA reporting requirements, confusion regarding the plan's accountabilities, and lack of sufficient funding for quality improvement. *(Between when research was conducted and publication, CA leveraged Prop 56 to offer a $59.90 incentive for developmental*

screening. At the time of the publication, it was unknown how this impacted screening rates in CA; reported rates of developmental screening were 25% in 2020).

1. Medi-Cal plan quality metrics do not require minimum performance on screening or reporting on care coordination efforts

At the time of the key informant interviews, developmental screenings were not yet a reportable quality metric for plans. Accordingly, key respondents cited compliance approaches that stopped at the plan level (e.g. CPT code monitoring, chart reviews during a delegation oversight visit). After the State Auditor flagged Medi-Cal health plans for failure to ensure delivery of these screenings in a 2018 external quality review report, DHCS required reporting in 2020, but did not sanction plans for noncompliance nor require minimal performance (Auditor of the State of CA 2019). In response, DHCS issued an APL codifying EPSDT requirements, including ensuring care coordination to services and supports, including carved-out services (DHCS 2019). Repeatedly, it was stressed by managed care key informants that what is not measured and reported by the State, may be missing, even if it is an area of known importance. A vast majority of participants stated that until a measure becomes reportable, it is not as high of a priority area for the plan's oversight of contracted IPAs or providers, as other numerous measures prioritized by the State. Plans have numerous oversight obligations and may be challenged in meeting current measurement and reporting mandates, in part due to poor encounter data submission by providers (Manatt 2020). One respondent noted (before developmental screening became a measure):

> "It's not a top priority. Because it's not a quality measure…we are struggling so much with what we do have to measure, it's a stretch."

Another informant highlighted the need to bolster IPA oversight to ensure provision of developmental screening and care coordination. CA's model of managed care permits plans to delegate responsibility for provider contracting, provider payment, and quality assurance to IPAs, but technically, accountability for provider performance remains with the plan that is contracted with DHCS. For plans which contract with IPAs vs. directly with provider groups, there an understanding the IPA is providing oversight to ensure EPSDT compliance. Plans which capitate IPAs have an added need to validate

compliance through encounter data capture or delegation audits. One respondent specifically highlighted how the delegated model may reduce plan's staff familiarity with and their enforcement of EPSDT:

> "(For) plan and state level change, the metric has to be measured, if it's not measured, it won't get done. It's got to be something that is valued with oversight, to ensure that the practice is being carried out. Plans need to step up and be more engaged to ensure there is linkage to treatment. From the plan and IPA perceptive, they are not going to focus on things that aren't measured."

There was awareness among many respondents that pediatric providers were underscreening, or likely not coordinating care with providers in the community for children with an identified developmental or behavioral need, a requirement under EPSDT. Some respondents noted that contracted medical groups lacked capacity to complete care coordination.

> "However, knowing what I know about individual MD and individual offices, in regard to the management, support, structure and the ability in what they can do, I have no confidence, or around 50% at best of physician groups can do this well. I would feel really bad for the remaining groups. If you want uniformity and consistency, you can require it (care coordination) from the plan."

2. Insufficient reimbursement and financing from the State to ensure members receive screening and care coordination

Several key respondents cited lack reimbursement or incentives as barriers to the plan's role in ensuring compliance with screening obligations or supporting the provider's completion of developmental or behavioral screening. Select respondents were prescriptive about potential future mechanisms for ensuring screening completion. Some respondents believed the State's rate-setting process and capitated reimbursement created an overly a narrow focus on high-utilizers and adults with chronic care needs. As preventative services have a longer-term time horizon for payback, requiring immediate cost savings to justify practice transformation projects may inhibit a plan's focus on children. One respondent shared the plan could use additional financial support to provide oversight over contracted IPAs, or to help strengthen contracting terms.

> "If there is will or funding, the plan can structure the standards better, so we can proscribe this better for the contracted provider. We could have delegation oversight in our audits or with our review. We can sanction them if they don't do these things. We could also do this from a contracting perspective."

A key informant shared frustration with a general underinvestment in pediatrics by the State and commercial plans, suggesting that children are undervalued, in part due to carve outs of children with disabilities outside the system, leaving inadequate financing.

> "Because the State does not reimburse pediatricians well, we have a challenge. The kids who are disabled are carved out of California's Medicaid managed care system. We have a system that doesn't fund for pediatrician's services and therefore I don't think the health plan can do anything about it, whether they are non-profit or for-profit plan."

Another respondent highlighted the disconnect between the plan's high volume of pediatric members and the plan allocation of resources for child members. The desire for quick ROI on practice transformation projects deterred practice transformation efforts for relatively lower risk members if risk is narrowly defined as high acuity or utilization of high-cost services.

> "Most of our pediatric members are low risk, but we love focusing on high utilization because we get the quickest ROI, but I believe on the start of life is important as an OBGYN. But there are not as many resources for kids, and we have a half million."

These quotes highlight for greater reimbursement for the plan's oversight costs and to better compensate pediatric providers for their time. Often, the pediatrician is receiving a capitated rate vs. FFS payment for encounters. This rate is lower than in some states, as children with special needs in CA are carved out to the CCS program. Additionally, investing in underutilizing populations is referenced as a low priority, despite EPSDT and a requirement to screen and connect children to services. Later in Chapter 6, Plan for Change, the PI will discuss potential financial tactics to promote preventative care, and the challenges of ensuring an appropriately resourcing pediatric practice.

3. Confusion regarding plan's pediatric care coordination role and accountabilities

There was some confusion among respondents about health plan's responsibilities for pediatric care coordination, and a perception that other entities serving children with significant disability are solely responsible for this function, vs. health plans. In summary, respondents identified pockets of pediatric care coordination and care management capacity, but most concurred that the health plan's internal capacity to support families and route children to appropriate providers for all developmental or behavioral concerns, may be lacking, in part due to carve-outs. California's managed care model carves

out select services for children with special health needs to the California Children's Services program, or CCS, and specialty mental health behavioral health to the County. In most CA counties, CCS is the responsibility of the county vs. the Medi-Cal plan and includes case management services for select CCS-eligible conditions. (There is an exception for children in Counties participating in California's 1115 Waiver funded Whole Child Model, which carves in CCS into managed care). Some respondents assumed that children with more significant developmental needs would fall under the purview of CCS and had low familiarity with the EPSDT requirements mandating the provision of care coordination for any child enrolled in Medicaid with an identified developmental or behavioral need, regardless of severity (DHCS 2019). Children enrolled in both CCS and Medi-Cal continue to receive primary care services through their Medi-Cal managed care plan, including EPSDT benefits (CHCF 2017). Respondents contemplated the CCS carve-out to the counties for children with special health care needs may have inadvertently contributed under investment in pediatric care coordination services or programs for children with mild to moderate concerns.

One informant highlighted moving the ABA provider network to the plan as a vehicle of demonstrated the plan's ability to coordinate care. Few interviewees cited work to ensure children are routed to regional center or county mental health, raising the notion that the plan may not be as focused on helping members navigate access to carved out services. Select leaders viewed care coordination as provider's domain vs. the plan's role. This perspective, however, was not universal, as there were certain respondents who cited confusion regarding roles and responsibilities and fragmentation in accountabilities to service members with developmental or behavioral concerns.

Providers

Interviewees reported four major barriers impeding a provider's ability to conduct timely developmental screenings and ensure successful linkages to EII services and supports; these including limited manpower and time, complexity of navigating administrative barriers to access to EII services, challenges in the appropriateness of screening tools, and a lack of timely access to EII services outside of their network, or system of care. In almost all cases, screening was seen as a high priority by the pediatric

provider, but the sheer number of tasks within the screening and linkage cycle created a major burden on the practice.

1. Lack of timely access to early intervention supports and services in the community

Repeatedly, respondents referenced frustration with a lack of access for children with developmental or behavioral concern. Obtaining access to neurodevelopmental providers or to autism services was described as particularly challenging. While there are network adequacy provisions and requirements for timely access tied to Medicaid rules, providers reported delays in linking children to appropriate services or supports (DCHS 2017).

> "There are so many non-medical issues that are key. The lack of developmental pediatric specialists is a big problem. It's a one year wait at the children's hospital. That's a big problem. We can refer them to regional center, but when we need to see a specialist, the neurologist doesn't want to see the kids."

Even for providers able to navigate medical specialty services, there were challenges accessing mental health services. Under EPSDT, services are a medical necessity if they correct or ameliorate defects and physical and *mental illnesses and conditions discovered through screening*- a lower standard to access care than for adults (DHCS 2020). Despite this enhanced eligibility, the primary provider of mental services for children was often the County Mental Health Department, which lacked sufficient access or was not navigable for caregivers. An inability to secure services for children with needs was disheartening to informants. While they continued to complete developmental or behavioral screenings, they had little sense that screening would lead to a timely intervention for low-income children. A perceived low benefit to doing the screen, in light of a paucity of quality or accessible EII services in the community, may contribute to providers' lack of enthusiasm for screening.

> "The nature of screening is that you need to be able to respond to a screen, if you can't respond, or no one in your system of care can respond, it makes it very hard to address the concern that is identified, particularly for mental health."

Depending on a child's need, age, or severity of their delay, respondents were unclear if the child would qualify for through the regional center, the plan, or school district. This fragmented system creates

confusion for providers and families, particularly those with children with more than one developmental or behavioral delay or concern.

> "We are pretty good about screening, nearly 100% get screened, but it can take a year or more to get services, I see a huge loss in developmental delay over a year. It can cause a lot of stress in the family, and it causes behavioral issues, and there is up to a year wait for all of the therapy, physical therapy, speech, occupational therapy."

2. Complexity of navigating administrative barriers to access EII services

Often, a child with a developmental delay requires interventions outside of the pediatrician's network. Respondents cited administrative burdens to ensuring a child qualified for a particular level of care, obtained specialty services, or received school district services. While most providers have a general sense of the regional center's role, some admitted to having limited familiarity with the intake process, the level of support provided to families by regional center staff, and the regional center provider network. This is further complicated by the effort to distribute follow-up responsibilities between the practice and parents and find an appropriate provider to address needs.

> "Traditionally, in primary practices, screening is performed by a pediatrician and a MA, and the MA is the back-office person. The MA does the rooming, the screener, and may or may not score. The pediatrician will interpret it or not formally, communicate the results, document it, and bill for it, and communicate a plan to the family, and that may or not touch a back-office person. I find this process falls short of the needs of the families."

Some providers cited cracks in the system for children with mild or moderate developmental delays. For example, one key area of confusion pertained to speech therapy services; for children ages zero to three with a measurable delay, the regional center may be an appropriate referral path to obtain service provider, given that Early Start services are available for eligible children in that age range. For children above age three, the child's school district may be the appropriate site for service and additional screening. And finally, for children who have a medical contributor impeding their language expression or development, they may quality for speech therapy through their Medi-Cal plan.

> "My biggest frustration is for kids with moderate delays. Due to neurological or genetic reasons, they may not be as easy to help. If the moderate delays are caught, these can be treated and helped. Those are the kids who fall through the cracks- often they wouldn't meet the speech delay criteria according to the school or regional center."

3. Low adoption of technology for developmental screening and coordination tasks

Select respondents were frustrated at barriers to moving to a paperless system for screening, which included proprietary content from tool owners, poorly designed user interfaces requiring duplicative data from respondents, and a failure to leverage technologies to support a family's ability to complete a developmental screening form in advance of an appointment. One respondent noted the potential to go beyond moving a developmental screening into a patient electronic system for data collection, and rethinking ways to reduce duplication. Another key informant highlighted the potential of supporting families with completion of forms, by adding AI tools such as chat-bots, to provide guidance and answer questions. Additionally, respondents connected to a larger EHR system expressed frustration in their inability to receive needed custom quality improvement reports to monitor progress.

Few respondents had access to tools or interfaces which supported care coordination. More advanced practices embedding screening questions into the EHR but remained frustrated at their failure to send or receive any structured data to and from specialty providers, families, or plans that would help to identify barriers to accessing recommended services. This lack of a closed loop diminished providers' capacity to ensure patients are getting what they need.

> "As far as the changes to the system, there is a need to figure out how to electronically track what is happening with a family who is not in front of you. My EHR does not generate a text to families that would check on whether the family needs help, ask if they need to come in sooner. When the family comes in for a follow-up visit, I check against the recommendations from the previous visit, but that could be done electronically. We haven't used the full capacity of an EHR. Are there studies of how someone is doing this, beside people power?"

4. Limited manpower and time to complete developmental screening and care coordination tasks

Most respondents shared that completing a screening was feasible but challenging, given the need to fit this in between examinations and vaccinations. Often, the provider has as little as 20 minutes to spend with the family. If the screening flags a developmental concern, the provider must explain finding, provide anticipatory guidance, and give context for any referral. Many respondents referred children to the regional center or older children to area schools for a speech assessment. Managed care plans were cited as a barrier vs. an enabler with prior authorization barriers to access pediatric subspecialty services.

"Yes, we have screening processes, but there is a price. The providers are doing this on their admin time or in between. Sometimes it's not done right away. I'm confident it could be done with more resources."

Some providers had sufficient infrastructure or space to handle developmental screening sessions but lack of staff to successfully connect a child to appropriate supports.

> "If (the screen is) not normal, the MD has to provide developmental guidance, needs to tell the family if there is need for further assessment or referral; many tools come with activities, but that never happens. Particularly, there should be someone (they) could call if they have concerns between visits and if not, there is concern. There should be an opportunity to have a person to care coordinate that support, and someone to help, if you come in for a screening."

Respondents did not reference health plan(s) as a source of support for providers or parents of members requiring care coordination support; no respondent referenced referring families to their health plan's member services or care management department for support.

5. Developmental screening tools are not cultural/socially/linguistically appropriate

While the ASQ is now available multiple languages, providers working in more diverse communities faced challenges finding an appropriate translated tool. Additionally, while some key informants saw self-administration as optimal, others were adamant that patients benefit from assistance when answering questions or need a lower health literacy tool. One respondent serving homeless children noted challenges in expecting caregivers to complete the ASQ, given questions related to child's fine motor skills, such as an ability to color a picture or to stack toys. The validity of the screening tool for low-income populations was questioned by a few informants, as some parents lack basic supplies at home.

> "I don't like the ASQ- it doesn't work in our population. When I have patients who speak Spanish, I think I miss some of the nuances….I'm in an area where they may not have toys. The mother is looking at me confused because it asks about stacking blocks and they don't have blocks. The mother doesn't have crayons, so she scores the child low on the question about crayons, because she lives in a transitional home. It needs to change- I tell the mother to forget about the blocks, the crayons. It makes the population look more delayed than they are. The tools are all on paper, and the caregiver completes in the waiting room. The caregiver doesn't have any context for the screening. Based on the mother's responses, this child didn't pass the fine motor, even though the child is in front of me, but playing with the cell phone."

This highlights the challenge of parental self-administration of screenings, without guidance from a trained professional. While a physical assessment of the child's behavior can validate screening

responses, the screening may be more reliable if the caregiver or parent has some context for the questions and real-time support when completing the tool in the waiting room or at home.

> "Some of the challenge with the screenings – some of the questions are difficult to understand and include activities that the families haven't tried."

Having a resource to support caregivers with screening may be pivotal for collecting accurate screening data, given low literary levels, English language skills, or few resources.

Managed Care: Facilitators to Shifting Care Management Tasks to Paraprofessionals

Key informants first shared barriers and facilitators to leveraging paraprofessionals as providers of care management services all Medi-Cal enrollees- including adults. The respondents shared findings regarding the feasibility of using paraprofessionals for care management services within their organizations, then focused more narrowly on the potential of using paraprofessionals for specific tasks, such as screenings, care coordination, and education. Select plans employ paraprofessionals to support high-risk members, including those participating in California's Health Homes initiative which leveraged Medicaid funding to provide support to adult high-utilizers and homeless members. A handful of plans go further and invest in a pipeline through training and certification initiatives, and still fewer, leverage paraprofessionals to coordinate preventative care. Managed care leaders highlighted key facilitators to shifting care management tasks to paraprofessionals, including the existence of State programs funding paraprofessionals for select high-risk populations, a perception that paraprofessionals add clinical and efficiency value to the care team, and leadership support of paraprofessional models.

Table 9: FACILITATORS TO SHIFTING CARE MANAGEMENT TASKS TO PARAPROFESSIONALS

Managed Care	
Theme	**Weight**
1. Existence of State programs funding paraprofessionals for select high-risk populations	Often
2. Belief that paraprofessionals contribute to the effectiveness of the care team	Occasionally
3. Leader support of paraprofessional model and perception of mission-fit	Occasionally

1. Existence of State programs funding paraprofessionals for select high-risk populations

A number of respondents attributed the plan's original investment in a paraprofessional workforce to the Health Homes and Whole Person Care programs. These programs have an explicit focus on community-based care management for high-risk members, with roles for non-clinical providers to support members with key aspects of non-clinical care and case management, including appointment scheduling, logistics, housing navigation, and health education (DHCS 2016, CMS 2017). These programs focus on high-need, high-utilizing populations, such as the homeless, formerly incarcerated, and those with serious behavioral health care concerns, aiming to bridge silos between physical and behavioral health systems.

> "We have CHWs and are building the role into our workflows. I think as part of the Health Homes programs, we are using them to reach out to members, I was just talking to one today and she was going out to knock on doors and engage people in health care."

Early experience with unlicensed staff, including training, workflow development, and care team integration was a foundation to further explore the role's ability to support other members.

> "It happened cyclically, maybe a pilot for promatoras, and then there was more attention to scope, and what do they do- in a health plan the paraprofessional role needs more definition. We took advantage to put this in the model for Health Homes and Whole Person Care to be deployed to the clinics, took advantage of that political will."

2. Belief that paraprofessionals add clinical and efficiency value to the care team

Select plan clinical leaders saw paraprofessionals as valuable in supporting adult members with chronic or acute health care needs. Definitions of value varied but aligned with the Triple Aim- improving the patient experience of care (quality and satisfaction), improving population health, and reducing the per capita cost of health care. Respondents noted paraprofessionals like CHWs can save costs and improve comfort if they provide community-based support to members at recurrent risk of a high-cost hospitalization.

> "We have some CHWs that are paired with case managers for high-risk members who keep bouncing into the hospital. Some who can help do a home visit for things that the nurse doesn't need to be doing. We have merged with (another) health plan. With that model, I've built a mobile care team to have CHWs assist with home-based services, or in the field to provide services or wherever the patient is comfortable, depending on multiple disciplinary needs, with a CHW, Nurse Practitioner, and Licensed Clinical Social Worker on the team."

Integrating CHWs on the team allows the paraprofessional's workflow to be fully integrated into the member's care plan. There was a perception that paraprofessionals can add value compared to a nurse- with paraprofessionals providing similar services that are perhaps more patient-centered and at lower cost and equivalent quality.

> "Financial was important; we can't calculate an ROI for our paraprofessionals, but we want to make sure to be sure they have value. I'm thinking of our Member Connections program, they go into the field and the home. They support case management and outreach to members, mostly around chronic disease."

One plan respondent noted that while there was the perception CHWs contribute value, return on investment was elusive. *(This research was conducted before the announcement of a proposed CHW benefit in 2022. If CHWs eventually have reimbursement potential, it is feasible that a health plan or outpatient provider could realize a relatively short term ROI).* Regardless, respondents noted that the convenience of care in the field is a value for members who would otherwise be forced to go to less accessible location. Another value of using CHWs cited by informants was the impact on member experience. When asked about the rationale for funding paraprofessionals, leaders cited "community connection" as an asset. Language, racial, or ethnicity concordance between providers and members, as well as living in the community, created a sense of shared experience between paraprofessionals and members. The ability to identify barriers to care, social determinants of health, and to support members in changing health behaviors, reflected increased trust.

> "We do know that we work with Community Health Workers, doulas, and outreach workers (because of) proven outcomes and the connection with community."

Paraprofessionals such as CHWs, promotoras, peer counselors, or parent partners have lived experience, which can engender trust and reduce stigma associated with needing support.

> "We are usually looking for someone who has lived experience and a connection to the community and reflects diversity of the members we serve."

3. Leader support of paraprofessional models and mission-fit

Various APLs highlight the plan's regulatory obligations regarding care coordination, which is also reinforced in the plans' boilerplate contract with the State. However, given that there is little oversight over this requirement, which is often downstreamed to contracted IPAs or provide groups, very few health plans opt to build care coordination services or models which serve those at low or risking risk, such as children. One unusual plan offered paraprofessional support to every plan member, justifying investments in care coordinators as related to their core mission and purpose, and fulfilling their obligations to the State:

> "All (our) members have care coordinators, CHWs, Navigators. CHWs serve members based on a risk assessment/rising risk. Care coordination is what plans really do, and it's seen as having high value and we try to supply care."

Leader support was a factor, with CMOs or CEOs spearheading investments in workforce models and directing management teams to bring up paraprofessional programs.

> "One of the primary drivers is our CEO and others have had prior experience with CHWs as part of the care team, and it was positive. He's been pushing us in that direction and the reason why, is that he thinks it's successful."

> "I know that on the Medi-Cal side, my direct line of reporting is to the Chief Medical Officer, and they are excited about (CHWs)."

Some respondents highlighted the criticality of investing in a paraprofessional pipeline to further professionalize and standardize the role, and to help the plan broaden support for members.

> "We do have increasingly more CHWs. We are involved in creating a CHW pipeline. We have the CHWs intern and shadow parts of our care management program. We also have non-clinical Care coordinators that help members coordinate logistics, transportation, and getting an appointment scheduled. There is a program up north where we take students through a CHW certification program, beginning when they are in high school as a sophomore. At the end of it, you get a CHW certificate. It is the only program we know of in the State. We also are integrating interns who want to be CHWs to get intern hours."

> "Unlicensed staff are new to our team, we are partnering with (a local) University to providing training, especially around health plan CHWs."

Respondents reported variation in the site of care for paraprofessionals- some work in telephonically, others in the client's home- while others at the provider office. Only one plan, however, expended resources to leverage schools as a site of intervention for the plan's paraprofessionals. This

more robust orientation to care management reflects a commitment to meeting and finding children, in likely settings where they can be reached and service.

> "We have paraprofessionals that go into clinical spaces, outpatient (settings), go to schools, and members' homes."

Paraprofessionals performed a variety of tasks to help members access services and supports. These tasks were focused on bolstering, rather than reducing, appropriate utilization. Select respondents leveraged paraprofessionals for other screening functions, Health Risk Assessments (HRA) or depression screenings. At staff model HMO with an integrated delivery system, Medical Assistants performed pediatric screenings, while higher-level providers provided anticipatory guidance to families.

> "It makes sense from an ROI perspective. It's much cheaper and the right level of experience needed to move this forward. If we invest in paraprofessionals, we'd see an increase in screening and referrals."

However, few plans leveraged or financed paraprofessionals to help ensure families access developmental screenings and receive coordination to appropriate services.

Managed Care: Barriers to Shifting Care Management Tasks to Paraprofessionals

Managed care clinical leaders provided feedback to identify challenges associated with shifting care management tasks, such as care coordination and care planning, to unlicensed paraprofessionals. These challenges included a perception that the provider vs. the health plan should be responsible for and is delegated to perform care management functions, and a belief that using uncredentialled providers would create risk management or reimbursement concerns in California.

Table 10: MANAGED CARE PLAN BARRIERS TO SHIFTING ANY CARE MANAGEMENT TASKS TO PARAPROFESSIONALS

Theme	Weight
1. Perception that care management is the responsibility of the provider vs. the plan	*Occasionally*
2. Perception that uncredentialled providers cannot be used for care management tasks in California	*Occasionally*

1. Perception that care management is the responsibility of the provider vs. the plan

Several health plan leaders highlighted provider created paraprofessional programs in support of select care management activities, including patient outreach, engagement, health education, care coordination, and more. While they were supportive of paraprofessional modes, a few plan leaders noted that these are uniquely provider-based decisions and did not believe in dictating how providers should organize their care teams, nor in the plan directly employing paraprofessionals to support screening or care coordination functions. In this instance, the respondent is defining the plan's predominant role as a payor. Often, the plan provides reimbursement via capitation, and fully delegates pediatric care management responsibilities, services, infrastructure and staffing decisions to the local provider. By providing providers or provider groups with a prepaid per-member-per month (PMPM) rate inclusive of all primary care services, including care management, select plan leaders plans suggested that the groups could use their flexible payment to employ personnel of any kind, to support this function. The respondent is hesitant to be prescriptive regarding workforce transformation.

> "Our funding model is focused on a risk arrangement, and the rate includes support services. We are interested in the final outcome for the members. The professional fee isn't enough in our model of care, so we build in support services, and that includes the time of paraprofessional that may be used by the provider. We don't have an agenda to fund paraprofessionals using community benefit, but we want to make sure that the ideas or strategies are aligned with the strategic vision of the plan. That is part of a more delegated model, with a more effective quadruple aim."

In this case, plan leader defines their role as predominately a payor, providing audit and oversight over outcomes, but does not invest in the workforce transformation to facilitate the provision of care or services. Additionally, the plan leader does not indicate a need to provide additional funding or resources to the provider to support practice-based enhanced care management. The delegated model is cited as an inhibitor to the plan's willingness to invest in care team innovation, even leveraging the plan's community benefit funds separate and apart from provider payments. Whether or not the plan is providing sufficient reimbursement for services to help a contracted IPA or provider hire or train paraprofessionals is unknown. Some respondents shared that paraprofessional workforce interventions at the provider level, eventually sparked interest at the plan level.

> "For any practice that is in our network, how they chose to use the money they receive from us, is up to them. For example, many of the clinics have CHWs. We are relatively new to including CHWs on the care team."

2. Perception that uncredentialled providers cannot be used for care management tasks in CA

Another limitation cited by respondents associated with levering paraprofessionals for care was lack of a credentialing process by the State and the plan for unlicensed providers. Any services provided by a paraprofessional must be under the direct supervision of a credentialed provider, such as a nurse, social worker, or physician. At the time of the interviews, the State had few allowable billable roles for paraprofessionals (e.g. Certified Perinatal Support Worker for maternal health).

> "Medi-Cal is limiting on provider credentialing. To become a Medi-Cal provider and bill directly, credentialing is burdensome, and may not fit the level of education. There are rules regarding being under the supervision of a licensed providers and how to become (one). Right now, no benefit (to paraprofessionals)."

While direct receipt of FFS reimbursement or incentive payments is limited to credentialed Medi-Cal providers, providers are not prohibited from leveraging a lower-cost workforce to aid throughput and

completion of screenings, under another credentialed provider's supervision. Additionally, plan-employed paraprofessionals could deliver care management services under the supervision of a credentialed health plan clinician. Despite these opportunities, select respondents believe that credentialing is a major barrier to expanded use of the role. Key informants then reflected on facilitators of potentially leveraging paraprofessionals to support developmental and behavioral screenings and care coordination functions for pediatric members.

Facilitators to Shifting Developmental Screening and Care Coordination Tasks to Paraprofessionals: Managed Care and Providers

Table 11: FACILITATORS TO SHIFTING DEVELOPMENTAL SCREENING AND CARE COORDINATION TASKS TO PARAPROFESSIONALS

Managed Care		Provider	
Theme	**Weight**	**Theme**	**Weight**
1. Practice or plan has an adequate training and supervisory infrastructure to support paraprofessionals	*Often*	1. Belief that paraprofessional's shared language, culture, or lived-experience bolsters family's trust	*Often*
2. Practice or plan has optimized workflow and electronic health record for team-based care	*Occasionally*	2. Belief that task-shifting select screening and care coordination tasks to paraprofessionals advances the "Quadruple Aim"	*Often*
3. Plan leaders have high commitment to effective EII due to prior experience with paraprofessionals.	*Occasionally*	3. Practice invested in communication practices, supervision and training needed to successful implement team-based care	*Often*

Managed Care

Interviewees reported three major facilitators to potentially leveraging paraprofessionals for developmental screenings and linkage to services, including EHR workflow optimization, training and supervision, and leader commitment to EII. Almost all respondents were receptive to the conceptual idea of providers leveraging an additional unlicensed member of the care team in service of supporting pediatric members. Far fewer plans, however, identified a role for their health plan in funding or organizing pediatric care coordination.

1. Practice or plan has an adequate training and supervisory infrastructure to support paraprofessionals

Given that providers have limited time to support screening and referral process, staff augmentation at the provider level was seen as valued added. The time required to complete a developmental screening and provide care coordination may exceed the resources of traditional pediatric care team. However, a paraprofessional's value add is predicated on the clinician having confidence in the paraprofessional's skills. A paraprofessional trained in child development expertise was shared as a potential differentiator.

> "It's a matter of getting providers to see how it benefits them, rather than interferes with them. What we also hear from MDs, is not enough time to do everything I need to do. They recognize that they need to screen, but they don't believe they have the time to do it. What if we could say they have someone who has the training in child development and it was a trained person and you could rely on their insight, and (MDs) would see it as a benefit?"

With training on child development, managed care, and the EII -and with the aid of a system to standardize processes-respondents felt non-clinicians could complete referrals to developmental services and supports. Specifically, leveraging a paraprofessional to support coordination with the regional center for children who qualify for Early Start Services under was viewed as feasible, with training on triggers and risk factors.

> "This is an easy place for paraprofessionals to plug in. I used to spend a lot of time educating people on criteria that make kids eligible for Early Start. These risk factors are easy for referral, and it would be easy for a paraprofessional to make the referral to the regional center. The paraprofessional could plug it into the practice (management) system and (send) to the regional center using the criteria. It doesn't require a clinician."

This highlights the value of a potential triage system, where paraprofessionals leverage criteria or decision rules to route a child to the regional center. Another respondent noted paraprofessionals are more positioned to have an effective discussion regarding a child's developmental issue than physicians, given the sensitivity of some screening findings. With training, a paraprofessional can ensure caregivers are receptive and understand the rational for accessing services and supports for their child.

> "It would be really positive (to use a paraprofessional). It's hard for MDs to not speak in medical terms about things that are sensitive. It does require a lot of training to present (developmental delay) in a way where it's not a negative to families. And more positive about a way to highlight support."

Under supervision, the paraprofessional could execute the child's care plan created by a clinician according to the patient's needs, as determined by a screening or assessment. Absent thoughtful stewardship and family support, a care plan may not be executed successfully, and the child may not receive needed and timely services.

> "This is key role that paraprofessional can do, more taking the baton after the full assessment is done. I think the carrying out the plan once the assessments have been done, and doing follow-up, and that's where they can have some supervision with the care plan but make those care plans work. I think because the responsibilities have been given the health plans to ensure that this happens, they have to have some way to report and organize this."

In some cases, respondents used MAs in conjunction with care coordinators or unlicensed paraprofessionals. In both cases, there was a recognition that care coordination was a separate function from clinical duties, and this task was needed to ensure linkage to services.

> "At the practice level, medical assistants help an awful lot in care coordination, in my former staff, we had care coordinators who did referrals. And they did a hugely important role for what it took from the time an issue was identified like a developmental (issue), (patients) didn't just get places if we didn't help them."

Large multi-specialty practices with a streamlined workflow aided by technology and a robust staffing model including a social worker, may not need a paraprofessional. In a large integrated delivery system affiliated with a staff model HMO, workflow is supported through parental screening administration, with data entry by a licensed vocational nurse (LVN), and an ability for the pediatrician to refer to an on-site developmental pediatrician. These resources may exceed those available in a smaller or stand-alone practice or clinic where referrals must be made outside the system, there are fewer licensed vocational nurses (LVNs), or the screening results cannot be entered into an EHR viewable to both an in-network developmental pediatrician or in-system behavioral health provider.

2. Practice or plan has optimized workflow and electronic health record for team-based care

Multiple respondents cited EHRs as a way to help standardize screening and care coordination workflow, if properly designed and configured to allow multiple users and user types. With an appropriate interface, a caregiver could self-complete or a paraprofessional could help administer a screening, and outcomes could be shared with other providers and tracked over time. Barriers to this may include licensing fees associated with various screening tools, and the cost to program screening questions into the system, necessitating greater financial support from a health plan or private funder for the transformation.

The value of closed loop communication, where practices receive confirmation that a family is successfully linked to or engaged in care, was prominent. For practices unable to pilot or sustain a paraprofessional to support due to insufficient resources, one respondent raised an idea regarding a

"utility" model, where plan-funded care coordinators could provide support to multiple practices; this would be a way to scale care coordination as a service.

> "Whomever (can screen) and wherever, as long as there is a link to create that closed loop communications. My sense is that would be better coordinated in a practice, with a staffer in a practice, or if not in a practice, but some sort of utility model structure. In that model, if a health plan had the care coordinators that they deploy to practices, they close the loop with the practices and they cover X# of practices in a systematic way."

The importance of workflow was highlighted, as well as an interdisciplinary care team including a clinical champion, operations leader, and a paraprofessional or ancillary staff person. Given completing priorities and limited time, one respondent recommended removing as many developmental screening and coordination tasks away from the provider.

> "Take it off the pediatrician's plate. Bake it into your care processes in other ways. Have a clinical champion and have someone operationally responsible. What's the type of ancillary or paraprofessional staff that will be trusted and able to connect with families, (who) may be willing to go to the home to do this to make it more robust?"

3. Plan leaders have high commitment to effective early identification and intervention due to prior experience with paraprofessionals.

Ultimately, select leaders with high commitment to EII cited innovative ways they currently or in the past have leveraged paraprofessionals, outside of the standard practice model. In these cases, the plan directly employed unlicensed staff to support families, funded practices, or supported partnerships in service of pediatric system improvement. This commitment often came due to a health plan leader's past experience with paraprofessionals.

> "Something we did at my former health plan in Massachusetts- the health plan hired Parent Consultants who were caregivers of kids with special health care needs. So, they were part of our care management team. They were available to help families with special health care needs, especially navigating the challenges of educational plans, special educational plans, particularly if the caregivers were finding that the IEP wasn't adequate and dealing with the school system."

> "We are providing in-kind resources for a plan developmental screening practice improvement pilot with (our First 5), and we do CME programs."

Respondents cited previous experience working with paraprofessionals, which bolstered their commitment to pediatric care management models when they moved to the plan.

> "I've been at two places where we had our own model. A Children's Hospital pediatric clinic, a Primary Care Medical Home model, I don't believe (a) promotora, but we used non-licensed professionals (care coordinators) in a non-licensed role. At (a large FQHC), we had a strong role for promotoras, including for kids with special health care needs."

Providers

Providers were receptive to collaborative care with paraprofessionals, citing their ability to bolster trust due to language and cultural concordance, and the perception that they could help improve quality, patient experience and reduce provider burnout. Several key informants shared best practices related integrating the paraprofessional as a full member of the pediatric care team, including participation in regular huddles or team meetings.

1. Belief paraprofessional's shared language and culture, or lived-experience bolsters trust

Among many respondents, there was a preference for paraprofessionals with lived experience navigating services for their own child and/or linguistic concordance with the family. There was a perception this alignment built trust and helped the family understand the rationale of developmental screening and services. Key informants noted paraprofessionals with experience obtaining services from regional center for their own children were a major asset and required minimal training. Select respondents thought using an individual with lived experience to administer or support a developmental screening yielded more comprehensive and accurate information from families regarding the child's developmental status.

> "We have a paraprofessional who is a parent with lived experience…involved in our intake process. He is aligned in culture and language (with families) and is the dad of an autistic child. It means we have a full inventory of material to understand the child's history and progress. He is part of parent meetings and it's helpful to have him in information sessions."

> "I run the Navigator Project. We have navigators do the (care coordination) function, who have lived experience. The caregivers trust them as they have been through it, and they understand. Having somebody do a warm hand-off makes a difference. In our case, they are individuals we've selected who have understood the system, because they are caregivers of individuals with disabilities and have worked with regional centers in different capacity. They had all of the skills from their background, so we didn't have to do any training."

As to why respondents would use a paraprofessional for screening and care coordination:

> "Our parent navigators speak Spanish- most of the patients speak Spanish. A) The language concordance in communities, and B), they are from the communities and are more reliable. Many times, the patients and families would feel immediately more comfortable with the language-concordant MAs, and they would continue speaking even after I left."

Select respondents found paraprofessionals to be essential resources if the patient was not literate in one of the translated versions of the ASQ, particularly if they worked in areas with immigrants from a variety of countries. Employing paraprofessionals with language concordance and skill in medical translation was viewed as essential to completing an accurate screening. Additionally, as ASQ questions may not be straightforward, they can require modest explanation and education for non-English literate families. A paraprofessional's value may be realized during the follow-up. After a screening is completed and a deficit is identified, a paraprofessional may be able to accompany the family through the process of finding resources aimed at mitigating the developmental concern or delay. In rare cases, respondents shared that the CHW served families both in the practice and at home. Field work helped the CHW gain context to the barriers the family may be facing in accessing recommended services and supports.

> "Having the CHW have a perspective and share what she sees in the home, and hearing how they connect with the families, was really eye opening for me. The kids who need (and qualify for) a CHW to be involved (in our system)- they have medical and social needs; in an ideal world, a provider can address both, but I don't know if they can and should, because a CHW has skills that are special to her role. The family rarely want to go to the office, so she will meet them outside. The CHW speaks Spanish fluently. We have weekly meetings with her and the nurse care manager."

Respondents saw a value to staff with knowledge of linguistic, educational, and administrative barriers. Providing a bridge between the practice and the regional center can help caregivers can access services and reduce stigma regarding a child's need for supports.

> "It would be helpful to have (share) what parents can expect (and) is very knowledgeable to be a resource for parents. I think it would be great to have someone follow-up to see if it could be done, and then of course making sure any language barriers are addressed, so parents understand why we are referring them, or address any stigma."

2. Belief that task-shifting screening and care coordination tasks to paraprofessionals advances the "Quadruple Aim"

Many key informants emphasized the quadruple aim when articulating the importance paraprofessionals- a health care interventions which advance the "quadruple aim"- improved the health of

populations, enhanced the patient experience of care, and reduced the per capita cost of health care, and improved the work life of clinicians and staff (Bodenheimer 2014).

Improving the health of populations

Respondents noted health systems developed trust in paraprofessionals as an improvement intervention when this new workforce served adults, providing proof of concept that paraprofessionals could ensure patients were successfully connected to critical services. Key informants found that paraprofessionals bolstered efficiency or quality of care due to knowledge of benefits programs, referral systems, or child development.

> "We did keep enhanced MAs who (had) administrative time to do care coordination…I fought hard for one to be in pediatrics. The good ones served as a bridge between the clinic and patient, and between the patient and community resources. Some of them, we had a lot of QI conversations, a constant tug of war between many competing priorities."

Enhancing the patient (and family) experience of care

Key informants noted paraprofessionals provided valuable support to caregivers by helping families navigate complex systems; in many cases, the paraprofessional had more detailed knowledge of EII systems than nurses or physicians.

> "The MAs have a clinical sense, if a kid has durable equipment needs, they…can recognize it. (However) the CHWs were sometimes better at care coordination; they got training on how to (help parents) sign up for benefits, and one individual was fantastic who was able to connect with financial benefits. I think that's great training for any navigator."

> "I think it requires a higher level of expertise than a MA. I think MAs can help to a certain extent in that they can help with referrals, faxing and about the knowledge of the system."

Reducing the per capita cost of health care

Respondents indicated shifting certain tasks to a paraprofessional ensured their time was preserved for tasks requiring a highly trained clinician. While there was some initial trepidation, most respondents found paraprofessionals offered similar quality for screening and coordination tasks, at a lower price point. Task shifting also allowed nurses to work at the height of their licenses and spend less time on non-clinical endeavors.

> "The MDs role is different than a nurse's role is different than an MA's role. Each of these people have a different skillset that should be used. Sending a fax to the regional center is not the best use of the nurse's time; a MA could do this. Using paraprofessionals helps use skills appropriately."

Regarding cost, select practices found a way to sustain paraprofessionals even after proof-of-concept projects had ended. For example, at one FQHC, an enhanced MA model continued after grant funding ended, in part due to the increased visit attendance and improved throughput contributing to additional reimbursement under the wrap-rate, which rewards volume. While the practice did not complete a detailed financial analysis, this nuance regarding FQHC revenue streams vs. non FQHC revenue streams, may support greater sustainability in certain provider settings.

> "(The navigators) cost less than a nurse would. I have them call the family, and e-mail the results, they haven't been able to call everyone, but we do get feedback that most are working. The Parent Navigators will help go into a deeper explanation of what the regional center is, and what is available."

> "The FQHCs have an enhanced reimbursement system with PPS, and MAs are relatively cheap. That enabled this to continue after this (grant) occurred, not just for kids but for adults. With outside regulatory pressure, if (screening) became a metric, it would happen. The enhanced MAs were originally paid by a grant that covered their time. Even after the grant, some of them continued to offer enhanced interpretation unpaid."

Improving the work life of clinicians and staff

Additionally, providers indicated their clinical and administrative workload exceeded what was possible to complete in a normal day. Incorporating a relatively low-cost staff resource to assist with workload added enormous value. Respondents shared burn-out due to screening fatigue and due to the sheer number of tasks they must complete during a busy practice day.

> "I think part of the case (for CHWs) was that this was a MD wellness and burnout tool. It was taking care coordination away from the MD to prevent turnover. And differentiated us from other clinics. It helps, because one of the causes of burnout is because you feel ineffective. Having another member of the team helps you feel effective as an organization and you see more progress, and that is rewarding at keeping your sense of meaning and purpose, that sense of efficiency, and reducing some of the administrative burden. Otherwise we are making all of the calls themselves. It also helps you get home a little earlier."

Several key respondents shared they learned information from paraprofessionals which enhanced their own knowledge of EII systems. Additionally, some providers shared how grateful they were to be

able to leverage newfound time saved from shifting tasks to paraprofessionals to provide enhanced care for children in the practice or community.

> "When it worked well, it was a family feeling. (Families) had a point of contact in the clinic who spoke their language. When it worked well, it was like a family. 'The care comes together from every corner.' This happened with the CHWs, and the enhanced MAs got to know the patients, it worked well."

> "Working with a paraprofessional would improve my work-life balance, as it will improve the quality of time with the parent- for me, that would be rewarding. I think it would improve our quality scores. It would give us the freedom to spend more time with the mother and do a better job with the developmental (exam) and spend more time examining the patient."

3. Practice invested in training, communication practices, and supervision needed to implement team-based care

Respondents noted that leveraging paraprofessionals required having a thoughtful approach to hiring, training, and supervision. In particular, customer service skills were cited as an essential paraprofessional skillset when recruiting and hiring staff. This attribute ensures paraprofessionals with patient-facing responsibilities or coordination tasks with insurers and outside providers, have strong foundational communication skills.

> "Having someone who understands clinic workflow, but medicine in general, is pretty important. It is important to understand why they are making a referral, and it's helpful to have the Care Gap Coordinator respond to a request. Someone who has good customer service skills is huge. If I had to pick, I'd pick customer service. I mean, definitely it's all about their attitude and how they treat the patient. My Care Gap Coordinator is great…. they are one of the first people the families talk to. It's crucial that they are knowledgeable."

As paraprofessionals may lack health care experience or training, many key informants developed curricula to ensure they had subject matter content experience needed to work with families as well as with insurance professionals or community providers. Many sites provided child development training or thought this training would be value-added. This highlights the variation in enhanced pediatric care, with some practices choosing to hire a paraprofessional and providing specific pediatric training, with others obtaining grant funding to implement models with set training curriculum such as Project DULCE or Healthy Steps. The benefit of localized training is that it allows for flexibility and tailoring specific to the practice's patient population, or to cross-train paraprofessionals to serve additional populations between pediatric patients. A challenge may be the cost of implementing a pediatric model with fidelity.

> "The bare minimum was that they had to have medical interpreter training, we talked with them about that. I basically gave them some training in child development, because we had some many kids with neurodevelopmental issues, so they knew what was at stake. The rest was on the job by making a lot of calls to the Children's Hospital and the regional center, and they gained cumulative experience on the job. And they would ask me questions if they needed understanding. A lot of the practical knowledge they learned on the job."

Select respondents implemented enhanced pediatric models such as Project DULCE and Healthy Steps, which include structured training on child development and developmental screening. Other respondents simply incorporated screening education as a separate training activity. Select providers thought it was feasible for the paraprofessional to eventually be trained to administer a screening, score the tool, and provide select non-clinical guidance to caregivers, task-shifting beyond the vision of the pediatrician-focused AAP.

> "I would use paraprofessionals for (developmental) screening- I've seen it work under the Healthy Steps model. I don't think that the administration of the tool requires significant skill or expertise. A paraprofessional can be taught to do it or the scoring."

> "We do a developmental screening on a young child, then the care managers will help them make that phone call to the regional center. And Project DULCE does care management for very young children ages 0-6 months. Maternal/child home visitors are not as integrated in supporting (developmental) screening but could be more integrated."

Paraprofessional reporting relationships varied, but one common practice was creating a dyadic-reporting relationship, where they report to both a clinician and another supervisor. Regardless of the reporting structure, supervisors provided guidance and engaged in process improvement discussions with the paraprofessional to nurture their ongoing development.

> "Ideally, the paraprofessional should be assigned to a MD….Teams need reflective supervision and the opportunity to work outside of the practice and meet- the bottom line is that providers know they are given inadequate training and it's very stressful. Once they understand the process improvement, then they want to work on this, and the team can improve. You would want an experienced professional who can discuss cases, and it's just like MAs. Paraprofessionals should be doing the same things."

> "The CHW is supervised by me and by the social work department director. I think the model of the CHW supervision is perfect. Our CHW can talk with me about the medical things, and when she has a social issue, she can ask the social worker."

Integrating paraprofessionals on a care team requires a new way of communicating and working together. Critical to the success of collaborative care and embedding paraprofessionals on teams, was bolstering provider trust in their work.

> "Providers can be challenging to work with too. They want the extra help but are not always willing to relinquish the position or that piece of the relationships. There is a bit of culture change that is needed. People need to understand their roles and their needs for training. People need to understand why (having a paraprofessional) going to help."

This highlights the effort required to build trust and a professional rapport between physicians, nurses, and paraprofessionals, and the need to create effective dyadic relationships between the parties. The physician and the nurse must grow to trust the paraprofessional's competence and judgement, and the paraprofessional must be receptive to integrating into a larger care team.

> "Without a doubt, we could shift tasks to someone who could do a good job, and I've never met resistance in clinic. Once you can use a paraprofessional, it's a game changer, but it requires a good amount of trust and an understanding team-based training and understanding providers. Healthy Steps started a readiness assessment for practices, and there is a "Zero to Three" developed tool for team-based care competency, or cross-sector competencies."

Several respondents highlighted the importance of an interdisciplinary team meeting to enhance communication, quality improvement efforts, and care planning. This multi-disciplinary time allowed the team to refine practices and communication approaches.

> "No matter who it is, there needs to be consistent and healthy team-based care and interdisciplinary rounds to review complex cases, and to review the cases for the day. I would wonder how skilled a paraprofessional could be at driving Continuous Quality Improvement (CQI). You want them to be aligned to the practice culture, and task-shifting to be the norm in the culture. Every effort, there has to be a process for CQI in place, and if you don't have it, you are going to have issues… and something will get out of sync."

> "In terms of time for discussing these patients, it can be hard because the Interdisciplinary Care Team (ICT) multidisciplinary time is hard- everyone has to peel away from responsibilities. We've been doing these meetings now for two and half years and I think people are adamant about having these. For families who are resistant to the services or struggling, it's nice to sit down with the pieces and talk through the needs."

Ensuring the paraprofessional can access relevant information and enter a case note in the EHR, is foundational to collaborative care. Some sites did significant EHR modifications to incorporate a custom role type for paraprofessionals with a particular set of permissions, while in contrast, others gave the paraprofessional full view and data entry privileges. For informants open to leveraging plan or

community-based paraprofessionals to support screening and coordination tasks, two-way electronic communication was essential; the practice needed screening and referral results in timely and HIPAA compliant way.

> "I think everybody who intervenes with the child should have the knowledge and have the opportunity to refer the child for a developmental issue."

This issue of economies of scale for enhanced pediatric care may highlight the benefit of a hub and spoke model for practices with lower pediatric volumes. There may be a minimum number of pediatric patients ages zero to three to warrant investments in on-site vs. contracted paraprofessionals. These contracted paraprofessionals could work at county department (e.g. public health, First 5, child welfare) with a focus on early intervention and children, or even a health plan.

> "It would be nice to have an outside vendor or a county department who would do it for all of county so all of the information can be sent there, that would be ideal and good (for) the coordination. Pediatrics has gone down in (our system); we aren't the market leader."

> "I think putting it out in the community makes it more likely for them to screened, but I wonder if a WIC/Early Head Start office would know what do to next? I think a MD can look at it in a more nuanced context- if the screening could be funneled into a medical home, that would be great. You would need to agree to data sharing or a shared system. You could easily see an app developed that shares info in a FERPA/HIPAA compliant way where caregivers give consent- it could really facilitate communication. And I like the way of roping in the parent, and that transparency would be good. If that means more information comes in, the better."

Barriers to Shifting Developmental Screening and Care Coordination Tasks to Paraprofessionals: Managed Care and Providers

Table 12: BARRIERS TO SHIFTING DEVELOPMENTAL SCREENING AND CARE COORDINATION TASKS TO PARAPROFESSIONALS

Managed Care		Provider	
Theme	**Weight**	**Theme**	**Weight**
1. Perception practices have insufficient resources or scale to maintain a training and supervision infrastructure at the practice-level needed to support paraprofessionals	*Often*	1. Insufficient Medi-Cal reimbursement to sustain an enhanced pediatric care team	*Often*
2. Insufficient reimbursement or cost savings to employ or fund pediatric paraprofessionals	*Occasionally*	2. Paraprofessional role design and training is resource intensive for practices	*Occasionally*
		3. Risk management concerns regarding use of unlicensed staff for EII tasks	*Occasionally*
		4. Perceived barriers to exchanging data with paraprofessionals outside of the medical home	*Occasionally*

Managed Care

Managed care respondents cited insufficient reimbursement as the largest barrier to scaling paraprofessional adoption at the practice level, as well as inadequate infrastructure to address the training, technology, and supervisory costs for team-based care. The largest barrier to implementing enhanced paraprofessional support at the plan-level is the perception care coordination is the responsibility of the contracted provider.

1. Insufficient resources or scale to maintain a training and supervision infrastructure at the practice-level to support paraprofessionals

While there was receptivity to the concept of embedding paraprofessionals at the practice level to support screening and care coordination functions, respondents noted that not all practices have the capacity to address training and supervisory considerations. Additionally, respondents referenced the need for the training and orientation to be carefully tailored to literacy and experience of someone new to a

health care setting. Creating and maintaining this training structure may beyond the bandwidth of many practices or require too much overhead for smaller practices with only one or two paraprofessionals.

> "There has to be a system in place to integrate screening data into the EHR If there is a model to guide providers or a training academy that could train paraprofessional on how to do this, whether it is a certification I could integrate into the practice and do this."

Additionally, failure to orient the care team to a paraprofessional's role was identified as a barrier to implementation. Without establishing expectations regarding their role, scope, and function, it is unlikely the team will appropriately leverage a paraprofessional's capabilities.

> "Some sort of established training and skillset, and then you can say to the team what they are adding, and why, and how they can utilize them, and expectations from working with them, from their introduction. Just training, what they come in with is less structured, so they come in with more variability in their range of skill sets. We've tried to support that training, so that (the plan) can be comfortable in training them, so we know that there is some structure. You need to know how you evaluate people and what is reasonable to evaluate."

There was some feedback a paraprofessional requires oversight from someone other than the MD. Accordingly, if the paraprofessional must report to another staff person than the MD, then the role is more suitable for larger practices, health plans, or even IPAs, which can offer management and supervisory support from nurse, social worker, or other personnel. This desired intermediary management layer may challenge smaller practices which may not have staff with sufficient administrative time to hire, train, and supervise additional personnel. For these practices, a plan could assume responsibility for care management. For practices with low pediatric volume, there may be insufficient volume to dedicate a paraprofessional to well-child care; respondents noted the challenge of scheduling well-child visits in a clustered way to leverage support staff.

> "There is a workflow issue. It would have to be done in a rotating fashion, as there is not enough work to do it full time, and that's the logistical time that's hard. Do we do all of our 15-month visits on the same day, so this person can do all these screenings on the same day?"

2. Insufficient reimbursement or cost savings to employ or fund pediatric paraprofessionals

Some respondents questioned whether paraprofessional models were sufficiently valuable to justify the added costs. Additionally, there was a sense from others that paraprofessionals models should

demonstrate a short-term return on investment, which is less likely in pediatric well-child care, vs. in models focused on reducing avoidable, high-cost utilization.

> "It would take a big shift to pay for this, and you would have to justify this that you weren't just going to engage people and not add cost to the system."

The plan respondents highlighted constraints stemming from insufficient State reimbursement, and in particular, care coordination activities. Notably, while the State launched an incentive payment for developmental screening, respondents highlighted that the overall reimbursement may be too low to cover the high cost of coordinating care and ensuring a member with an identified need can successfully connect to services or supports. Additionally, an inability to code for and obtain paraprofessional reimbursement was cited as a constraint.

> "We could give you more PMPM, but again, the funds have to come from the State. Otherwise, plans can't come up with the resources. They are premium based and tied to the payment model. This is an issue for how our country doesn't get it. We as a society do not act the right way. It's not just developmental screening, it's any screening. Economically, paying them more doesn't align with our capitalist values. It's very clear that we are stupid where we need to put our money or values, and in care coordination, generally."

Providers

While almost all key respondents were receptive to expanding the care team to better meet the needs of young children, many cited challenges to integrating a paraprofessional into their practice or sustaining their role to enhance screening and coordination capacity, due to resource requirements, insufficient reimbursement, risk management concerns, and perceived data exchange barriers.

1. Insufficient Medi-Cal reimbursement to sustain enhanced pediatric care team

Medi-Cal reimbursement was seen as insufficient to cover the cost adding a paraprofessional to the team. Many respondents believed the rates they received from plans did not begin to cover the true cost of connecting a child to needed services in line with EPSDT requirements. While this research was conducted prior to the full implementation of the Proposition 56 tobacco tax-funded Medicaid provider incentives, there are still no incentives tied to labor-intensive care coordination. Frequently, informants used philanthropic funding to establish programs in pediatric settings but faced sustainability challenges programs after deployment.

Additionally, no provider referenced receiving grant support from a partner Medi-Cal health plan to pilot or launch an enhanced pediatric model. Select providers benefited from support from their County's First 5 to implement models such as Help Me Grow or Project DULCE, which include paraprofessionals or paraprofessional capacity building funds. One respondent who implemented Project DULCE at a clinic with First 5 support noted that the program administrator was struggling with the sustainability of model in California, where Medi-Cal practices are largely paid capitated reimbursement, vs. fee-for-service, which does not support increased utilization of preventative services. The perception of inadequate quality incentive funding, reimbursement rates, revenue generation upside for time-intensive care coordination activities in particular, thwarted sustainability or scaling paraprofessional programs, even if the paraprofessional contributed to significant improvements in EII.

> "If I lose the grant, I don't know if I will be able to continue this. I'm not aware of (the right revenue model) that exists. Currently, this Patient Navigator program is at our main location, and no other sites. There is potential to expand, but not planned for now."

> "Project DULCE is grant funded. Project DULCE has been looking at this issue of (revenue and cost)- the kids will come in for more visits, and maybe they will miss less visits. If you can prove under DULCE that there is value, that's important. For us to do it and not have any financial value, it's hard for us to do it, as we don't have the money."

Respondents struggled with the best recommended revenue model, with some proposing P4P to reward practices for screenings and care coordination, and others highlighting a change to bolster capitated rates to better cover the cost of supporting young children in Medi-Cal.

> "We are not billing the paraprofessional now. We don't have the right model unless we are given for pay-for-performance for Medi-Cal."

> "I don't think that screening is a current HEDIS measure, or if our clinic is rewarded for monitoring referrals to early intervention services. MDs are receptive to working with the navigators, it was just so needed. If there was an official role and it was able to be reimbursed, it would be more accepted and sustainable."

Time-limited governmental support tended to be channeled to systems serving children with significant health, vs. those with moderate or mild delays. One key informant shared their system was able to leverage Whole Person Care funds for a CHW for children with significant physical health care needs who were likely to be high utilizers of care. Another respondent noted that with grant support from

DDS, which funds regional centers, a Children's Hospital was able to support a navigator role to aid in care coordination tasks. Other respondents leveraged existing medical assistants to perform additional care coordination and health education tasks, broadening their role, vs adding a child-development specific paraprofessional.

> "(The Children's Hospital) where I used to work has a grant from (their Maternal Child Commission); they had been in the process of implementing EHR changes (for screening). On the care coordination side, (the Hospital) decided to put the care coordinators into the operating budget. They have a grant from Developmental Disability Services (DDS) just for co-located System Navigators. (The Hospital) is high resourced, and I have very high confidence that patients are resourced."

Another key informant expressed receptivity to improving developmental screening rates by delegating the screening function to another entity focused on children. The key informant's health system did not pursue the opportunity, due to resource constraints. Additionally, one informant highlighted interest in delegating these functions to maternal and child Home Visitors, who are part of State, County Public Health Department, or Department of Social Services, or Maternal and Child Health Commission-funded programs for high-risk families.

> "We had a provider from (and area system) who did a presentation to (our) chiefs of pediatrics, about a system-a grant program and she collaborated with 211-and it was quite successful, but it would cost money. There is a center that would do all of the developmental screening for us prior to the visit so that when the patient would come in, they would be ready. We tried to explore this vendor. The (health system) said no."

One key informant shared their receptivity to growing their paraprofessional model to better serve parents but acknowledged an inherent tradeoff on labor costs; changing their practice's staffing model to bolster screening and care coordination processes would require diminishing their other investments in key team members.

> "That would be revisiting our higher level people structure to maybe hire more paraprofessionals, maybe at the cost of losing a social worker. But that would be an issue for mental health- we get a lot of issues with domestic violence, anxiety, depression, suicide."

2. Paraprofessional role design and training is time and resource intensive for practices

By definition, paraprofessional roles are often locally defined vs. driven by licensure requirements. Key respondents noted that to successfully integrate paraprofessionals into work teams,

practices must provide sufficient role clarity and workflows to facilitate successful team dynamics and workflows, and explicitly define the paraprofessional's authority and autonomy on the team. This planning requires practice leaders to codify, refine, and reinforce the paraprofessional's scope, and to continually communicate and reinforce this scope with other team members and the patient's family.

> "One of the challenges of working with a paraprofessional; paraprofessionals are an amazing resource, but if they are new to that new role, it takes a lot of time to train and to help them understand their role. I think it's more than a complex job that someone is taking, than say as a job as a bank teller. They are taking on a job from scratch."

> "The temptation of people to reach outside their scope, however, could be a problem."

> "In the Healthy Steps model, they teach the Family Specialists to have deference to the providers, but still ended up with strange power struggles. Providers need to feel like they are the captains of their team. The point is that if you aren't knowledgeable about what is going to happen with teams, then as a MD, you assume (team meetings are) more busy work."

Respondents noted screening and coordination workflows require elegant integration between team members performing dependent tasks. In addition to providing training on team-based care, many informants noted that practices should offer early childhood development training, and on-going care coordination training. And finally, there was some concern about ensuring trainings addressed professional behavior, as some paraprofessionals may be new to a health care practice environment, norms, and behaviors.

> "Sometimes it's hard to get a paraprofessional ramped up, if I have someone who need to be instructed on everything. Sometimes, the CHWs themselves bring their messy lives to work and are less professional than you'd think…. it's very personality dependent."

Given the need to train paraprofessionals, to provide on-going mentoring and support, and to offer appropriate supervision, an employer must be thoughtful about resources required to maintain a productive paraprofessional workforce. Some providers may underestimate the workforce development and skills training required at hire and to provide on an on-going basis.

> "We need initial training and on-going screening. We did a two-month training, and it still wains off; we bring in new people, but it's difficult to think through…If there was a training for MAs to get trained; there is giving them the Ages and Stages, but it's beyond that. It's what do you do recognize depression, and many times it's the MA who picks up the symptoms. The (mother) has a black eye, they are crying. No one wants to pay for lost reimbursement from people being at the training and not seeing the patients, (but) they will pay for the training. You need to handle the (staff) replacement costs."

Additionally, some were hesitant to train paraprofessionals on how to enter or even view information in an EHR. Such regular training requires time and resources, for those leading trainings, taking the trainer and paraprofessional away from daily tasks in the practice.

> "EHR access is always an issue. Every system has different levels/permissions. We found that with Healthy Steps, some practices didn't give paraprofessionals access to the EHRs."

3. Risk management concerns regarding the use of unlicensed staff for EII tasks

Select respondents highlighted potential risk management concerns impacting provider willingness to broaden a paraprofessional's scope of practice to perform developmental screening or provide any guidance related to screening outcomes. The specific issues were related to lack of clarity regarding the use of unlicensed staff, and potential malpractice risk.

> "MDs need clarification on licensure types, and what that entails….My experience is that malpractice covers everyone in the practice, but anybody can hurt a patient, or even share protected health information (PHI). To me, this isn't an issue, but providers want to understand how malpractice covers these folks; that clarification would help. I think the regulatory issues are that MDs do not know if there is a licensure in their state that someone needs, to screen for child development or screen using a tool. I don't know if there is a licensure issue with regards to providing the guidance."

Family receptivity to obtaining information from a paraprofessional regarding recommended interventions, was discussed. This highlighted potential tasks where shifting all developmental screening functions to a paraprofessional may not be welcomed by families, without some clear guidance regarding the individual's credentials or expertise.

> "Regarding the intervention, if something is wrong, gray zone or positive, for kids where it's not an immediate referral- the recommendation is to provide specific guidance on development and specific things they can do. I feel like caregivers would be reluctant to receive this advice from someone other than an MD, unless they trusted that person."

4. Perceived barriers to exchanging data with paraprofessionals outside of the medical home

The sheer complexity of tasks to route a child into services was a burden, as well as the knowledge that due to administrative complexity of navigating EII services, the family was unlikely to connect to needed care without some level on-going care management support from within or outside of the medical practice. While many were conceptually supportive of leveraging EII resources outside of the practice for screening or care coordination, some respondents had concerns about the inability of a care

coordinator to build a rapport with the family via phone or text, or the complexity of having health-plan lead support, given that the provider may contract with many different plans with different care management models.

CHAPTER 5: CONCLUSIONS

The qualitative research themes can be further distilled into key insights which capture the alignment between managed care leader and pediatric provider perceptions, opportunities for best practices in the implementation of enhanced pediatric care models. These insights inform the Plan for Change in Chapter 6. Most significantly, there was receptivity among both providers and health plan leaders to leveraging a new workforce and technology aids to support screening and care coordination functions, and a sense that developmental screening and care coordination tasks are time intensive.

Insights

1. **There is high Medi-Cal plan clinical leader and pediatric provider receptivity to task shifting select developmental screening and care coordination functions to paraprofessionals.**

In almost all cases, Medi-Cal plan clinical executives and pediatric provider respondents welcomed the involvement of a trained lower-level staff person in the developmental screening and care coordination process. There was almost universal perception that the current EII process was onerous and may not be meeting the needs of members. Some sites focused on enhancing the EII capacity of existing MAs, while others leveraged grant or county funding to pilot parent navigator, CHW, or care coordinator roles. In all cases, these were unlicensed staff without explicit revenue-generating potential, beyond contributing to improved throughput or potential Prop 56 incentive payments. In many cases, even if an enhanced MA contributed to the successful completion of a child's developmental screening, routing the family to recommended services or supports required assistance from another unlicensed staff person in the practice, such as a navigator or care coordinator.

2. **There is a shared belief among respondents that using paraprofessionals for screening, health education, and care coordination is a quality improvement intervention.**

Several respondents noted that paraprofessionals with lived experience as a parent of a child with developmental needs, or with racial or ethnic concordance with the patient family, yielded more comprehensive and accurate screening and intake information from families. Providers noted this alignment helped build trust and minimize stigma associated with social need or delayed development, resulting in a higher likelihood the family could access services and supports. Language-concordance and familiarity with the family's community were seen as a pathway to trust. Sharing information on a child's developmental or behavioral status requires vulnerability, and it may be easier to be forthright with someone who shares culture, language, and community.

3. **There is a shared Medi-Cal plan clinical leader and pediatric provider perception that existing Medi-Cal reimbursement rates do not adequately cover time-intensive EII care coordination functions.**

There was almost universal belief that the effort involved in to successfully link a young child to early intervention services exceeded the capabilities and resources of pediatric practices, even though the health plan and the contracted practice is contractually obligated to do so, under EPSDT requirements. Medi-Cal plans downstreamed care coordination functions to the IPA or practice, and few knew to leverage the health plan's existing care management and member services resources for care coordination support. While this research was conducted prior to the full implementation of the provider incentive for screening-which may have modestly swayed perceptions regarding reimbursement support- there was still no incentive or additional funding to support far more time intensive care coordination process for under-resourced young families requiring EII services and supports.

4. There is a shared belief among providers and plans that the standard developmental screening and care coordination workflow is complex and labor intensive for pediatric practices.

Optimal developmental screening and care coordination to needed services and supports is ultimately a product of multiple subtasks, including outreach to engage families in timely well-child care, appointment scheduling support, provision of family education regarding developmental screening, data collection, data interpretation, provision of anticipatory guidance, authorization/insurance routing, EII

appointment scheduling, and obtaining data back from EII service sites and entering it the child's medical record. The intensity of developmental screening and resultant care coordination tasks often exceed the allotted time for an entire well-child visit. There was high appetite to explore parental self-administration of screening tools, but a sense that this would require additional real-time support for families requiring assistance, given linguistic or health literacy barriers. Notably, screening tools were not seen as socially or linguistically concordant for disadvantaged, diverse populations. For example, the ASQ was not available in all languages spoken by families with young children and posed questions which presumed families had access to particular resources, such as blocks and crayons, to assess motor development. Additionally, some respondents emphasized the potential to better leverage mobile technology to allow parents to complete screenings prior to their appointment, and to deploy screening designs which better phase questions to facilitate concurrent completion of multiple pediatric screenings to reduce redundancy and improve family experience. Almost all respondents saw opportunities for workflow improvement of some kind, in service of better supporting Medi-Cal members.

5. There is a shared perception among providers and plans that children served in integrated delivery systems may be advantaged in accessing timely needed specialty care for identified developmental concerns.

Pediatric providers at integrated delivery systems with the capacity to submit in-system referrals for recommended services after completing a developmental screen were advantaged; in these situations, the system was often capitated or fully "at risk" for care, and there was not an external authorization or tedious process to refer the patient to another provider. Overall, respondents reported a positive association between connecting a child to care and being part of a larger health system. However, it is challenging to attribute these results solely to system structure vs. being on a shared electronic referral platform; conceptually an interoperable electronic referral system could be developed and deployed with data-sharing agreements. Almost all sites reported significant challenges connecting a child to behavioral health services, whether though the County Behavioral Health department, or from community providers.

6. There is a perception that Medi-Cal health plan plays a limited role in helping to support providers and pediatric members with developmental screening, and coordination to services and supports.

As discussed throughout the results section, there was a perception that the Medi-Cal health plan played a very minimal role in supporting effective EII processes in almost all cases, with the major exception of one health plan referenced by a respondent. Plans were rarely a funder of pediatric practice improvement for developmental screening and services, nor deeply focused on improving developmental screening rates and children's linkage to care as a quality and oversight entity, nor a supplemental provider of screening and care coordination support. The plan downstreamed EPSDT developmental screening and coordination requirement to contracted practices, even though clinical leaders were acutely aware many practices often lacked the capacity to complete the required screening or coordination tasks (DHCS 2018). The plan frequently cited competing priorities for adult members, and the lack of State oversight as disincentives to addressing known gaps in preventative care and early intervention. Additionally, while plan respondents noted that members could access their health plan's care management or member services teams for assistance accessing provider recommended developmental services or supports, provider and plan respondents did not view the plan as a resource for care coordination support.

7. There is high provider and clinical health plan leader receptivity to using care management support outside of the medical home provided adequate data exchange and financial support.

Select providers saw a potential role for developmental screening and care coordination support from contracted partners, vendors, or community organizations. Provided the pediatrician receives data regarding developmental screen results and can optimally record screening disposition data in their EHR, many providers seem content to delegate this task to another entity or provider. Suggestions ranged from delegating this to the school system, the regional center, or to an experienced outside vendor/partner. Respondents emphasized that children would still need to, however, visit the pediatrician at an appropriate periodicity for well-child visits and immunizations. In all cases, the respondents would

benefit from better an understanding of billing and reimbursement options for non-MDs, to either draw down revenue or existing provider incentives.

8. There is a perception of a need to combine pediatric workforce transformation with technology enhancements, to improve developmental screening and care coordination processes.

A well-designed workflow which leverages EHR can support improved screening rates, but it may not negate the need for workforce expansion. As noted in Donabedian's Quality Framework, health care outcomes are determined by the structure and processes of care, some of which require sufficiently variable to require human intervention, in the case of care coordination. Alternatively, a pure workforce investment would be better paired with a well-designed screening tool- including improved analytics and question phasing to complete multiple pediatric screenings in a more efficient way. As one respondent noted,

"We need greater investment into understanding how these types of professionals can get trained and integrated with care management technologies, and research to publish how to optimally scale their reach, and number of patients they can cover. And that we can actually scale the workforce for accessing and training and connecting clinics, and my sense is that this is huge win, and giving people jobs is an important thing."

Responses highlighted that practices need critical resources for training and supervision to successfully shift tasks to lower level providers. As echoed by respondents, task shifting is an intervention to address human resource shortages, but may generate new tasks and responsibilities, particularly in the area of supervision. Key informant interviews validated Deller et al.'s observations regarding facilitators of task sharing in a health care setting, and the value of conducting a task analysis prior to implementing an EII paraprofessional task shifting program. Early research noted a positive relationship between practice size and use of allied workers in expanded roles (Yankauer et al.1969); this may be in part due to the ability to have supervisory staff to monitor the performance and training of non-clinical staff. Accordingly, implementation approaches must account for the increased time for supervision, particularly for smaller practices with scarce resources.

9. There is a shared belief that pediatric practices must adapt a quality improvement mindset to optimize the value of paraprofessionals, continuing to refine and optimize workflows.

Providers should have regular team huddles and employ quality improvement cycles to continuously inventory functional tasks required to ensure that a child actually receives EII services. Additionally, participation in practice improvement networks involving the provider, plan and the regional center may aid in refining access pathways. MDs seem to think that the inclusion of a trained paraprofessional can both support families and improve quality metrics, and their participation in patient visits had no adverse impact on patient flow.

In summary, based on key respondents' high receptivity to incorporating paraprofessionals on pediatric care teams, there is value to policymakers and health plans to helping to institutionalize pediatric paraprofessional roles in California. Accelerating enhanced model of pediatric care is warranted, given 1) high-need among Medi-Cal families, 2) the State's lower-than average developmental screening rates, 3) high provider and plan receptivity to shifting key tasks to a new workforce, and 4) fast approaching pediatric provider shortages. Key insights gleaned from research respondents identified plan and provider receptivity to paraprofessionals as an intervention, a review of recent state programmatic and policy plans is warranted to determine the feasibility to resource this practice transformation. Ultimately, implementation is contingent upon larger factors such as capitated or fee-for-service reimbursement rates, practice transformation opportunities under special programs such as state waivers, and regulatory oversight. In recent months, the State of CA has made overtures to bolster both quality metrics and workforce transformation.

The Shifting Healthcare Landscape

Since the researcher's completion of key informant interviews with Medi-Cal plans and providers, several active or proposed State pediatric preventative service financing or regulatory initiatives emerged that may favorably the quality of developmental screening and care coordination services for California's youngest children (DHCS 2020, DHCS 2021, CA Governors Budget 2022). The researcher's *Plan for Change* in Chapter 6 builds off these initiatives but seeks accelerated investment in

pediatric workforce transformation to advance the quadruple aim and ensure compliance with EPSDT statewide.

Quality and Oversight

Developmental Screening in the First Three Years of Life was designated as a voluntary Children's Health Care Quality Core Measure by CMS for States in 2010 (CMS 2022). This metric measures the percentage of children who are screened for risk of developmental, behavioral, and social delays using a standardized screening tool in the 12 months prior to or on the child's first, second, or third birthday (National Quality Forum 2011). CA began requiring Medi-Cal plans to report on *Developmental Screening in the First Three Years of Life* data in 2020, when the State adopted the Managed Care Accountability Set (MCAS) to monitor plan performance (DHCS 2020). The MCAS is a standardized set of measures based on the CMS Child and Adult Core Set Measures. The initial reporting year revealed fairly poor performance; the aggregate rate for all plans was significantly below the national benchmark, highlighting the need to strengthen data collection efforts and ensure children receive screenings for risk of developmental, behavioral, and social delays (DHCS 2020). As of February 2022, DHCS has not yet required plans to meet the national Medicaid 50th percentile minimum performance level.

Funding and Transformation

The Governor's FY23 proposed $286B budget includes several initiatives with a potential to bolster developmental screening and care coordination activities (CA Governors Budget 2022). First, the budget includes an additional $176M to continue provider payment support for developmental, trauma, and maternal screenings, supplementing declining Proposition 56 funding; CA first launched this tobacco-tax funded developmental screening incentive payment in the FY2019-2020 (DHCS 2019). Second, the proposed budget includes significant one-time funding of $400M for provider enhanced payments to promote preventive care in Medi-Cal, given the detrimental impact of COVID-19 pandemic on utilization. The DHCS 2020 Preventive Services Report found that only 26 percent of children aged 0-30 months attend six or more well-child visits, compared to the national benchmark of 68 percent (DHCS 2020). These rates likely further declined given the adverse impact of the COVID-19 pandemic on

pediatric utilization in Medicaid (CMS 2020). Accordingly, this rate enhancement may help bolster providers' capacity to deliver high-quality and effective care to both children and adults (CA Governors Budget 2022).

Third, the State is making a significant investment in the transformation of Medi-Cal via CalAIM, a framework that encompasses broad-based delivery system, program, and payment reform across the Medi-Cal program (CA Human Services Budget 2022). This update to the state's Medicaid waiver programs includes initiatives that could bolster provider and health plan care management for the youngest children- Enhanced Care Management and Population Health Management. Early indications suggest that the ECM program eligibility criteria for children may be too narrowly defined to bolster the EII system of care but could result in meaningful support for the highest risk children, such as those with severe clinical impairment, serious emotional disturbances, homelessness, or foster care involvement (DCHS 2021). Population Health Management is a push to ensure plans have capacity to better plan and implement population health interventions. The plan is required to provide wellness and prevention services in alignment with NCQA and contractual requirements, including ensuring receipt of preventative service (DHCS 2021). The Population Health Management program explicitly calls for the development of care management programs for those with low or risking risk, signaling the potential for plan investment in monitoring the utilization of screenings and offering meaningful care coordination supports for children.

And finally, the Governor is recommending $350M in funding to create a 25,000 CHW workforce by the year 2025; this workforce could conceptually be a vehicle to sustain existing enhanced pediatric models with unlicensed personnel, such as Family Specialists under Project DULCE, a Healthy Steps Specialist, or a home-grown CHW or Navigator models. This funding builds on an early 2020 provision to add CHWs as allowable providers under Medi-Cal. The State combined Federal language for the definition of a CHW with CA specific language, indicating that "CHWs are trusted members of their community who help address chronic conditions, preventive health care needs, and health-related social needs within their communities." (DHCS 2022). Pursuant to 42 CFR Section 440.130(c), CHW services

are provided as preventive services and must be recommended by a physician or other licensed practitioner of the healing arts within their scope of practice under state law. While a stakeholders' group is shaping potential CHW competencies under the benefit, early domains proposed by the group in **Table 13** align with themes captured in this research:

Table 13: COMMUNITY HEALTH WORKER CERTIFICATE PATHWAY

DHCS Stakeholders Meeting February 4, 2022
Core competencies include: • Communication, • Interpersonal and relationship building • Service coordination and navigation • Capacity building • Advocacy, education and facilitation • Individual and community assessment • Professional skills and conduct • Outreach • Evaluation and research • Basic knowledge in public health principles and social determinants of health, as determined by the supervising provider.

Key categories of service include screenings which do not require a license, health education, and health navigation. Per the stakeholders' meeting materials, navigation may include screening and assessment that does not require a license, and that assists beneficiaries with connecting to appropriate services to improve their health. Broadening the concept of a CHW to include practice-based paraprofessionals may require advocacy at the State levels, as the program details are refined (DHCS 2022). Notably, DHCS is including an ability for CBOs deliver CHW services, and the CHW hiring supervisor can be a CBO, managed care plan, clinic, hospital, or enrolled Medi-Cal provider. As noted at the February 2022 meeting, culture issues, payment methodology and the role of plans in ensuring access will be refined during further planning and implementation. DHCS expects to submit the SPA by March 31, with a goal of receiving federal approval prior to the July 1, 2022, effective date

CHAPTER 6: THE PLAN FOR CHANGE

Model of Change

Adding paraprofessionals to the pediatric care team is a critical innovation in light of California's looming provider shortages (Coffman 2018). A paradigm shift is needed to align funding in a way that is more commensurate with the size of the zero to three population in Medi-Cal. To catalyze the workforce changes needed to bolster the quality of and children's access to developmental screening and care coordination to needed services and supports, a robust quality, access, and financial case for enhanced pediatric care- as well as state-level policy changes are needed. Given provider receptivity to paraprofessionals, it is critical to realign state, plan, and delivery system incentives to promote workforce transformation. The researcher will disseminate findings to advocates and plan leaders, propose policy and financing changes, and share a proforma tool modeling the impact of an enhanced care team to garner philanthropic, policymaker, and health plan support for an **Enhanced Early Childhood Capitation** payment. Policy changes are timely given forthcoming CalAIM population health initiatives, and nascent Medi-Cal Community Health Worker benefit. Specifically, the researcher's *Plan for Change* calls for six activities, two specific to the PI's local efforts and four statewide policy recommendations, as shown in **Table 14**.

Table 14: STEPS TO ENHANCE PEDIATRIC QUALITY AND ACCESS IN MEDI-CAL

1. **Develop and Share Business Case for Enhanced Pediatric Care Models**

- Develop and share pro forma tool to help providers advocate for a local-plan funded "Enhanced Early Childhood Capitation" payment to enhance quality and access for Medi-Cal enrollees ages 0-3
- Guide providers weighing "build" or "contract out" approaches to pediatric care management

2. **Support Advocacy to Improve Quality of and Access to Pediatric Preventative Services**

- Support legislative action to bolster quality and oversight over existing Medi-Cal plan developmental screening and care coordination requirements, including building consumer awareness of existing health plan care management services,
- Require Medi-Cal plans to participate in a pediatric preventative services Performance Improvement Program to demonstrate plan readiness for pediatric aspects of the CalAIM Population Health Management Strategy, and foster pediatric workforce transformation for improved population management, including screening and care coordination capacity,
- Advocate to ensure the CHW benefit incorporates the role of pediatric paraprofessionals
- Broaden the responsibilities of the State's Medi-Cal Child Health Advisory Panel (MCHAP) to include meaningful input in and oversight over pediatric performance improvement

To ensure the research findings influence practice and create demand for innovation, the researcher will apply Kotter's Model of Change, as shown in **Figure 6** to magnify awareness of ways to deploy paraprofessionals as a relatively low-cost vehicle to improve developmental screening and referral rates (Kotter 2017). Leveraging Kotter's model, the researcher will amplify promising practices and existing health plan care coordination partnerships to key stakeholder groups. This, coupled with legislation to advance the meaningful and immediate enforcement of existing EPSDT requirements for managed care plans by the DCHS Managed Care Quality and Monitoring Division, would signal a prioritization of young children in the Medi-Cal program.

Figure 6: Klotter's Model of Change (Klotter 1995)

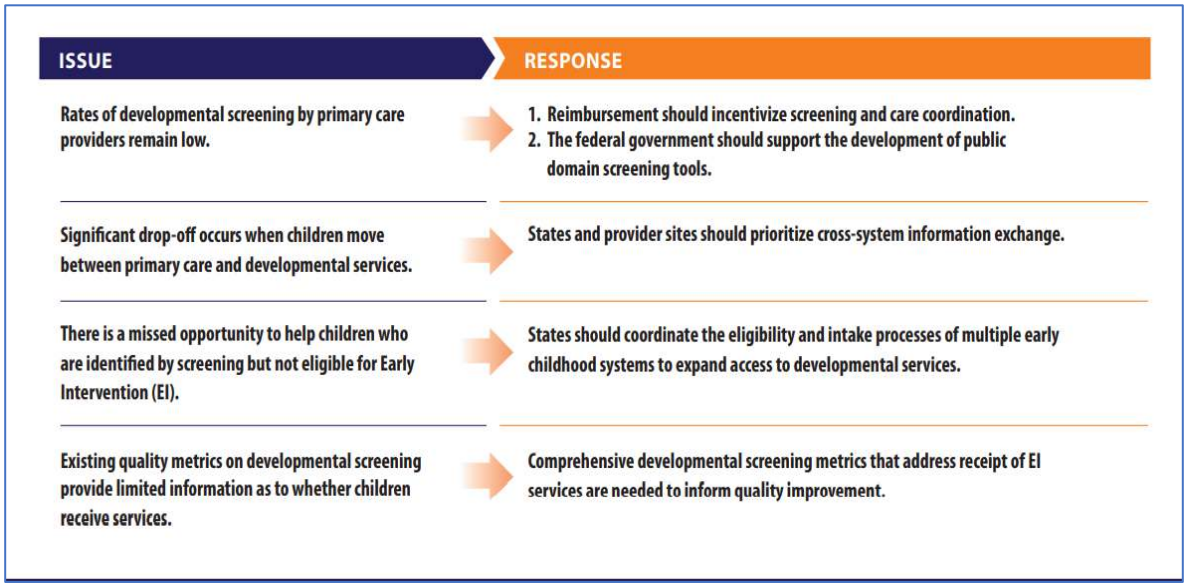
Step 1. Bolster Urgency for Change Due to Looming Pediatric Provider Shortages, and Low Preventative Services Performance, As Compared to Peer States

In 2019, less than 25% of children enrolled in Medi-Cal received a timely developmental screening (DHCS 2020). Additionally, the majority of US children screened for a developmental issue are never successfully linked to a service (Reuland 2018). Embedding a paraprofessional in pediatric practices is a promising and low-cost strategy to support developmental screening and linkage to appropriate early identification and intervention services (Minkovitz 2003). The researcher's study results heighten awareness of high Medi-Cal clinical health plan executive and Medi-Cal provider receptivity to using pediatric paraprofessionals for developmental screening and care coordination functions, in service of advancing the quadruple aim. Respondents emphasized how paraprofessionals improved families' access to developmental screening and care coordination to needed services, enhanced the patient (caregiver) experience, boosted health equity and linguistic concordance, and improved provider experience- all at a cost believed to be far lower than other health providers. Generally, there was agreement from key informants that paraprofessionals can assume several key tasks from pediatricians, nurses and social workers, given appropriate training and supervision. By freeing up providers for other higher value functions, pediatricians can better meet patient demand and avoid burnout. This awareness of

the value of paraprofessionals-coupled with an imminent pediatric provider shortage- may prompt State policymakers, health plans, philanthropic funders, and health system finance leaders to accelerate the inclusion of paraprofessionals on pediatric care teams in CA.

The researcher will develop a pediatric paraprofessional proforma and will share this a decision support tool with key advocates, such as the First Center for Children's Policy, Institute for Medicaid Innovation, and CA safety net health care executives. Activating regulatory change with policymakers, however, requires a different communication strategy, as exemplified by an extract of a compelling issue brief shown in **Figure 7** from The Children's Hospital of Philadelphia's Research Institute, with language to promote focused advocacy (CHOP 2012):

Figure 7: AN INTEGRATED APPROACH TO SUPPORTING CHILD DEVELOPMENT (CHOP 2012)



Existing managed care plan contracts already require plans to adhere to the AAP/Bright Futures periodicity schedule for developmental screening. Additionally, Assembly Bill 1004 required managed care plans to ensure that developmental screening services provided for members as part of the EPSDT benefit comply with the AAP/Bright Futures periodicity schedule and guidelines (DHCS 2019, McCarthy 2019). Medi-Cal health plans have an existing obligation to ensure contracted providers demonstrate capacity to reliably screen and refer young children to developmental services and supports and a

relatively new requirement to report on developmental screening rates (DHCS 2019). Despite this, there is still little incentive for plans to invest in pediatric care transformation, given the lack of consequences for low plan performance. Stakeholders such providers, consumers, and paraprofessionals must push for regulatory reform, such as a new Pediatric Performance Improvement Plan requirement to ensure Medi-Cal managed care plans demonstrate and augment their capacity to ensure basic preventive services are delivered.

Step 2. Form a Powerful Coalition Leveraging Non-Traditional Stakeholders

The researcher will share these recommended state-level policy changes, including minimum plan performance standards for developmental screening and a new pediatric-focused Practice Improvement Plan, with existing pediatric coalitions. A successful coalition must go beyond traditional child advocates to include provider, consumer, and paraprofessional stakeholder groups to highlight the connection between reimbursement, the pace of care team expansion, and adequate Medi-Cal provider supply and network adequacy. Potential key messengers may be First 5s, given select existing partnerships with area Medi-Cal health plans to support practice improvement efforts, leveraging national models such as Help Me Grow. Additional key messengers may be pediatric providers and even health plan leaders. Several Medi-Cal health plan clinical leader key respondents amplified the value of paraprofessionals during the course of this research. The stakeholder group's responsibility is to highlight the quality improvement impact of paraprofessional workforce innovations for pediatric practices, and the importance of going beyond screening a child, and routing them to covered services and supports in a timely fashion. An additional burden is to demonstrate to finance leaders at health systems and health plans why paraprofessionals- whether directly employed or contracted via partner organizations- may be an appropriate intervention for a resource-constrained health system. For example, lessons learned from Project DULCE indicate that a trained paraprofessional can improve patient retention, utilization, and access to services and supports, without adversely impacting throughput (Sege 2015). Likewise, lessons learned from the enhanced pediatric model EDOPC indicate that relatively low-cost clerks can play a supportive role in improving developmental screening outcomes (Allen 2010).

Key messaging could include: “Without immediate investment, California’s youngest children will suffer from poor access to health care and poor health and well-being.” With the support of First 5s as an organizing entity, parents of Medi-Cal enrolled children can provide a powerful voice to highlight a system failing to identify and address basic child developmental concerns. Alternatively, activating stories of children who received successful early intervention services before the age of five, whether via speech therapy, occupational therapy, or behavioral health support, can help the coalition’s messaging. Additionally, the coalition should focus explicitly with organizations with a mission to improve consumer education and rights, so caregivers are aware:

1) Pediatricians should be using a validated tool to screen their children for developmental concerns so they are off to the best start,

2) Parents have access to telephonic health plan care management support to help find appropriate services and supports to address their child’s developmental concern,

3) Parents can check a health plan’s performance on prevention to help them pick the best possible health plan for their child

And finally, an “inside strategy” can be employed to ensure that a new Pediatric Practice Improvement Plan initiative is initiated and successfully implemented. Advocates can engage the existing Medi-Cal Child Health Advisory Panel as a partner to help bolster accountability and oversee a proposed new Pediatric Performance Improvement Plan initiative.

Step 3. Create a Vision for Change by Building on Child Health Policy Advocate Recommendations, and Research Findings and Accompanying Pro Forma Tool

The PI will share research findings with local community clinic coalitions, health plans, and First 5s including the resulting proforma, to promote funding for local-level practice transformation. However, to ensure the sustainability of pediatric transformation, state-level policy change is needed. Early childhood advocates continue to push California to strengthen enforcement of existing requirements, to support caregiver education, spread key practices among higher performing health plans and Medi-Cal providers, and create plan benchmarks and minimum quality standards for all preventive services

(Children's Now 2021). Similarly, a 2021 analysis by Guyer et al. identified strategies to establish greater accountability for child health among Medi-Cal managed care plans, realize the full potential of Medicaid's EPSDT benefit for California's children, and elevate a focus on children among the managed care plans and the state Medicaid agency (Guyer 2021). Additionally, there are a series of financial and non-financial ways DHCS can bolster plan performance- including withholds, if needed (CHCF 2021). Potential state level policy changes include:

1. **Require Plans to Pursue Pediatric Performance Improvement, Under Supervision of Child Health Experts**
   Created in 2015, one of the MCHAP panel's key responsibilities is quality measurement. Given low developmental screening rates, DHCS should require Medi-Cal plans to implement a pediatric-focused Performance Improvement Program (PIP), supplementing the two PIPs they are already required to execute upon. This program should be dually overseen by DHCS and the Medi-Cal Child Health Advisory Panel, given their unique expertise as pediatric preventative care leaders.

2. **Ensure Plans Demonstrate Readiness for Pediatric Population Health Management**
   In 2023, under CalAIM, Medi-Cal plans will be required to meet NCQA standards for Population Health Management, as well as additional standards. This will require Medi-Cal health plans to implement risk tier criteria and stratification, including for children with a developmental need. Concurrently, DHCS will launch in 2023 of the Population Health Management Service (DHCS 2022). This second initiative will require plans to share data across multiple delivery systems (e.g., physical, behavioral health, pharmacy, dental health) and with Medi-Cal enrollees, their providers, human services programs, and other partners. The Medi-Cal managed care plan will be required to provide a toll-free line for primary care providers and specialists who seek technical and referral assistance when any physical or behavioral condition requires further evaluation or treatment, including to developmental services referrals (DHCS 2021). *DHCS should work with DDS to require plans to obtain and share data from regional centers. Medi-Cal managed care plans should be required to establish a process by which members can easily self-refer to access*

case management or services for other emerging needs. MCOs must promote existing and new plan-based or contracted care management services to the parents of young members and report on care management call/text/live chat volume, by member demographic, to the State.

3. **Shape Community Health Workers Benefit for Pediatric Populations**:

   Lessons learned from this research can shape the implementation approach for CHWs for plans and practices seeking to augment pediatric-serving practices with a new workforce. *Advocates must ensure the explicit inclusion of standard pediatric paraprofessional functions in forthcoming Community Health Worker (CHW) program regulations. Additionally, the State should build sound CHW reimbursement rates, which include the cost of training, IT needs, and supervision.*

Additionally, the coalition should stress that modest, but critical funding is needed to ensure that providers can sustain a model of care focused on the unique needs of children ages zero to three. There is an urgent need to bolster Medi-Cal quality and deploy an effective and welcomed workforce to route children with a developmental need to services and supports.

Step 4. Communicate the Vision

Development of a Proforma Tool to Guide Pediatric Paraprofessional Investments

The quantitative arm of this research is a proforma tool to aid practices in weighing the potential impact of adding a paraprofessional to the team to enhance developmental screening and care coordination functions, over a four-year time horizon. This model is designed as a tool to aid practices and funders considering paraprofessional investments in pediatric preventative care. The model shares anticipated revenue increases and reflects expense categories referenced by informants during interviews. And finally, the model demonstrates the impact of a proposed **Enhanced Early Childhood Capitation** payment.

Cost considerations

Ensuring that providers delegate tasks to well-trained team members can be both an efficiency strategy, as well as reduce costs (Hopkins 2014). In a team-based care environment, there are four stages of outpatient visits; as displayed in **Table 15**, each phase has specific tasks that can be delegated to a variety of care team members by the pediatrician:

Table 15: FOUR STAGES OF OUTPATIENT VISITS (Hopkins 2014)

- Stage 1: Gathering data
- Stage 2: Physical examination and synthesis of data,
- Stage 3: Medical decision-making,
- Stage 4: Patient education and plan-of-care implementation.

In order to ensure that paraprofessionals can add true value to stages one and stages four of a pediatric well-child visit, training, supervision, and access to the EHR is essential.

Technology: The assumption is the paraprofessional has access to information to support the provider's care plan, and ensures the child is connected to recommended services, as documented in the EHR. Given input from key informants, the proforma builds in assumption that the paraprofessional has access to the E.H.R, and a personal computer. Additionally, given input from key respondents, there is a set aside to create a custom paraprofessional user profile, and to impede electronic developmental screening tools in the EHR.

Training and Collaborative Care Time: Optimally, paraprofessionals receive concerted on-boarding at hire and basic health care and child development education before they work directly with providers and families. Accordingly, the proforma builds in a one-month training orientation for a new paraprofessional. Additionally, the tool includes funding for one-hour a week- outside of practice time- for paid child development training to ensure they are aware of emerging protocols, policies, and practices, and can effectively collaborate with providers during collaborative care meetings. Likewise, the pro forma creates protected administrative time (2.5%) for pediatric physicians to participate in a weekly huddle meeting with staff, including paraprofessionals, in service of continuous quality improvement.

Supervision: All key respondents stressed the importance of supervision, given the often ambiguous role and functions of a paraprofessional. Accordingly, the pro forma includes 10% FTE health manager, which could be a social worker, nurse manager, nurse supervisor, or another practice administrator.

Cost avoidance considerations

Long term data suggests that children who receive early intervention services are better prepared for school, have lower high-school drop-out rates, teen parenthood, poor behaviors, and criminal activities, which are all risks associated with developmental delays (Gellasch 2015). These costs, however, are born by multiple disparate systems, and while they can be factored into state budgets, they cannot be factored into a traditional business or programmatic plan. Additionally, while many CHW ROI models traditionally look at the impact of reduced hospitalization, few pediatric paraprofessional models can have meaningful impact on cost avoidance, with the exception of pediatric asthma (Krieger 2005). Accordingly, the proforma does not capture potential upside of changes in care-seeking health behavior, such as avoidable emergency department utilization associated with higher engagement in well-child care. The proforma user can customize the proforma to include cost avoidance figure associated with improved MD retention, to the extent enhanced pediatric care is a satisfier and can reduce turnover and MD recruitment costs.

Access and efficiency considerations

Attributing an increased uptake in well-child care productivity, screening rates, and more effective linkage to the inclusion of a pediatric paraprofessional in the practice involves a series of assumptions; accordingly, the users can enter tailor these assumptions in the modifiable proforma. As some studies suggest that panel size capacity can be increased if practices implement strategies associated with improved efficiency (e.g., using care teams or panel managers, adopting scheduling innovations, increasing telecommunication between physicians and patients, delegating appropriate tasks to non-

physician clinicians), the PI incorporated a pediatric panel size per MD increase of 5% per year into the baseline model, which can be modified by the proforma user (Raffoul 2016).

Reimbursement considerations

As California's Medi-Cal providers are predominately paid by capitation vs. fee-for-service, modeling the sustainability of an enhanced pediatric paraprofessional model is complex; more pediatric encounters do not directly tie to greater revenue. [The exception may be FQHCs who do generate additional per visit wrap-around rate revenue up to their approved Prospective Payment Service (PPS) rates- which can range as high as $400 (DHCS 2022). With as little as an additional 20 visits per week, FQHCs may be able to generate sufficient revenue from enhanced productivity to sustain the paraprofessional role; however, not all pediatric-serving practices in Medi-Cal are FQHCs, so the proforma accounts for both FQHC and non-FQHC practice environments (CHCF 2018)]. The key informant data collected in this study suggests that pediatric paraprofessionals can help with the quality of pediatric preventative care by improving the practice's capacity to increase screening rates via improved family engagement and throughput assistance (Valado 2019). With the advent of State funded incentives for developmental and trauma screening, improved pediatric screening is tied to some additional revenue; these incentives are included in the model, and the baseline line projects a 20% increase in screening rates per year.

Pediatric workforce enhancement models may be cost prohibitive, however, without modest new revenue, such as a care coordination quality incentive for practices layered on top of existing capitation and screening incentive payments. While the State is pursuing an Enhanced Care Management program under CalAIM, the pediatric populations proposed for eligibility are far too limited to help all children requiring care coordination support to access developmental services and supports (DHCS 2021). Eventually, as part of the implementation a Population Health Management Strategy, the State could create an incentive payment tied to existing codes for care management or collaborative care. A simpler approach, however, is enhanced and targeted capitation.

The case for capitation

A more managed-care oriented approach would be to consider an **Enhanced Early Childhood Capitation** payment, or a modest per-member-per-month fee that is sufficient to cover the labor and accompanying costs of a pediatric paraprofessional working at full productivity. The researcher posits and the example proforma illustrates that with a modest PMPM enhancement for children ages zero to three (e.g. $6 PMPM), practices can support a dedicated paraprofessional resource to improve pediatric productivity, access and quality. The advantage of a PMPM is that is preserves maximum flexibility for practices on how to design paraprofessional models, and it is a prospective, vs. retrospective investment, which is critical for less resourced practices who may struggle with P4P optimization and cash flow. Continued receipt of the capitation sweetener should be depending on the practice achieving set goals for screening rates and demonstrating excellent pediatric patient access to care.

Building a Paraprofessional Proforma Tool to Inform Adoption Considerations

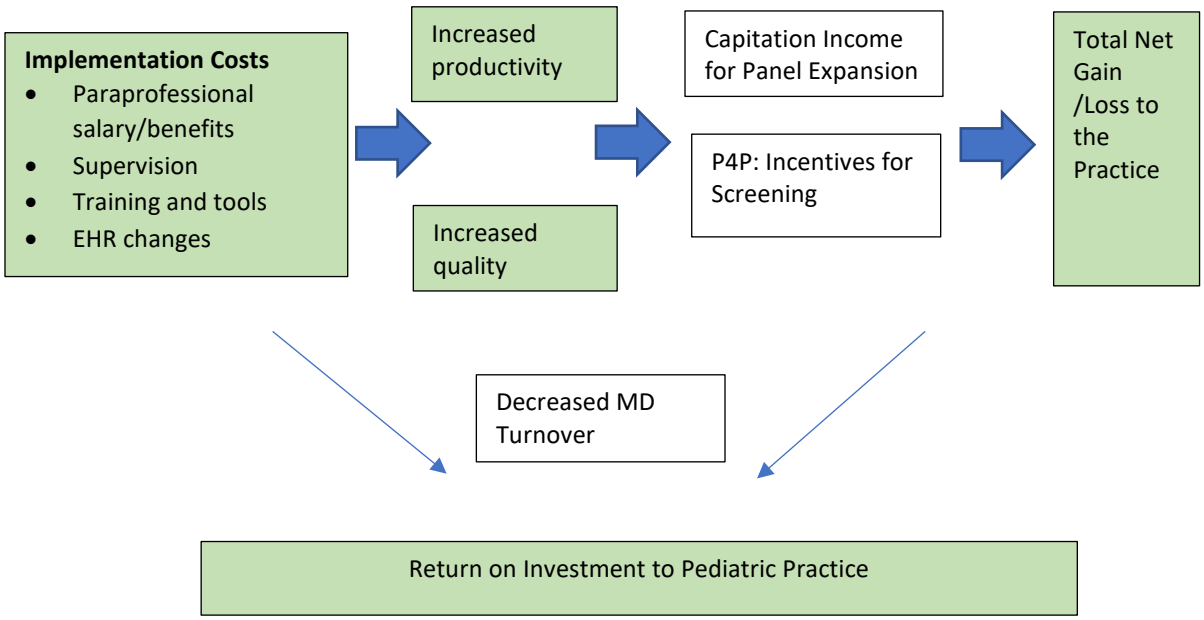
A decision-support model can guide potential implementation of an enhanced pediatric care team. Practices with limited profit margins may be wary of incorporating additional personnel on the care team, even if the personnel contribute to improved early identification and intervention outcomes in pediatrics or provide other care management functions. The business case for improved early identification and linkage to services is tied to the practice's reimbursement model; there is a direct relationship between revenue and screening for practices compensated on a fee-for-service basis for encounters. Data for the decision-analysis tool came in two forms - qualitative data to determine the variables of interest, gleaned from the key informant interviews, and quantitative data to determine the values for select variables which are relatively constant in the Los Angeles, CA market, such as salary costs for paraprofessionals.

At least five coordinated care models featuring paraprofessionals have shown positive return on investment for high risk Medicare beneficiaries, including Care Transitions Intervention; Care Transitions Intervention (Group Visit); Geriatric Resources for Assessment and Care of Elders (GRACE); Project RED (Re-Engineered Discharge); Project BOOST and Transitional Care Model (SCAN 2014). Critical to

this analysis is demonstration of cost savings from reduced high-cost utilization, including hospitalizations.

In contrast, a sustainability analysis for paraprofessional investments in pediatrics cannot be based on pure one-year cost avoidance, as children are relatively low utilizers of high-cost care, and the costs of failing to identify and treat a developmental or behavioral issue are not uniformly borne on the health system, but rather, on the educational and social services sectors as well (Help Me Grow 2021, Conti 2013). **Figure 8** presents a framework that may be more relevant for a pediatric assessment of paraprofessional models:

Figure 8: RETURN ON INVESTMENT FRAMEWORK FOR PEDIATRIC PARAPROFESSIONALS



A quantitative approach contributed to the development of proforma tool, as numeric factors such as the practice's reimbursement type, staffing model, Medi-Cal zero to three patient panel volume, labor costs, supervision time, and EHR changes to support team-based care, will sway the financial impact of a potential paraprofessional investment. Research has captured the intrinsic ROI of developmental screening, including improved child developmental and health outcomes, academic performance, earning performance in adulthood, and economic inequalities and reduced public benefit and special education spending (Help Me Grow 2021).

However, the adoption costs of a system which facilitates timely developmental screening in practice may not have been outlined, The cost per case discovered and referred will increase if implementation costs are fully factored into considerations. This cost can be compared with the known cost borne by systems of delayed diagnosis and treatment. A sustainability analysis cannot be performed without sensitivity to several key variables, including practice type, patient volume, and payor mix, as highlighted in **Table 16**:

TABLE 16: VARIABLES FOR A PARAPROFESSIONAL INVESTMENT DECISION-ANALYSIS MODEL

Model Variable	**Variable Type**	**Example**
# Medi-Cal Members Ages 0-3 Per Panel	Continuous	250
Incentive Payment Reimbursement	Continuous	$59.90
Medi-Cal/Commercial Payor Mix	Categorical	50% Medi-Cal, 50% Commercial
Federally Qualified Health Center	Binary	Yes/No
Wrap rate per Encounter	Continuous	$100 per encounter
Supervision Ratio	Continuous	1 MD to 2 paraprofessionals
Annual Training Cost	Continuous	$3,000 per year
Paraprofessional Hourly Salary	Continuous	$53,000 per year
Nurse Supervisor Hourly Salary	Continuous	$50/hour
Benefited Paraprofessional Position	Binary	Yes/No
Benefit Rate	Continuous	30% of wage
Productivity Improvement Rate- % Increase in # Children Seen Per Day with Paraprofessional	Continuous	10%
One-Time EHR Enhancements	Continuous	$10,000

The first key input is practice type, which will inform the revenue model. As demonstrated in **Table 17**, FQHCs can access additional fee-for-service visit revenue under the Prospective Payment System (PPS) on top of their capitated rate and any quality incentives:

TABLE 17. IMPACT OF INCREASED PATIENT THROUGHPUT, BY PRACTICE SETTING

Practice Type	Contract Example	Cost Savings Potential	Revenue Potential
Federally Qualified Health Center	-Fee-for-service (Prospective Payment Rate) -Capitated Medi-Cal managed care rate	Cost savings from using paraprofessionals vs. nurses for non-clinical tasks	-Increased PPS revenue associated with improved patient attendance at well-child visits -Improved throughput facilitates ability to increase patient panel -Prop 56 Incentive payments
Safety Net Hospital-Affiliated Outpatient Practice	-Capitated Medi-Cal managed care rate	Cost savings from using paraprofessionals vs. nurses for non-clinical tasks	-Improved throughput facilitates ability to increase patient panel -Prop 56 Incentive payments
Freestanding Outpatient Practice	-Capitated Medi-Cal managed care rate -Commercial contracts	Cost savings from using paraprofessionals vs. nurses for non-clinical tasks	-Improved throughput facilitates ability to increase patient panel -Revenue from commercially insured patients -Prop 56 Incentive payments

The second key input is labor costs. The researcher queried Bureau of Labor geographic data to develop a base model, while building a tool which permits the user to enter direct actual salary and benefits information for their sub geography in the spreadsheet. A preliminary salary study of paraprofessional-like roles in California indicates that salaries for CHWs currently exceed those of Medical Assistants; this different illustrated between **Table 18** and **Table 19** could reflect greater public sector employment for CHWs, in the early advent of the CHW workforce:

TABLE 18: STATES WITH THE HIGHEST EMPLOYMENT OF COMMUNITY HEALTH WORKERS (BUREAU OF LABOR STATISTICS 2021)

State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
New York	7,300	0.84	1.99	$ 22.18	$ 46,130
California	5,960	0.36	0.86	$ 25.45	$ 52,940
Texas	3,350	0.28	0.66	$ 19.75	$ 41,070
Washington	3,100	0.97	2.30	$ 22.33	$ 46,440
Massachusetts	2,770	0.83	1.96	$ 22.26	$ 46,300

TABLE 19: STATES WITH THE HIGHEST EMPLOYMENT OF MEDICAL ASSISTANTS (BUREAU OF LABOR STATISTICS 2021)

State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
California	95,690	5.82	1.14	$ 20.67	$ 42,990
Texas	72,640	6.00	1.18	$ 16.20	$ 33,700
Florida	56,010	6.64	1.30	$ 16.73	$ 34,800
Pennsylvania	27,740	5.03	0.99	$ 16.67	$ 34,670
Ohio	26,250	5.11	1.00	$ 16.48	$ 34,270

The third category of variables included in the tool were informed by the qualitative interviews. These variables include supervision needs, ongoing or start-up training costs, and informatics needs to effectively incorporate a paraprofessional on the care team. Additionally, it is essential to invest in care transformation efforts to improve the pediatrician practice experience and bolster or maintain participation in the Medi-Cal program. Nationwide, Medicaid payment for pediatric primary care services averaged 64% of Medicare and 53% of private insurance payment before 2013. Data suggests that low payment can be a participation barrier (Tang 2018). Accordingly, a figure was included aiming to capture the value of reduced MD turnover, attributable to an improved team-based practice experience.

Pro forma use for decision-making

Completing this template can help a practice determine whether to launch a practice-based paraprofessional model, or delegate select tasks to another lower-cost care management entity. This tool is configurable to reflect differences in pediatric practice types, different physician to paraprofessional staffing ratios, and varying social needs or acuity of the children and families being served. For example, larger practices may be able generate sufficient incentive payment revenue to offset the majority of the supervisory and training burden of a dedicated pediatric paraprofessional, while others may lack the zero to aged three pediatric volume in their panel to cover the operational burden of a full or half-time worker. These practices could elect to upskill a medical assistant or subcontract select responsibilities to a third-party, such as the County's First 5's Help Me Grow program, a private vendor, or a community-based care management organization. Alternatively, a mission-minded Medi-Cal managed care plan may opt to

deliver at least some pediatric care coordination services functions for members served by less-resourced pediatric providers.

The pro forma is fully modifiable to reflect local practice assumptions regarding baseline screening rates, size of the zero to three population per MD panel, and physician, supervisor, and paraprofessional compensation and benefits. The following pro forma example is specific to the Los Angeles, CA market, and accordingly, reflects higher than typical salaries (BLS 2022). This pro forma demonstrates the potential impact of an *Enhanced Early Childhood Capitation* (PMPM) for members ages 0-3, tied to access and quality measures established by a plan. The purpose of this enhancement is to offset the cost of embedding a pediatric professional focused on young members. A pediatric serving practice could seek start-up financing from philanthropy to cover initial technology and training costs. In summary, with a modest PMPM enhancement, one paraprofessional serving two pediatric providers is cost neutral, by Year 5. An FQHC with a high wrap-rate could hit positive net income, by Year 4 (see **Table 20**).

TABLE 20: PEDIATRIC PARAPROFESSIONAL PRO FORMA TOOL

Pediatric Paraprofessional Proforma Tool								
		Start-Up	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Total**
Key Inputs								
	Practice Population and Performance							
	# of Children Per Panel Ages Zero to Three	250						
	Baseline Pediatric Screening Rate	25%						
	Workforce Assumptions							
	Number of Paraprofessionals	1	1	1	1	1	1	
	MD to Paraprofessional Ratio	2	2	2	2	2	2	
	Benefit Rate		25%	25%	25%	25%	25%	
	Salary/Rate Inflation Rate		2.5%	2.5%	2.5%	2.5%	2.5%	
	Paraprofessional Salary		$ (53,000)					
	Health Manager Salary		$ (138,000)					
	Pediatrician Salary		$ (212,990)					
	Access and Quality Assumptions							
	Panel Size Increase Due to Increased Productivity		5%	5%	5%	5%	5%	
	Annual Screening Rate Increase		20%	20%	20%	15%	0%	
Costs								
	Labor							
	Paraprofessional							
	Salary and Benefits		$ (66,250)	$ (67,906)	$ (69,604)	$ (71,344)	$ (73,128)	$ (275,104)
	Supervision and Collaboration Time							$ -
	Health Manager Supervision @10% per Paraprofessional		$ (17,250)	$ (17,681)	$ (18,123)	$ (18,576)	$ (19,041)	$ (71,631)
	MD Admin Time @2.5%		$ (13,312)	$ (13,977)	$ (14,327)	$ (14,685)	$ (15,052)	$ (56,301)
	Training Time							$ -
	Orientation and Weekly Meetings	$ (5,521)	$ (1,656)	$ (1,698)	$ (1,740)	$ (1,784)	$ (1,828)	$ (12,398)
	Technology							$ -
	E.H.R. User Role Configuration	$ (5,000)	$ -	$ -	$ -	$ -	$ 1	$ (5,000)
	Screening Tool License	$ (10,000)						$ (10,000)
	E.H.R. User License		$ (500)	$ (500)	$ (500)	$ (500)	$ (500)	$ (2,000)
	Computer	$ (1,500)						$ (1,500)
Total Costs		**$(22,021)**	**$ (98,968)**	**$ (101,763)**	**$ (104,294)**	**$ (106,889)**	**$ (109,548)**	**$ (433,935)**
Revenue								
	Number of Children 0-3 per MD panel	250	263	276	289	304	319	
	Total # of Children 0-3 Per Paraprofessional	500	525	551	579	608	638	
	Quality Incentives							
	Pediatric Screening Rate		45%	65%	85%	100%	100%	
	Incremental Increase in Developmental Screening Incentives		$ 14,151	$ 21,463	$ 29,470	$ 36,404	$ 38,225	$ 101,489
	Incremental Increase in Trauma Screening Incentives		$ 6,851	$ 10,391	$ 14,268	$ 17,625	$ 18,506	$ 49,135
Total Revenue		$ -	$ 21,003	$ 31,855	$ 43,739	$ 54,030	$ 56,732	$ 150,627
Net Income (Loss)		**$(22,021)**	**$ (77,965)**	**$ (69,908)**	**$ (60,555)**	**$ (52,859)**	**$ (52,816)**	**$ (283,308)**
With Enhanced Early Childhood Capitation								
	Monthly PMPM for Children 0-3		$6.50	$6.66	$6.83	$7.00	$7.17	
	Increased Total Capitation		$ 40,950	$ 44,072	$ 47,433	$ 51,050	$ 54,942	$ 183,505
Adj Net Income (Loss)		**$(22,021)**	**$ (37,015)**	**$ (25,836)**	**$ (13,122)**	**$ (1,809)**	**$ 2,126**	**$ (99,803)**
With FQHC Wrap-Rate								
	Increased Wrap Around Rate- FQHC							
	Number of Additional Pediatric Patients 0-3		25	51	79	108	138	263
	Number of Visits Per New Patient Per Year		2	2	2	2	2	2
	Estimated Wrap Around Rate		$ 75	$ 75	$ 75	$ 75	$ 75	$ 300
	Increased Wrap-Around Revenue		$ 3,750	$ 7,688	$ 11,822	$ 16,163	$ 20,721	$ 39,422
Adj Net Income (Loss)		**$(22,021)**	**$ (33,265)**	**$ (18,148)**	**$ (1,301)**	**$ 14,354**	**$ 22,847**	**$ (60,381)**
Intangibles: Reduced MD turnover costs, Improved family care plan compliance, improved clinical outcomes								

Step 5. Empower Action (*Regulatory Change/Reporting/Quality Incentives)*

The Medi-Cal Children's Health Advisory Panel (MCHAP) advises DHCS on policy and operational issues that affect children in Medi-Cal (Medi-Cal Children's Health Advisory Panel 2013). The MCHAP should be empowered to help effectuate change and greater commitment to and resources for pediatric preventative care at the State level. In order to help the advisory panel elevate or prioritize early childhood within the Medi-Cal program, regulatory or legislative action may be required to change their charter. Specifically, an amendment to Section 14005.271 could include the italicized sentence below:

Proposed Amendment to Section 14005.271 of the Welfare and Institutions Code

(j) The advisory panel's powers and duties include, but are not limited to, both of the following:

(1) To advise the Director of Health Care Services on all policies, regulations, and operations of the Medi-Cal program related to providing health care services to children.

(2) To meet at least quarterly, unless deemed unnecessary by the chair.

(3) To advise on and review annual required Pediatric Performance Improvement Plans submitted by contracted plans.

Alternatively, language in a bill creating a new required Pediatric Performance Improvement Plan for Medi-Cal plans could explicitly name the Medi-Cal Children's Health Advisory Panel as a key oversight body, in conjunction with DHCS staff.

Enhanced reporting

The MCHAP could recommend the State Department of Health Care Services to identify a mechanism for contracted Medicaid managed care plans to submit data (encounter or a representative audit) on successful developmental service and support referrals, vs. just developmental screening. Requiring reporting on a metric that demonstrates care coordination practices would be similar to monitoring care transitions practices for other populations. Similarly, the MCHAP could direct the DHCS

to require managed care plans to submit care management case volumes for members ages 0-5, to ensure that caregivers are aware of and children are benefitting from existing plan resources.

Incentives

The MCHAP could direct DHCS to study and report on potential pediatric quality incentives to promote improved performance. A more significant change in two-plan or geographic managed care model counties, would be to use developmental screening rates to inform auto-assignment of Medi-Cal enrollees who have not opted into a particular plan.

Step 6. Create Quick Wins to Demonstrate Proof of Concept
A Novel First 5 and Medi-Cal Managed Care Plan Paraprofessional Pilot

Select Medi-Cal managed care plans and community-based partners with expertise in child development have promising paraprofessional initiatives. For provider practices with limited staffing resources, opting to leverage an outside partner such as a First 5 for paraprofessional-level outreach and care coordination functions may be prudent. In 2019, Alameda County's First 5 Commission begin a novel partnership with the Alameda Alliance, the Medi-Cal local initiative health plan, to promote increased pediatric well-child utilization, via a paraprofessional outreach pilot to plan members. The purpose of the partnership was to bolster access to pediatric preventative services.

The health plan's grant funding leveraged First 5's existing Help Me Grow program, a national model designed to support increased developmental screening in communities and early identification and treatment of developmental delays. The health plan provided a list of young children who had not engaged in well-child care and First 5 care coordinators conducted telephonic outreach to families, provided health education, and supported appointment scheduling with their providers. Early data indicated that First 5 staff had a high success rate in reaching families by phone, and families readily accepted navigation and appointment scheduling assistance services to well-child care. This initiative advanced the First 5's strategic objective to advocate, plan, and implement for scaling of care coordination function, leveraging the Commission's Help Me Grow model (First 5 Alameda 2021).

Drawing on the researchers work in managed care and research in enhanced pediatric models, and through a collaborative planning partnership, the parties developed an expanded scope for year two of their partnership, with consultant assistance. *(The researcher participated as a subcontractor on this project for First 5 Alameda, under supervision from Margolis Consulting).* This enhanced partnership includes provider training and care coordination support for the families of young children with developmental concerns who are referred to First 5's Help Me Grow for guidance. Pilot projects between First 5s and health plans can be shared with the MCHAP or other key stakeholder groups, to demonstrate proof of concept of developmental screening practice improvement initiatives. These pilots could include multiple Medi-Cal plans and a partnering First 5, and a collaborative to support evaluation and best practice sharing.

Step 7. Build on the Change: Leveraging CHW Expansion

The State recently advanced legislation for CHW reimbursement, and is working toward a CHW benefit, to be submitted to CMS. Case studies regarding successful team-based care models leveraging unlicensed staff to support early childhood interventions can be shared with the State's Community Health Worker Stakeholder group, and with local Medi-Cal plans to bolster awareness and ensure key components are factored into the CHW design. These models could include Project DULCE, Help Me Grow, and Healthy Steps, or local models, including those featuring Enhanced Medical Assistants. However, as these models result in linking a child to additional benefits or services, given the nature of early intervention, they are seldom cost saving. Accordingly, any briefing on these models should be accompanied by the researcher's pediatric paraprofessional proforma tool demonstrating that with very modest investment from the State or plan, any pediatric paraprofessional model can be sustainable for pediatric practices. There is precedence in California for the use of paraprofessionals; for example, via California's CPSP program, paraprofessionals can bill for screening, education, coordination and intervention maternal services for Medi-Cal enrollees (CDPH 2018). The potential to gain revenue or reimbursement for paraprofessionals under a nascent CHW benefit presents an opportunity to formalize and professionalize task sharing for early identification and intervention, similar to the model for CPSP.

Continuing education and training for health workers will support their utility in pediatric health, provided there is adequate reimbursement for their roles and incentives tied to their performance.

Step 8. Make it Stick- Convening and Research Dissemination

A UCSF Workforce report highlighted a critical need for the State to provide training, support, and incentives for team-based care, in light of physician supply concerns (UCSF 2018). As shared by key informants in this study, paraprofessionals can reduce the clinical and administrative burden on clinicians, with thoughtful task sharing. The urgency for improving developmental screening and successful linkage to services and supports is clear due to California's need to demonstrate improved performance on CMS Core Child Health Measures. The relevant coalition to support this effort is already underway- First 5s and other pediatric leaders are deeply invested in bolstering provider-level capacity for developmental screening and referral.

The PI's study has the potential to inform health care funders' strategies for early identification and intervention. Lessons from this study can guide Medi-Cal health plans and First 5's in their quality improvement approach. The PI can serve as a convener by promoting the availability of a proforma for organizations considering creating or funding enhanced pediatric models with paraprofessionals. The objective is to provide more specific guidance to practices and funders based on the profile of the practice setting- reimbursement rates, productivity, and supervisory costs. This tool will be shared with the executive leadership of the First 5 Association, which represents First 5 organizations in all 52 CA counties. The tool will also be shared with peers at advocacy organizations focused on early childhood and will be the focus of blogs and on-going presentations, consistent with the PI's role at a pediatric provider organization. More broadly, the researcher will share findings with fellow members of the Institute for Medicaid's Child and Adolescent Subcommittee, which is comprised of plan, provider, and research leaders in child and adolescent health. The subcommittee is focused on advancing the prevention and treatment objectives based on the state of health of the child and adolescent population in Medicaid, and advancing the Institute's Strategic Pillars, as shown in **Figure 9** (Institute for Medicaid 2022).

Figure 9: INSTITUTE FOR MEDICAID INNOVATION STRATEGIC PRIORITIES (Institute for Medicaid 2022)

Limitations and Informing Additional Research

The literature review revealed key implementation considerations for organizations considering task-sharing pediatric activities with unlicensed staff. However, few studies addressed health plan clinical leader's perceptions of pediatric paraprofessional models. Accordingly, the plan for change calls for further research in this area. Another observation is that significant investments in paraprofessionals supporting care management functions abound in the field; the issue is whether there have been appropriate tools to promulgate their spread in a financially prudent manner to serve children at risk. In order to do this, one must try to identify tenets of a particular model that are noteworthy, and specific impacts on quality, provider experience, patient experience, and population health. For example, more research is needed to discern the impact of practice-based paraprofessionals vs. those who can also perform home or community visits, and accompany families with more significant support needs, to regional centers or other treatment providers.

There were many limitations to this study. The initial challenge was recruiting eligible CMOs, as there are less than 25 Medi-Cal health plans in the entire state (DCHS 2022). However, the researcher was successfully able to contact 10 senior leaders at plans to gain a broad representation of perspectives

from a relatively small number of leaders with major influence over clinical oversight and transformation in Medi-Cal managed care. Additionally, health plans were largely located in major metropolitan areas, although one health plan did serve members in rural counties. This more urban perspective may influence perspectives about care coordination, as distance/travel time may be less of a constraint for urban members than it could be for those in rural regions. Some of the health plans operate in counties with different managed care models (county organized health systems (COHS), two-plan counties). Additionally, two of the health plans are for-profit plans, which may have different incentives and focus, and have different governance models. And finally, the study was constrained by the very big differences among the infrastructure at the participating providers. Providers who were part of an integrated delivery system with on-site specialty care, vs. those at single-site community clinics, often face extremely different referrals pathways for care for children with developmental issues.

Additionally, interviews were collected prior to the full implementation of Proposition 56 provider payments for developmental screening, and during the implementation of reporting for the *Developmental Screening in the First Three Years of Life* metric. This additional financing and reporting element may have changed respondents' perceptions regarding the priority of developmental screening. However, early data suggests developmental screening rates remain stubbornly low in CA's Medi-Cal program, despite reporting requirements and provider incentives. And finally, the researcher did not interview paraprofessionals supporting developmental screening and care coordination functions, nor caregivers of young children, which is a major limitation of the study; this is an area for future research.

Further research could identify an opportunity to better define the role of paraprofessionals at the managed care service organization (MSO) or Independent Practice Association (IPA) level, given the importance of these entities in ensuring the fulfillment of other managed care requirements to proactively engage members (e.g. HEDIS metrics, Initial Health Assessments). This analysis could identify a role for care coordination at an intermediary level, such as at an IPA well-positioned to oversee adherence to standard procedures and practices. This additional research may offer an opportunity to define the role of paraprofessionals at the MSO level. Pediatric paraprofessionals could also be employed in Counties

which offer centralized call centers to provide referral services to families of children with an identified behavioral or developmental concern, an approach consistent with the National Help Me Grow model espoused by First 5s. Additionally, more research is needed on collaborative models where pediatric providers unable to assume resource intensive care coordination functions can delegate these activities to a contracted community partner. Ultimately, with a robust exchange of data and a "no wrong door" approach, screening and care coordination could be provided by health plan care managers, or plan-funded community-based providers offering community-based, phone, or text based short or long-term care management. An area for future research is better tiering the service intensity of supports for screening and care coordination to needed services, from basic health plan letters/texts prompting an initial screening, to telephone care management, to in-person support, and more intensive longitudinal home and community-based support. Additionally, more research is needed to inform whether providers should pursue purely practice-based support or explore partnerships with outside organizations to perform select pediatric care management functions. And finally, based on provider feedback, more research is needed to provide clinical pathway guidance for children with a positive screen, particularly for families with high social needs or barriers to accessing and receiving services. Given the fragmentation of EII services, provided a higher level of support to select families may be warranted to ensure there is successful linkage to and engagement in appropriate services. This clarity can help guide the distribution of roles and functions among care team staff, in service of providing the most appropriate supports for a child's social and clinical needs.

Summary

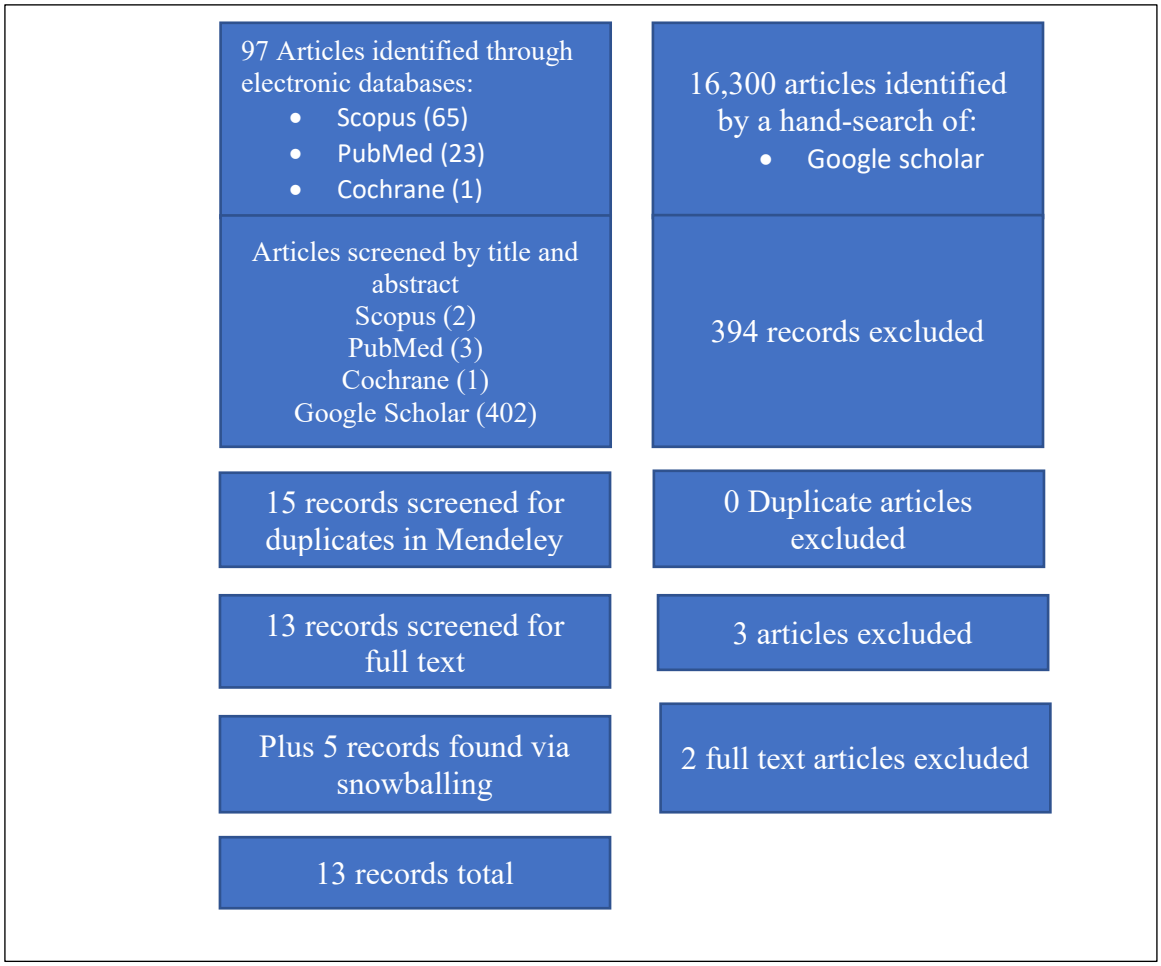
In California, there is potential to improve developmental screening and referral rates for children ages 0–5 and strengthen linkage to early identification and intervention services. Data suggests that poor care coordination across early childhood settings leads to inefficiencies, delays, and fragmentation with care-seeking as well as marginalization and emotional stressors for parents seeking services for their child (Dababnah 2018). Improving this system is predicated on improved family engagement, and

screening and care coordination models which leverage both technology and human resources for universal assessment, universal referral for children with identified conditions, and universal data collection to confirm successful linkage- in a resource-constrained health care system.

With a workforce innovation strategy, achieving pediatric population health goals embedded in EPSDT and ensuring all of California's children get off to the best possible start, is within reach. Care team innovation is warranted to prepare for a pending pediatric provider shortage, and to reduce pediatric provider burnout. However, the approach calls for a rethinking of managed care reimbursement. The cost benefit for early identification and intervention should extend beyond considerations for traditional rate setting, and consider savings accrued in other key State budget programs. Additionally, while an enhanced capitation may be sufficient to sustain a program, select providers may need catalytic funding to develop and maintain enhanced pediatric care programs.

It is time to align limited public resources to address inherent gaps in the early childhood system, and better support the quality of care rendered to children most in need. Adding pediatric paraprofessionals to the care team can advance the quadruple aim and ensure parents and pediatric providers can focus on their highest priority- helping young children thrive.

APPENDIX 1: PRISMA DIAGRAM AND STUDY RESULT DETAIL



APPENDIX 2: AMERICIAN ACADEMY OF PEDIATRICS (AAP) DEVELOPMENTAL SCREENING GUIDELINES (Pediatrics, 2013)

The AAP affirms the following policy recommendations:

1. A pediatrician should serve as the leader of the pediatric health care team. This leadership role is based on the pediatrician's ability to man- age, coordinate, and supervise the entire spectrum of pediatric care, from diagnosis through all stages of treatment and in all practice settings.

2. Pediatricians must assume responsibility for educating patients, families, health care purchasers, policy makers, the media, and the public about scope of practice issues.

3. Pediatricians should participate in the training and educational experiences of nonphysician pediatric clinicians, using evidenced-based and best-practice sources whenever possible. Similarly, training of pediatricians should include collaborative learning experiences in team care.

4. The AAP supports limitations on the scope of practice of nonphysician clinicians and opposes legislation that expands their scope of practice, including independent practice, hospital admitting privileges, and independent prescriptive authority.

5. Although the AAP opposes independent practice for non-physician clinicians, in states that do allow independent practice, nonphysician clinicians acting independently of physicians should be held to the equivalent degree of professional and medical liability and abide by the same rules regarding liability insurance as would physicians.

6. To promote the highest standards of care in each state, scope of practice issues should be resolved according to the current guidelines developed by the Federation of State Medical Boards. These guidelines were designed to assist policy makers in ensuring that all practitioners are prepared, by virtue of education, training, and ongoing evaluation of competency, to provide services authorized in their scopes of practice in a safe, effective, and cost-efficient manner.

7. AAP chapters should encourage, recruit, and train their members to serve as advocates of optimal pediatric health care in state-level policy initiatives concerning non- physician scope of practice. Such activities depend on physicians who are knowledgeable about law- making and policy-making processes and who have the skills necessary to be effective advocates in legislative deliberations.

8. AAP chapters and state medical and specialty societies, as well as national medical and specialty societies, should be proactive in scope of practice advocacy and should partner in informing policy makers, health care purchasers, the media, and the public about the differences in the education, skills, and knowledge of various health care professionals.

APPENDIX 3: PRE-TEST KEY INFORMANT INTERVIEW PROTOCOL FOR MANAGED CARE LEADERS

Thank you for speaking with me today to discussion your perceptions of the facilitators and barriers to expanding the use of paraprofessionals in pediatric health care. The following interview guide was created to reflect themes noted in published literature but provide time for you to share your own experience as a managed care leader in California. Your responses will contribute to a dissertation for the University of North Carolina, Chapel Hill. The dissertation will contribute to the general knowledge base regarding barriers and facilitators impacting the utilization of paraprofessionals. Your name will not be shared.

1. Name
2. Title
3. Organization
4. Role and Years in Role

- In your work supporting practices, how common is it to see paraprofessionals integrated in clinical practices?
- Has your health plan funded or considered funding models in which a paraprofessional is part of the care team?
- Are there specific practice types (e.g. federally qualified health centers (FQHCs), Academic Medical Centers, private practices) which appear more likely to incorporate paraprofessionals into care?
- In your opinion, which developmental screening and referral tasks could be delegated to a paraprofessional, under the oversight/supervision?
- Can you share any past investments made by the plan to promote the use, skillset, or expansion of paraprofessionals in primary care?
- Can you share any past investments made by the plan to promote the use, skillset, or expansion of paraprofessionals in pediatric health care?
- What are the barriers within the Medicaid system to broadening the role of paraprofessionals?

- Do you think are barriers within practices to completing developmental screening?
- What do you think are barriers within practices to completing behavioral health screening?
- What is your feedback on the certification of paraprofessionals?
- From your perspective, how does technology facilitate or hamper the integration of paraprofessionals in provider practices?
- From your perspective, what are the potential advantages to using paraprofessionals to support the uptake of developmental screening, coordination of referrals, documentation of screening results, care coordination?
- How does the plan use developmental screening results to triage members into services?
- What are potential inhibitors to sustaining paraprofessionals on a care team?
- How does the inclusion of paraprofessionals on the care team impact physician experience?
- Have your contracted physicians been trained on team care or collaborative care?
- The World Health Organization has identified components which facilitate task shifting to lower-level health care workers. We will discuss each of these concepts and whether you think these may impact the adoption of paraprofessionals for developmental screening in practices.
    1. policy and regulatory support
    2. definition of roles, functions, and limitations
    3. determination of requisite skills and qualifications
    4. education and training;
    5. Service delivery support
        a. including management and supervision
        b. incentives and/or remuneration
        c. material support (e.g. commodities)
        d. referral systems

APPENDIX 4: PRE-TEST KEY INFORMANT INTERVIEW PROTOCOL FOR MDs

Thank you for speaking with me today to discussion your perceptions of the facilitators and barriers to expanding the use of paraprofessionals in pediatric health care for developmental screening and referral. According to the Academy of Pediatrics guidance on Team Based Care in the Pediatric Office, under the pediatrician leader's guidance, a full range of health care services may be managed by other team members—all facilitating comprehensive, coordinated, patient centered care. The purpose of this discussion is to guide research on facilitators and barriers to incorporating a pediatric paraprofessional, one potential care team member, into your well-child practice. For the purposes of this study, paraprofessionals are defined as personnel who support the delivery of health care, but are not nurses, physician's assistants, or physicians.

1. Name
2. Title
3. Organization
4. Specialty
5. Years of Practice

Organizational Background

Does your practice employ any of the following paraprofessionals?

- Qualified/Certified Medical Assistant
- Staff dedicated to Developmental Screening/Referrals
- Community Health Worker
- Care Coordinator/Navigators
- Certified Perinatal Support Workers
- Clerical and Administrative Staff

Current Practice Background

- What are the key responsibilities and tasks that need to be performed in your clinic to provide high quality, accessible developmental screening and referrals services for your patients?

- What tools are needed to carry out each task?
- What tools and resources are needed to carry out each task?
- Do you feel like you have the needed tools needed to carry out diagnosis?
- Do you feel like you have the human resources (staff) to carry out the duties?

Knowledge

- Are you familiar with the latest APA guidelines for the frequency of developmental screening?
- Do you know about requirements in other states to bolster developmental screening rates and document successful referrals for developmental services?

Social/professional role

- Who do you think should be doing developmental screening, referral, and linkage functions?
- What functions should a physician do?
- What functions should a nurse do?
- What functions should a paraprofessional do?
- Do you think paraprofessionals have a role in preventive health in general?

Beliefs about capabilities

- Why did you or why would you set up a paraprofessional in your practice to support developmental screening and referral functions?
- Do you believe your practice has the optimal workforce to perform recommended screenings and facilitate referrals and successful linkages to services?

Please indicate your receptivity to a allowing a trained paraprofessional to perform the following tasks in your clinic/practice (Receptive, Maybe, Not Receptive):

- Assist with caregiver completion of validated screening tools
- Scoring of completed questionnaires
- Entering data into electronic health record
- Educate caregivers about child development and behavior
- Distribute patient/family education materials selected by the team

- Identify and maintain referral lists to ensure currency
- Provide on-going parenting coaching and support
- Providing navigation to benefit programs and concrete family supports
- Provide on-going parenting ad-hoc family support

Cross-Over Domains:

- Document screening completion in EHR
- Record screening findings in EHR
- Educate caregivers about child development and behavior
- Develop care plan for clinician review
- Document care plan in EHR
- Participate in an Interdisciplinary Care Team meeting

Care Coordination Domains

- Provide referrals to other treatment systems
- Provide referrals to regional center
- Phone follow-up to confirm linkage
- Document disposition in system

Beliefs about consequences

- What are the financial consequences for delayed screenings for practices?
- What are the consequences to children of delayed screening and treatment?

Motivation and goals

- Why do you or would you use paraprofessionals to support completion of developmental screening, referral, and linkage tasks in your practice?
- How would the addition of a paraprofessional in your practice impact (if at all) your professional satisfaction?

Environmental context and resources

- Do you have any systems in place to support developmental screening, referral, and linkage?
- Have your physicians been trained on team care or collaborative care?
- Do you have the informatics or Electronic Health Record necessary to support effective tracking of developmental services linkage?
- What do you or would you use to help with the integration of a paraprofessional on care teams?
- Is there anything specific about WHERE you practice-your population group- I should know?

APPENDIX 5: MANAGED CARE KEY INFORMANT INTERVIEW PROTOCOL- FINAL

1. Which types of members are served by paraprofessionals currently employed/funded by the plan?
2. What considerations did your health plan weigh when hiring or funding paraprofessionals?
3. Where do these paraprofessionals practice? In a medical office/clinic, telephonic, or in the field?
4. What specific functions do these paraprofessionals perform on behalf of your members and providers?
5. From your perspective, what are the potential advantages to using paraprofessionals in health care?
6. From your perspective, what are the potential disadvantages to using paraprofessionals in health care?
7. How receptive have clinicians been to working with paraprofessionals?
8. Are you familiar with any existing care models which use paraprofessionals to support early identification of developmental delays and intervention? If so, which ones?
9. Who (e.g. health plan, caregiver, community-based organization, physician, nurse, social worker, paraprofessional) should be doing developmental screening functions?
10. Who (e.g. health plan, caregiver, community-based organization, physician, nurse, social worker, paraprofessional) should be performing care coordination functions to connect children with developmental issues to services?
11. What are the consequences to children of delayed screening and treatment?
12. What, if any, are the barriers for physicians in performing developmental screening and care coordination functions for children?
13. To date, has the health plan supported physicians with developmental screening and care coordination functions, and if so, how?
14. From your perspective, is supporting practice transformation for developmental screening and care coordination a low or high priority for the plan?
15. What provider-level practice changes are needed to support improved developmental screening rates and linkage to treatment services?

16. What plan-level practice changes are needed to support improved developmental screening rates and linkage to treatment services?
17. How do you think working with a paraprofessional could impact family and patient experience?
18. How do you think working with a paraprofessional could impact provider satisfaction or experience?
19. What regulatory changes would be needed, if any, to support the expanded use of paraprofessionals in pediatric health care?
20. What State payment or reimbursement changes would be needed, if any, to support expanded use of paraprofessionals in pediatric health care?
21. From your perspective, how does technology facilitate or hamper the integration of paraprofessionals on care teams?
22. What type of infrastructure would be needed to support this cadre of employees?
23. What is the optimal supervisory structure to oversee paraprofessionals who support developmental screenings and care coordination?
24. What would be the optimal training content for paraprofessionals who support developmental screenings and care coordination?

APPENDIX 6: MD KEY INFORMANT INTERVIEW PROTOCOL FINAL

1: Does your clinic currently employ paraprofessionals, and if so, which type?

2: How does your clinic handle developmental screening and do paraprofessionals provide support?

3. On a scale of 1-10, how much of a priority is it to your clinic to provide developmental screening to patients?

4. On a scale of 1-10, how much of a priority is it to your clinic to provide care coordination to link patients with developmental concerns to services?

5. How confident are you that your clinic currently has effective developmental screening and care coordination processes and could implement effective developmental screening and care coordination processes?

6. Why do you or would you use paraprofessionals to support completion of developmental screening and care coordination tasks in your clinic, vs. nurses or physicians?

7. In your experience, what are the key tasks that need to be performed to provide developmental screening to your patients?

8. In your experience, what are the key tasks that need to be performed to care coordination to your patients?

9. Do you feel like you have the needed tools (physical space, formal screening instrument, electronic health record configuration) and time in your clinic to carry out screening?

10. Do you feel like you have the staff time to carry out screening and care coordination to needed services offered outside of your clinic?

11. Do you currently work with community-based staff who complete tasks outside of the clinic, such as home visits or accompanying patients to visits outside of your office?

12: How could working with a paraprofessional contribute to your professional satisfaction or work life balance as a pediatrician?

13: What is the optimal workforce should be doing developmental/behavioral screening functions and where?

14: What is the optimal workforce should be doing care coordination functions?

15: If your clinic currently has paraprofessionals, do you know what the financial rationale was for including them on the care team?

16: Do you believe your clinic has sufficient revenue or the right reimbursement model to sustain a paraprofessional to support the cost of developmental screening and care coordination functions?

17: Are there any regulatory barriers which impact your willingness or interests in working with paraprofessionals?

18: What is the optimal supervisory structure to oversee paraprofessionals who support developmental screenings and care coordination?

19: What would be the optimal training content and structure for paraprofessionals?

20: What changes are or were needed to your clinic's Electronic Health Record, such as configuration, workflow, and permissions, to support teamwork with paraprofessionals?

21: How could do you think working with a paraprofessional could improve your clinic's quality or impact family and patient experience?

22: What are the consequences to children of delayed screening and treatment?

23: Is there anything specific about WHO your clinic serves-your population group- I should know?

APPENDIX 7 DELIVERY OF THE HEALTHY KIDS CHECK-UP (Alexander 2014)

Knowledge

- Do you know about the mandatory and non-mandatory components of HKCs?

Skills

- How have you learned how to do an HKC?
- Have you had any training for HKCs?
- Which components of the HKC do you perform? Are there any specific areas of difficulty?
- One of the non-mandatory components is questioning the social and emotional behavior. Do you ask about that? Can you assess the social and emotional well-being of a three-year-old?

Social/professional role

- What do you think about measuring children and calculating BMI?
- Who do you think should be doing HKCs?
- What functions should a physician do?
- What functions should a nurse do?
- How do they fit with the checks done by MCHNs?
- Do you think general practitioners have a role in preventive health in general?

Beliefs about capabilities

- Why did you set up HKCs in your practice?
- How good are we at picking up problems in young children?
- How good are we at linking young children to services?
- How easy or difficult is it to do an HKC?

Beliefs about consequences

- Do you think that you've got the skills (to do an HKC)? Do you fear that you might miss something? How confident are you that you can pick up a problem? How confident are you with the assessment of social and emotional wellbeing?

- Do you think HKCs are worthwhile? Do you think they should be scrapped? In your experience of doing health checks with this age group, did you come across problems in your population? What do you think about the evidence base behind the HKC? How do you think caregivers view the HKC? Has anyone refused a check?

Motivation and goals

- Why do you do HKCs? Why don't you do HKCs?

Memory, attention and decision processes

- Is performing an HKC something you usually do?
- Do you use any prompts?
- Has anyone decided NOT to do an HKC

Environmental context and resources

- Do you have any systems in place to run an HKC?
- Do you have the equipment?
- What do you use to help with an HKC?
- Is anyone using any questionnaires or tools with a Healthy Kids Check?
- Is there anything specific about WHERE you practice-your population group?

Social influences

- Has anyone used any reminders or invitations for HKCs or do you just wait for people to ask?
- What do you think about the policy change that links the HKC with the Family Tax Benefits?
- How do you feel about health assessments with children?
- Does it give you any particular feelings or emotions?

Behavioral regulation

- Are there procedures or ways of working that encourage you to do HKCs?

Nature of the behaviors

- What do you currently do about HKCs?

APPENDIX 8: EMAIL OUTREACH SCRIPT

Dear X:

I am writing to you regarding my dissertation qualitative research topic "A Workforce for Quality in Medicaid Managed Care: Facilitators and Barriers to Pediatric Paraprofessionals." My research plan and materials were recently approved by UNC Chapel Hill. I am now in active recruitment to speak with eligible subjects in the next four weeks by phone. I am reaching out to two groups: 1) CA Medicaid managed care leaders who work on quality and practice transformation, and 2) child-serving physicians serving Medicaid enrollees in CA. I have attached a full recruitment letter detailing my research plan to inform your potential participation. This qualitative research will be supplemented by my development of a paraprofessional investment decision analysis tool for health plans and physician groups, which reflects any identified infrastructure needed for successful team based-based care. Your input and expertise would contribute to this research enormously if you can spare one hour for a phone or in person interview in the next four weeks. If you are interested in participating, please let me know a few optimal times for your schedule. If you would like to pass on this invitation to an eligible colleague, please feel free to do so.

Appreciatively,

Lindsey Angelats, UNC Chapel Hill

Health Policy and Management, DrPH Candidate

415-624-XXXX

If you have additional questions about this study, please contact Sandra Greene, DrPH, at sgreene@email.unc.edu.

The University of North Carolina IRB has approved this research study; if you have questions about this process, please contact the UNC IRB office

720 Martin Luther King Jr. Blvd. Bldg.

#385, Second Floor, Chapel Hill, NC, 27599

Phone number: 919-966-3113

APPENDIX 9: FACT SHEET FOR ADULT PARTICIPANTS IN A RESEARCH STUDY, UNC CHAPEL HILL

University of North Carolina-Chapel Hill

Consent to Participate in a Research Study

IRB# XX-XXX

Consent Form Version: X, X, 2019

Title of Study:

Principal Investigator: Lindsey Angelats

UNC-Chapel Hill Department: Health Policy and Management

Co-Investigators: n/a

Funding Source: n/a

Study Contact: Lindsey Angelats, email: lindsey.angelats@gmail.com, phone 415-624-XXXX

What are some general things you should know about research studies?

You are being asked to participate in a research study. Participation in the study is voluntary. You may choose to note to participate, or you may withdraw your consent to be in the study, for any reason, without penalty. Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research study. There also may be risks to being in research studies. Details about this study are discussed below. It is important that you understand this information so that you can make an informed choice about being in this research study. You will be given a copy of this consent form. You should ask the researchers named above, or staff members who may assist them, any questions you have about this study at any time.

What is the purpose of this study?

The purpose of this study is to inform the feasibility of using paraprofessionals in pediatric practices, by identifying facilitators and barriers to implementation, from the perspectives of physicians and managed care leaders.

How many people will take part in this study?

Should you decide to participate, you will be one of up to 20 people in this research study which is being conducted with leaders in California. All participants were selected based on their participation as a provider in or payor in Medi-Cal managed care.

How long will your part in this study last?

Your participation in this key informant interview will last approximately 30-60 minutes.

What happens if you take part in the study?

You will be asked to share your insights regarding potential barriers. You may choose to respond or not respond at any point during the discussion. The interview will be audiotaped so we can capture comments in a transcript for analysis.

What are the possibilities from being in this study?

Information from this study will be blinded but shared with First 5 County and Association level leaders, as well as key stakeholders in the Early Identification and Intervention field.

APPENDIX 10: PROJECT OVERVIEW

A considerable number of California's children enrolled in Medicaid managed care are not receiving a timely developmental or behavioral screening in line with EPSDT screening requirements, nor accessing needed critical services and supports for an identified developmental or behavioral health issue. To satisfy the three aims of this dissertation, I will conduct a series of key informant interviews with senior clinical Medi-Cal managed care leaders, including Chief Medical Officers and senior medical directors. Additionally, I will interview practicing health care providers serving in Medi-Cal settings, including at Federal Qualified Health Centers, County clinics, and other delivery systems. The purpose of these interviews will be to identify and disseminate best paraprofessional integration practices derived from the literature review into Medi-Cal serving organizations. Information will be used to inform a decision-tool for practices considering additional personnel investments in pediatric paraprofessionals. Discussions will explore three themes:

- Barriers/Challenges to completing developmental and behavioral screening and care coordination
- Facilitators to completing developmental and behavioral screening and care coordination
- Barriers/Challenges to leveraging paraprofessionals for developmental and behavioral screening and care coordination
- Facilitators to leveraging paraprofessionals for developmental and behavioral screening and care coordination

A critical decision-support tool for health plans and health care practices considering paraprofessional investments in pediatrics, will be informed by qualitative interviews. Comments will be anonymous to protect the confidentiality of participants.

APPENDIX 11: MANAGED CARE PERCEPTIONS OF FACILITATORS AND BARRIERS TO PARAPROFESSIONALS FOR DEVELOPMENTAL AND BEHAVIORAL SCREENING

Theme or Parent	***Definitions***	**Subtheme**
Facilitators to health plan focus on developmental screening compliance	*Statements that provide rationale for plan's prioritization of developmental screening and care coordination tasks*	Plan is engaged in partnerships with key organizations to improve provider, member and community knowledge of developmental and behavioral screening
		Plan and/or provider has a direct network of behavioral or developmental services
		Perception that plan should play a key role in supporting access to and the quality of pediatric preventive care
Barriers to health plan's accountability over provider compliance with screening	*Statements that provide rationale for plan's lack of prioritization of developmental screening and care coordination tasks*	Medi-Cal plan quality metrics do not require minimum performance on screening, or reporting on care coordination
		Confusion regarding plan's pediatric care coordination role and accountabilities
		Insufficient State financing to ensure members receive screening and care coordination to developmental services and supports
Facilitators to shifting care management tasks to paraprofessionals	*Statements that provide rationale for plan's leaders receptivity to use paraprofessionals for care management tasks*	Existence of State programs funding paraprofessionals for select high-risk populations
		Belief that paraprofessionals contribute to the effectiveness of the care team
		Leader support of paraprofessional model and perception of mission-
Barriers to shifting care management tasks to paraprofessionals	*Statements that provide rationale for plan's leaders hesitation to use paraprofessionals for care management tasks*	Perception that care management is the responsibility of the provider vs. the plan
		Perception that uncredentialled providers cannot be used for care management tasks in California
Facilitators to shifting developmental screening and care coordination tasks to paraprofessionals	*Statements that assess rationale for plan's leaders receptivity to paraprofessionals for developmental screening and care coordination tasks*	Practice or plan has an adequate training and supervisory infrastructure to support paraprofessionals
		Practice or plan has optimized workflow and electronic health record for team-based care
		Plan leaders have high commitment to effective EII due to prior experience with paraprofessionals.
Barriers to shifting developmental screening and care coordination tasks to paraprofessionals	*Statements that assess rationale for plan's leaders lack of receptivity to paraprofessionals for developmental screening and care coordination tasks*	Insufficient resources or scale to maintain a training and supervision infrastructure at the practice-level to support paraprofessionals
		Insufficient reimbursement or cost savings to employ or fund pediatric paraprofessionals

APPENDIX 12: PROVIDER PERCEPTIONS OF FACILITATORS AND BARRIERS TO PARAPROFESSIONALS FOR DEVELOPMENTAL AND BEHAVIORAL SCREENING

Theme or Parent	*Definitions*	Subtheme
Facilitators of Ensuring Successful Developmental Screening and Care Coordination	*Statements that provide rationale for provider's completion of developmental screening and care coordination tasks*	Practice has on-site support staff dedicated to screening and coordination
		Practice has established relationships with developmental/behavioral service providers
		Practice leverages EHR for optimized screening and coordination workflow
		Provider values and prioritizes early identification and intervention
Barriers to Ensuring Delivery of Developmental Screenings and Care Coordination	*Statements that provide rationale for provider's barriers to completing developmental screening and care coordination tasks*	Lack of access to EII supports and services in the community
		Complexity of navigating administrative barriers to access to EII services
		Low adoption of technology for developmental screening and coordination tasks
		Limited manpower and time to complete developmental screening and care coordination tasks
		Developmental screening tool is not cultural/socially/linguistically appropriate
Facilitators to shifting developmental screening and care coordination tasks to paraprofessionals	*Statements that assess rationale for provider's receptivity to the use of paraprofessionals for developmental screening and care coordination tasks*	Belief that paraprofessional's shared language, culture, or lived-experience bolsters family's trust
		Belief that task-shifting select screening and care coordination tasks to paraprofessionals advances the "Quadruple Aim"
		Practice invested in communication practices, supervision and training needed to successful implement team-based care
Barriers to shifting developmental screening and care coordination tasks to paraprofessionals	*Statements that assess rationale for provider's lack of receptivity to the use of paraprofessionals for developmental screening and care coordination tasks*	Insufficient Medi-Cal reimbursement to sustain enhanced pediatric care team
		Paraprofessional role design and training is resource intensive for practices
		Risk management concerns regarding use of unlicensed staff for EII tasks
		Perceived barriers to exchanging data with paraprofessionals outside of the medical home

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