CHILD HEALTH AND HEALTH CARE: EVOLUTIONARY CONCEPTS AND THE ROLE OF HEALTH CARE PROVIDERS IN HEALTHY CHILD DEVELOPMENT

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INTRODUCTION

The healthy growth and development of children is an imperative for future success in life. That imperative extends beyond physical health to behavioral, language and cognitive development, emotional maturity and social competence. As we learn more about the multiple and complex factors that interact to determine health, it is clear that a comprehensive approach to child health and development cannot and should not be the responsibility of a single support sector, but rather, the purview of an integrated system with each of the components working toward the same outcomes. Still, this kind of holistic approach to children is not new to pediatrics. While the absolute contact time children have with child health care providers is not overwhelming, the office does serve as a nearly universal access portal for children – especially young children. And those contact hours often have significant influence on future behaviors. This manuscript offers a summary of the research, conceptual frameworks, health policy, health care delivery and other issues that have influenced the pediatrician’s concept of child health and child health care delivery, and reviews the health coverage options that serve as the gateway to the health system.

EVOLUTIONARY CONCEPTS OF CHILD HEALTH

Over time, our concept of child health and development has been influenced by significant research contributions from many of the sciences, by innovations in medicine and technology, and by the resulting changes in epidemiology. Advances in the neurosciences and in developmental psychology solidified our understanding about the growth and development of the human brain, underscoring how crucial are the social as well as physical environments to which children are exposed, especially during the early years (Sameroff and Chandler 1975; Bronfenbrenner 1979; Shonkoff, 2000). Moreover, even as we were mapping the human genome, this growing understanding of the dynamic and complex interactions between human biology and the environment led inevitably to a refutation of the notion that all we are and will be is determined at birth as a function of our genetic make up.

During the past half century, research in biology and sociology also shed light on our understanding of health and disease. We now know that many of the chronic conditions that occur in adulthood, including many of the leading causes of mortality in the US – coronary artery disease, diabetes, hypertension, cerebrovascular accidents (stroke) and perhaps even many cancers – have antecedents during childhood. The so-called, “thrifty phenotype” also known as the “Barker hypothesis,” posits that early life adaptations to the physical environment in which organisms live, influence a range of physiological processes and patterns (Barker, et al). While the adaptations may be appropriate for survival in these early environments, once these processes are programmed, they often establish a physiologic trajectory that leads to the early development of disease. For example, a pregnant woman with poor nutrition, or a chronic medical condition that affects metabolism (e.g., hypertension, lupus, drug addiction, etc.) unwittingly exposes her fetus to a nutrient depleted environment. This “fetal malnutrition” sets up a cascade of changes in placental gene expression, as well as hormonal and other changes in the fetus that reset the normal physiologic responses of baby for life, predisposing him/her to high cholesterol, obesity, diabetes, and hypertension.

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1 These five domains are identified by the National Education Goals Panels as critical to the assessment of school readiness.
Additionally, a voluminous body of work on the social determinants of health provides compelling evidence elucidating the causes for social gradients in health (Marmot 2005; CSDH 2008). A compendium of the research evidence on the types of social and economic conditions that influence health summarizes the findings in several key areas (Figure 1) (Wilkinson and Marmot 2003).

**Figure 1: Key Findings from Determinants of Health: The Solid Facts**

<table>
<thead>
<tr>
<th>Stress</th>
<th>Unemployment</th>
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<tbody>
<tr>
<td>Stressful circumstance, making people feel worried, anxious and unable to cope may be damaging to health and lead to premature death.</td>
<td></td>
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<tr>
<td>Higher rates of unemployment cause more illness and premature death.</td>
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</table>

<table>
<thead>
<tr>
<th>Early life</th>
<th>Social support</th>
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<tbody>
<tr>
<td>The health impacts of early development and education last a lifetime</td>
<td></td>
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<tr>
<td>Good social relationships and strong supportive networks improve health at home, at work and in the community.</td>
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<table>
<thead>
<tr>
<th>Social exclusion</th>
<th>Addiction</th>
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</thead>
<tbody>
<tr>
<td>Economic hardship, poverty and social exclusion lead to shortened lives</td>
<td></td>
</tr>
<tr>
<td>Individuals turn to drugs, alcohol and tobacco and suffer from their use as a function of broader social dysfunction.</td>
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<thead>
<tr>
<th>Work</th>
<th>Food</th>
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<tbody>
<tr>
<td>People who have more control over their work have better health</td>
<td></td>
</tr>
<tr>
<td>Shortages in the food supply lead to malnutrition and deficiency diseases, excesses lead to obesity, cardiovascular disease, diabetes, and dental caries.</td>
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</tbody>
</table>

Several important frameworks derive from the aforementioned expansion in research and knowledge, most importantly life course health development (LCHD) and the (bio)ecological model of health and development. The life course health development approach describes the processes and mechanisms that influence or determine health development trajectories (Halfon and Hochstein 2004; Kuh and Ben-Schlomo 2004). It offers theories and explanations that connect the dots between what happens early in life, and the expression of health or disease over the entire life course. The LCHD approach subsumes the earlier (bio)ecological systems theory of Urie Bronfenbrenner. That theory views child development within the context of many interrelated systems that interact to fuel and determine growth and development (Bronfenbrenner 1979). These theoretical frameworks are useful in organizing and interpreting future research, measurement and interventions.

The confluence of this burgeoning volume of research, the resulting knowledge explosion and explanatory theoretical frameworks, and a host of cultural and socioeconomic changes that have added global considerations to the local and national influences in our lives compel us to reconsider old notions of child health, and evolve a new definition. In, *Children’s Health the Nation’s Wealth: Assessing and Improving Child Health*, The Institute of Medicine offered the following definition of child health:

“...children’s health is the extent to which children or groups of children are able or enabled to (a) develop and realize their potential, (b) satisfy their needs, and (c) develop the capacities that allow them to interact successfully with their biological, physical and social environments.” (National Research Council IOM 2004).
THE ROLE OF PEDIATRICS IN HEALTHY DEVELOPMENT

From its very beginnings as a primary care specialty, pediatrics embraced a broad conceptualization of child health, consistent with the expansive IOM definition that would be established nearly a Century later. Influenced by the writings and teachings of Abraham Jacobi, a German immigrant whom many consider to be the father of American pediatrics, pediatricians adopted a more holistic view of health and a care model that was age specific, prevention oriented, and which emphasized growth, development and the provision of advice about the behaviors and changes that occur during the many transitions from infancy to young adulthood (Pearson 2006). Indeed the mission of the American Academy of Pediatrics (AAP), the trade association representing nearly 60,000 US pediatricians, states that AAP members are “committed to the attainment of optimal physical, mental, and social health and well-being for all infants, children, adolescents, and young adults.” This approach was in sharp contrast to the rest of medicine, which was, at the time distinctly focused on specific body parts, organs or diseases.

In many respects, pediatricians were the first physicians committed to prevention and health education. Pediatricians coined the term anticipatory guidance to describe the provision of information to help families prepare for expected physical and behavioral changes during the current and approaching stages of development for a child they are seeing during a health visit. Pediatricians also created the concept and implemented the initial medical homes (Sia et al 2004). While the original definition has been modified slightly as others seek to converge on a common approach across primary care disciplines (e.g., family medicine, internal medicine, geriatrics, osteopathy), the resulting joint principles of the patient-centered medical home bear the unmistakable influence of its pediatric origins (Joint Principles of the PCMH 2007).

Many factors have threatened the preeminence of the whole-child prevention-oriented, medical home focus in pediatrics. There is no denying that demands on practitioners have increased dramatically during this same time period, challenging the holistic approach to child health care, influencing pediatricians’ commitment to quality care for all, and taxing their ability to remain abreast of medical advances as well as the local, population-based influences that affect their patients. By some accounts the number of anticipatory guidance topics now numbers over 400. If pediatricians discussed each of these with patients and families during face-to-face visits the frequency and duration of those visits would increase exponentially. Although there is limited historical data assessing the provision of preventive services during well child visits prior to the collection of HEDIS indicators beginning in the late 1980s, recent studies demonstrate tremendous variation in the percentage of children receiving indicated preventive health services. The most rigorous studies indicate that percentage is as low as 40.7%, while other studies indicate as many as 81% of children receive preventive care visit (Mangione- Smith et al 2007; Selden 2006). Moreover, changes in the reimbursement and organizational structure of the health care delivery system have lead many physicians, including pediatricians to increase the number of patient visits and the procedures they perform each day, with a concomitant decrease in time for counseling and other face to face activities. A survey of pediatricians conducted in 2003 highlights time limitations and inadequate reimbursement as barriers to the provision of routine preventive care (Olsen et al 2008).

In recent years pediatric providers complained bitterly about the administrative complexities and other negative attributes of public health insurance programs, such as Medicaid and the State Child Health Insurance Program (CHIP), leading to concerns that beneficiaries of those
programs would have limited access to child health providers. While the percentage of pediatricians accepting all Medicaid patients increased from 48% in 1993 to 67% by 2000, safety net providers including community clinics, and providers in Medicaid-only HMOs and hospitals, continued to serve a higher percentage of Medicaid patients overall (89% vs. 56%) (Tang et al, 2003). The available research seems to indicate the reasons why pediatricians may limit participation are not only related to the amount of reimbursement. The 2005 Community Tracking Physician Survey of nearly 5000 physicians in 21 states found reimbursement rates for routine visits varied across states (from 36% of Medicare rates in New York to parity with Medicare in North Carolina), with a number of states having raised Medicaid reimbursement rates specifically to ensure adequate participation of and access to physicians. A more significant disincentive to Medicaid participation seems to be the turnaround time and predictability of claims payment. Not surprisingly, participation was highest in states with short turnaround times and higher reimbursements rates, however, slow turnaround times seemed to offset the effect of (relatively) higher reimbursement rates (Cunningham and O’Malley 2008). And while autonomy in decision-making about which publicly insured patients and how many to enroll has been cited by some as an important factor in determining physician participation in Medicaid, other studies indicate that having that kind of discretion does not have a strong effect in physician participation (Kletke 2008).

**Child Health and Health Policy**

Understanding the challenges to the whole child orientation of pediatrics requires some knowledge of the history and context of child health and health policy in the US. That history is marked largely by a reactive approach to adverse health trends rather than a planned strategy to invest in what is arguably our most precious resource. In the early 19th Century young couples planned large families anticipating the early demise of offspring who would succumb to a host of communicable diseases, agricultural and other accidents resulting from dangerous circumstances that would be considered abusive by today’s standards. For the most part, infectious diseases like smallpox, diphtheria, tuberculosis, whooping cough, and cholera killed mercilessly regardless of social or economic stature, although nutritional diseases and perinatal mortality were certainly more prevalent among the lower classes.

By the latter half of the 19th Century, physicians and other scientists learned enough about the causes of these illnesses, to implement a number of public health interventions that improved the health status of children and the population in general. Pasteurization of milk, sanitation of municipal water supplies and other shared resources, and improved nutrition and hygiene decreased dramatically the prevalence of many childhood illnesses. During the 20th Century the development of safe products for immunization reduced mortality from many infectious pathogens. As science began to chip away at the whole of acute and in infectious diseases in

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2 These concerns were voiced loudly and often even though beneficiaries in public health insurance programs were and still are slightly less likely to be enrolled in a managed care delivery arrangement than those with private insurance (67% vs. 74% in 2008 according to data from the Health Leaders Interstudy).

3 During this period, the percentage of Medicaid patients enrolled in managed care arrangements grew significantly as an increasing number of states took advantage of Medicaid 1115 waivers that allowed research and demonstration projects while waiving federal requirements to ensure certain standards within the state Medicaid program including enrollee choice. Moreover, this time period does not adequately represent provider activity in CHIP programs, as these programs were in their early stages.
childhood, disparities in health outcomes became more apparent. Poor families had less access to these clinical products and services than those with means.

The federal government began to play a significant role in the health and welfare of children and families with the establishment of the Children’s Bureau in 1912 to “investigate and report upon all matters pertaining to the welfare of children and child life among all classes of our people”; and in the pre-Depression era with the passage of the Sheppard Towner Maternity and Infancy Protection Act in 1921. While these laws were certainly significant, they began a saga of waxing and waning government responsibility for the wellbeing of children and families in the US. Yielding to pressure from special interest groups, the legislature allowed the Sheppard Towner Act to sunset in 1929. A resurgence of government’s role occurred during the era of the New Deal with the passage of the Social Security Act of 1935, and its specific provisions to help women and children, but it would be 30 more years before a health program specifically for children was included as an amendment to the Social Security Act to establish the Medicaid program for unemployed and impoverished families.

Despite the gains from these legislative remedies and the concomitant advances in science and medicine, the tug of war continued between those who would urge the government to assume responsibility for health as an inalienable right of citizenship, and those who would urge the government to leave that responsibility to states and individuals. Throughout the latter half of the 20th Century there were numerous victories for both camps. While professional medical associations (but not pediatric associations), special interests, and socially conservative advocates and legislators delayed implementation of Medicaid and Medicare, reformed Welfare laws, barred legal immigrants from early access to public programs, allowed the evolution of administrative complexities, and enacted austere budgetary restrictions that threatened access to these public programs, advocates and legislators with different views endorsed benefit expansions for women, children and those with special health care needs, (re)codified provisions of the Early and Periodic Screening Diagnosis and Treatment (EPSDT), delinked Medicaid and Welfare eligibility requirements, and in 1997 enacted the State Child Health Insurance Program – the largest expansion of children’s health insurance since 1965.

Although many would argue that the decades of shifting policies realized a net gain in health programs and services for children, the resulting “health system” is certainly not ideal. The US health system for children is at best a patchwork quilt, and at worst a fragmented, siloed collection of complex programs and services that are barely navigable (even for health care providers), and mostly constitute a lower tier of health care for American children who, by accident of birth, geography or economic circumstance find themselves in families who must depend on the government for their health and wellbeing.

**HEALTH INSURANCE COVERAGE, ELIGIBILITY AND ENROLLMENT**

Having briefly reviewed the history of child health and health care in the US, this section focuses specifically on the availability, eligibility rules and uptake of insurance by and for children. Nearly ninety percent of all children were covered by some form of health insurance in 2008 (KCMU 2010). Although the percentage of children covered by employer-based or other private insurance has been declining steadily since about 1998, private insurance still constitutes the major source of health coverage for children (54% in 2008) (Figure 2). This decline in private
insurance coverage parallels the rise in insurance premiums and the overall decline in employer-sponsored coverage during that same time period. The current economic recession will only contribute to that downward trend.

**Figure 2: Percentage of Children under 18, by Health Insurance Status**

![Graph showing percentage of children under 18 by health insurance status from 1996 to 2005.]


Public insurance programs have played a significant role in covering children since the passage of Title XIX of the Social Security Act in 1965. As the number of uninsured children rose through most of the late 1980s and into the 1990s, congress approved a number of expansions to the Medicaid program, and ultimately enacted the States Children’s Health Insurance Programs (SCHIP) in 1998. Although eligibility for SCHIP covers birth to 18 (through 21 by state option), implementation of these programs coincides with an upward trend in the percentage of young children (birth to 3) covered by public insurance (Figure 3). Medicaid and CHIP (as it is now called) are both jointly administered by the federal and state governments with the federal government providing matching funds for states to subsidize the costs of these programs. Federal regulations establish broad guidelines for eligibility rules and benefit package, allowing a fair amount of autonomy to states in the administration of these programs.

In addition to the federal match, there are noteworthy distinctions between the two programs regarding access and eligibility. Medicaid is an entitlement program intended to cover poor Americans who meet income, categorical and other requirements (e.g., citizenship, assets, etc).

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4 The Medicaid match employs a complicated formula based on the state’s per capita income and varies from 50-80%. The CHIP match is calculated as an enhancement on the Medicaid match to encourage state participation and averages 72% across all states.
A basic benefit package is required, and states have the option of including additional benefits from a menu established by the federal administrators (the Center for Medicare and Medicaid Services – CMS). Although there are minimal income levels below which all states must cover otherwise eligible individuals, the Medicaid statute allows states the option of raising the income threshold for some populations. The benefit package for CHIP is anchored to a benchmark plan, and in that respect is patterned after commercial insurance. CHIP requirements also allow some flexibility in determining income eligibility above the established floor of 200% of the federal poverty limit. However, the CHIP is not an entitlement program. Once (state and federal) funds are exhausted, enrollment ceases regardless of applicant qualifications. Consequently, many states have imposed annual caps on the number of CHIP enrollees, or been forced to establish waiting lists as the states near the limits of their block grant.

While the flexibility in determining income thresholds is highly desirable to states, the resulting eligibility requirements vary widely across states, often resembling a complicated, tiered pattern not unlike the one in Figure 5. Not only are these requirements confusing for health care workers, but families are often unable to enroll siblings in the same program. That complexity is often compounded by minor variations in income rules, complex enrollment applications, parallel yet poorly coordinated administrative processes for enrollment, and additional state-only health programs intended to address the needs of poor or near poor families, children with special health care needs, and others who are not eligible for either of the federal programs.

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5 The Federal Poverty Limit (FPL) for 2009 was $22,050 for a family of 4.
Despite the availability of these federal programs, and numerous other state and local-based programs, 7.3 million children were uninsured during at least part of 2008. Moreover, at least 60% of these uninsured children were eligible for but not enrolled in Medicaid or CHIP (Hudson and Selden 2007). The explanations for this gap between eligibility and enrollment are many including, but certainly not limited to the following:

- **Complexity of eligibility rules** – Means tests, income eligibility rules, documentation requirements, and frequency of renewals may lead to errors or reluctance to apply/renew.
- **Fragmented Administration** – In many states, there are multiple administrative agencies with responsibility for enrollment, often with little coordination across these entities.
- **Accessibility of application media** – Some states still require lengthy, paper applications (that are indistinguishable from junk mail when sent via the US postal service).
- **Fears among families with mixed documentation status** – Parents of citizen children who are themselves non-citizens, or who have other children who are non-citizens, fear repercussions of accessing public programs.
- **Behavioral barriers** – Information overload, decisional conflict and inertia may lead to non-compliance with application/renewal requirements.
- **Gate keeping culture** – Governments and agencies that view their role as gatekeepers to keep enrollees out of programs create direct and indirect barriers to enrollment.

To be sure, there have been many laudable and innovative state and local efforts designed to address these and other barriers to enrollment. Still, these challenges remain, and many fear a persistent gap without significant efforts to address them. Several health insurance reform provisions of the Accountable Care Act (ACA) create an opportunity to optimize enrollment in Medicaid and SCHIP. The list below is a high level summary of those provisions.
• **Consumer-friendly** – ACA requires states to create enrollment systems that ensure applicants are screened for all available health subsidy programs and enrolled in the appropriate program, with minimal collection of information and documentation from applicants (including expanded presumptive eligibility).

• **Coordinated** – ACA requires states to coordinate efforts across available health subsidy programs and exchanges to enable seamless transitions between those programs (no wrong door).

• **Simplified** – ACA requires states to operate a streamlined enrollment process and foster administrative simplification, using uniform income rules and forms as well as paperless verification procedures.

• **Technology-enabled** – ACA requires states to operate enrollment Web portals and securely exchange and utilize data to support the eligibility determination. In addition, ACA directs the Secretary of Health and Human Services to establish standards and protocols for electronic enrollment and eligibility systems, to allow for significantly improved streamlining and cross-agency capabilities.

**Re-engineering Pediatric Practice**

Even as our understanding of health determinants grows, epidemiologic changes shift the patterns of complexity of diseases, science and technology enable advances in medical interventions, and the organization and financing of health care delivery systems evolve, the basic organization and structure of pediatric practice have changed very little over the past few decades. The categories or domains covered during preventive health or well-child visits remain unchanged (history and physical examination, measurement of vitals signs and growth parameters, sensory screening, developmental assessment, dental/oral health assessment, procedures, and counseling/anticipatory guidance). Although the frequency of well-child visits has increased slightly over the years (from 14 visits during from birth to 21 years to 31 visits during the same interval), that periodicity is still tied largely to the administration of immunizations.

Some pediatric leaders have called for a re-engineering of pediatric practice in ways that reflect the changes in understanding about what produces health and the importance of development in the health status of children (Schor, 2004; Coker et al, 2006; Schor, 2007). While there are a number of anecdotal reports about pediatricians’ disposition to changes in the format and organization of pediatric practice, several recent systematic assessment of pediatricians’ perspectives on current practice, and their receptivity to change offers important insights and identifies a number of recurring themes:

• Prioritizing the concerns of the patient and family should be a primary objective during the delivery of well-child care

• Linking community services with pediatric offices should be a priority in order to facilitate patients’ access to these services, and

• The early recognition of developmental behavioral problems is of paramount importance (Tanner, et al 2009).

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5 The schedule of visits and recommended intervals between them are collectively known as periodicity.
A number of salient recommendations for innovations and retooling were also identified during focus groups with those surveyed:

- Restructure the format, location and practitioners involved in care (mechanisms to gather pre-visit information, group well-child visits, visits at schools, use of mid-level practitioners for anticipatory guidance and other aspects of well child care) so providers can operate at the top of their training and scope of practice.
- Create better linkages to other community service providers to ensure the needs of children and families are met (especially schools and mental health practitioners).
- Identify and implement creative uses of information technology to facilitate care (e.g., for education, developmental screening, monitoring lab results or physiologic parameters for chronic diseases, and scheduling just in time appointments).
- Include more post-graduate training and experience in developmental/behavioral pediatrics and counseling, and
- Undertake more research about the practical aspects of well child care (e.g., comparing different practice formats, evaluating system linkages, and assessing the effectiveness of various prevention messages).

Moving toward practice redesign and re-establishing the preeminence of a whole child approach to pediatrics will not happen quickly or easily. In addition to those recommendations above, this kind of re-engineering will require prototypes, expert coaching to facilitate and scale innovations, collaborative learning, and mechanisms for harvesting and sharing effective innovations and related tools. Involvement of government, professional associations, and philanthropies in establishing innovation laboratories, akin to the Agriculture Extension model (and now the Regional Extension Centers for the expansion of implementation and meaningful use of Electronic Health Record technology), would go along way to avoiding the proliferation of proprietary models that are not widely available. And because many of these redesign concepts involve cross-sector and cross-disciplinary coordination and models that do not fit neatly into existing reimbursement practices, it will be important to identify financial support or incentives to cover start up costs, and encourage innovation (Coker, 2010).

But we are not starting from scratch in this endeavor. In addition to historic programs, such as Health Start and Early Head Start, in which a health component is included, there are a number of exemplars across the country (and internationally) – interventions and research based programs aimed at optimizing the social, emotional, language, cognitive and physical health development of young children, with an anchor in the office of child health providers. A partial list is included in Figure 5.
### Figure 5: Exemplary Child Development/School Readiness Programs with a Pediatric Anchor

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Description</th>
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<tbody>
<tr>
<td>Reach out and Read</td>
<td>A national program that promotes early literacy by encouraging primary care pediatricians to engage parents and children in literacy promotion through the inclusion of messages about the importance of reading aloud and distribution books to children during well-child visits.</td>
</tr>
<tr>
<td>Help Me Grow (CT, IO, CA)</td>
<td>Provides training to pediatric providers to conduct developmental screening, conducts developmental surveillance when appropriate, and links providers and families with resources to support their developmental needs.</td>
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<tr>
<td>Community Care North Carolina</td>
<td>A primary care case management team that ensure creation of a medical home for Medicaid enrollees to better address both the social and medical determinants of health.</td>
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<tr>
<td>Healthy Steps</td>
<td>Promotes training and incorporation of a Healthy Steps Specialist, a professional member of the primary care team, into practices to ensure focus on promoting healthy development and to provide effective linkages between the family, the primary care practice and resources to support healthy development.</td>
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<tr>
<td>Smart Start North Carolina</td>
<td>A statewide initiative that provides funding, technical assistance and support to partnerships between early care and education, health and family partnership and supports created in local communities to drive accountability for planning, monitoring and interventions aimed at ensuring kids are healthy and prepared to succeed at school entry.</td>
</tr>
<tr>
<td>Kids Matter – (WA)</td>
<td>An early childhood systems collaboration provides training to primary care providers to conduct developmental screening, and builds relationships and linkages across the health, mental health, early care and education agencies, and the parent information network to create accessible early childhood pathways to help young children achieve their potential.</td>
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<tr>
<td>Assuring Better Child Development (ABCD)</td>
<td>A national collaborative that provides funding and technical assistance to assist states in improving the delivery of early child development services to low income children and their families by strengthening primary health care systems and services that support early child development (e.g., financing strategies, Medicaid programs and policies in support of early child development, increasing the use of formal developmental assessment tools).</td>
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<tr>
<td>Bright Futures</td>
<td>Is a set of principles, strategies and tools that are evidence-driven, and systems-oriented, and that can be used to improve the health and well-being of all children by addressing current and emerging health promotion needs within the context of 10 themes: child development, family support, mental health and emotional well-being, nutritional health, physical activity, healthy weight, oral health, safety and injury prevention, healthy sexuality, community resources and relationships.</td>
</tr>
<tr>
<td>Transforming Early Childhood Community Systems (TECCS)</td>
<td>A system of community engagement, measurement, monitoring, and improvement support that can be used by states and local communities to help children get ready to learn. Measurement and mapping of school readiness assessments and related data at the local level, are used to generate and prioritize interventions that can be implemented through evidence-based improvement models. Coaching and technical assistance on improvements techniques and orchestration of learning collaboratives ensure.</td>
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<tr>
<td>Sure Start – (UK)</td>
<td>A national program of centers located in and designed by local communities to provide support to pregnant women, families and young children through community development and the provision of specific services including early learning and childcare, parenting training and support, drop-in play sessions, child and family health services, job training and career support services. Since its inception in 1998 over 3000 Sure Start Centers have been created in the UK.</td>
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### Conclusion

It’s presumptuous and even foolhardy to assert that health insurance and child health providers are the panacea for all of the challenges confronting children and families. Those challenges are
more complex and more numerous than ever before, in a nation where expectation for success are now considered in a global context. Nonetheless, research demonstrates that health care providers still occupy a position of trust and that respectful provider-patient relationships enable those who seek care to hear and comply with messages about disease prevention and the promotion of healthy behaviors when no other voice is effective. For children, in particular, the doctor’s office is a universal point of access for at least several key transitions during the life course. Even without the pull of health prevention and screening recommendations, the fears and anxieties of parenthood tend to drive parents to take their young infants to the doctor. School entry requirements provide secondary incentives to comply with well-child visits that support the immunization schedule, and sports or camp participation encourage a small handful of visits for school age children and beyond. Because health insurance is currently the basis for connecting children and families with physicians, making certain that kids are insured is a crucial step in establishing and maintaining that relationship. Children with health insurance are more likely to have a usual source of care, receive all of the recommended immunizations, and have better oral health, while their counterparts without insurance are more likely to use the emergency room, have unmet medical and pharmaceutical needs, and to have poor school performance (Newacheck et al 2000).

The effectiveness of health care providers as a universal platform for innovations aimed at addressing broader developmental needs of young children is certainly not inconsistent with a pediatric perspective. Indeed, the prologue from a 40 year old set of guidelines established for pediatric practice is as germane today as it was then.

“The purpose of preventive pediatrics practice is to provide each child with opportunities for optimal intellectual, physical and emotional growth and development. Such opportunities are no longer considered luxuries; they are necessities for proper health” (AAP, 1967).

Realizing the promise of that holistic prevention agenda, and of the child health provider’s office as a universal point of access will require not only a renewed acceptance of these ideals, but also significant commitment to rethinking and re-engineering how those providers serve children. Most child health providers recognize that they have more influence on a child’s health and well-being by addressing factors other than acute and chronic medical conditions, and that addressing those “non-medical” determinants requires integration with the entire system of services and supports for children and families. Providing support for that re-engineering will be a struggle against a well established professional and organizational culture, market forces, policy, and the inertia of having already fought too many battles. Still, the many exemplary programs and individual physicians who have already acted on that realization, offer hope that providing support to the others who would take up that broader vision is achievable.
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