InCK Marks

COVID-19 and Child Health Care Transformation: Rising to the Opportunity

Working Paper Three

InCK Marks Child Health Care Transformation Series

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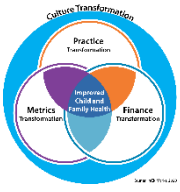
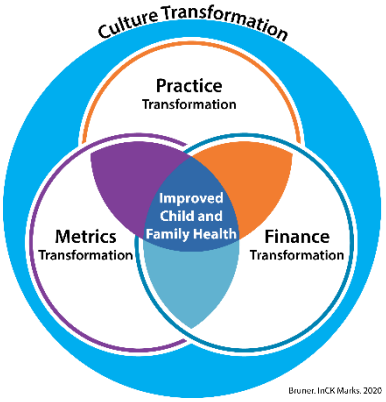


Framework for Transforming Children's Health Care



Children's primary health care providers include: pediatricians in solo or group practice, family practitioners in rural and urban clinics, nurse practitioners and physician assistants in community health centers, and others. All aim to be a family-centered medical home, and increasingly aspire to be team-based which truly partners with families.

Research and professional guidelines such as *Bright Futures* point to a need for more family-centered medical homes that emphasize: 1) prevention, promotion, attachment, and healthy development, 2) meaningful family engagement, and 3) connections to and collaborations with other services in the community. In addition to providing high quality medical care, child health practitioners are being called upon to identify and initiate responses to family needs within the social determinants of health, including stress and adversity (economic, social, and psychological). In short, they are being called upon to transform their practice.

Changing the culture of children's primary health care will require transformation in practice, measurement, and financing. Most important, transforming child health care will require a culture of practice with emphasis on whole family team-based care, health equity and long-range outcomes, not short-term costs.

Across the country, exemplary practices demonstrate how to create high-performing medical homes, which deliver more team-based, relational, and family-centered primary and preventive services. We have the knowledge base to move toward broader diffusion and adoption of child health care transformation.

InCK Marks encourages child health practitioners, experts, advocates, researchers, and policy makers to help advance child health care transformation and promote health equity for all children.

- **Practice Transformation** – Moving toward more high performing, family-centered medical homes with prevention, promotion, developmental, behavioral, and other services that respond to both bio-medical and social determinants of health. This includes reaching the standards set by *Bright Futures* and the expectations set by Medicaid's Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit.
- **Metrics Transformation** – Using measures and measurement tools to guide performance and support practice transformation, including those related to the child, home environment, and family strengths and goals. Practice-level measurement tools and system-level and population level metrics are all needed.
- **Finance Transformation** – Providing financing that recognizes how preventive and promotive primary care for young children has lifelong impacts and long-term cost savings across multiple public systems, that rewards the greater value of high performing medical homes over existing practice. This is particularly true for Medicaid financing.
- **Culture Transformation** – Advancing health equity via transformed medical homes that value and build from family culture, strengths, and goals and are connected to the neighborhoods and communities served. Assuring family-centered care focused on healthy development (cognitive, social/relational, emotional/behavioral, and physical) requires advancing equity and combatting racism and bias in all its forms

Preface and Acknowledgements

This is the third working paper in a series produced on child health care transformation produced by InCK Marks and based upon the transformation framework developed by the National Advisory Team (see page 2). The authors of this paper all serve on that advisory team. The goal of the working papers and the webinars that accompany them are to "support leaders in child health care transformation."

We are particularly grateful to the practitioner champions who participated in the listening sessions that provided the content for this report. Not only have they gone above the call of duty in their leadership in the field of child health practitioners, before and during the COVID-19 pandemic, but they also gave of their time and arranged their schedules to provide expert reflections on the work. We also are grateful to InCK Marks project officer Martha Davis and the Robert Wood Johnson Foundation for providing support, as well as to Martha and her colleague Alyson Silk for listening in on the sessions. We appreciate the efforts of Paul Dworkin, MD, FAAP, at Connecticut Children's Medical Center and Alan Mendelson, MD, at NYU for assisting us in identification of practice champions in their networks.

This working paper was a team effort. Building on InCK Marks identification of exemplary child health practices engaged in transformation in recent years, Charles Bruner saw an opportunity to invite such child health champions to share their responses to the COVID-19 crisis through listening sessions. Kay Johnson led the effort, identifying and contacting practitioner leaders, scheduling the listening sessions, facilitating the sessions, conducting qualitative analysis of the information shared, and organizing and presenting the findings on the InCK Marks webinar. The qualitative analysis included detailed content analysis (e.g., coding, highlighting, and other methods) based on notes and recordings of the listening sessions to identify themes and key findings. Charles Bruner took responsibility for the conversion of the webinar and key findings into this working paper. The other co-authors all participated as "listeners" in the sessions, provided thoughts on key themes from the listening sessions, gave input on the initial findings, and reviewed the draft working paper.

Since we conducted these focus groups and the writing of this report, our nation has witnessed more brutal killings at the hands of police officers, sparking a national uprising against racism and widespread outrage and demands for racial justice in America. The events of the past week, and America's long history of racial violence, reinforce the importance of challenging systemic barriers and surfacing the types of solutions that will advance equity. We know there is so much work to do to dismantle the embedded societal barriers that have put communities of color at greater risk. We also believe that transformed child health systems can contribute toward a vision where all children and their families have a fair and just opportunity for health.

Crises bring challenges but also represent opportunities. InCK Marks believes that the prior work of practitioner champions and the child health care practice field has set the stage for taking action that will enable the field to move forward rather than backward to greater equity and health.

Introduction: Learning from COVID-19 About Child Health Care Transformation

> *"In the healthcare innovation community, there is a "change layer:" the cloud in which visionary ideas about transforming health care resides. But there is also a "reality layer:" the place where most care is delivered. Both are necessary, but until COVID-19 struck us, there was little mixing between them both. Modest investments in digital health and value-based care transformation are now paying off handsomely for organizations that made them. When COVID-19 is behind us, will we complete the swing? Or will we go back to the way things were, to business as usual?"* — Sachin Jain, CEO, Caremore Health System [1]

COVID-19 has brought frightening and disruptive change to the health care system, especially primary care, resulting in immediate child health care transformation that lurches their work forward for better or worse. The leaders whose interviews informed this Working Paper #3 were in the midst of their own health care transformation and leadership when COVID-19 struck and thus bring us their reflections and discoveries of its immediate impact on current transformation efforts as well as their immediate efforts to lean into this challenge to further advance practice transformation, with children specifically in mind. In many respects, the disruptions caused by COVID-19 have posed even greater danger to children and their healthy development, with profound long-term implications to the country's health.

Children are not little adults, and child health system reorientation or transformation needs to be different for children than for adults. Advancing healthy development requires more than maintaining current health, with greater attention to social and relational determinants of child health. While seniors and those with conditions and infirmities are at most vulnerability to the physical impact of COVID-19 (morbidity, mortality, and hospital and other treatment expenses), the long-term impacts of the disruptions produced by COVID-19 may be greatest on children.

Previous working papers from InCK Marks have described the growing consensus in the child health care field on core elements and components of child health care transformation.[2, 3] Well before COVID-19, there has been substantial movement to redefine child health and child health care and to transform practice to be more preventive, promotive, developmental, relational, and ecological. This is reflected in definitions of child health and health equity by the Office of Disease Prevention and health promotion in *Healthy* People 2020[4], by guidelines for well-child care from the American Academy of Pediatrics,[5] and by descriptions of operating principles for medical homes by multiple professional medical associations.[6] With respect to young children and Medicaid financing, it and it is described in depth as a "high performing medical home."[7]

For many practices and the children and families they serve, going back to what existed before COVID-19 will not be an option. Whether we go forward or backward is dependent upon how well we can learn from and build upon the responses of those who have been that "change layer" in child health practice.

This working paper is the result of InCK Marks and its national advisory team enlisting those leaders in that child health "change layer" to learn from their experiences in responding to COVID-19 and what can be drawn from this to move forward to transforming child health care in the future.

"I want leaders to seize the opportunity to reorient the health care system that was so ill-prepared for the current crisis.… Nearly 1.5 million health care workers lost their jobs in March and April. Public officials are right. We need to get them back into the workforce. But rather than redeploying them back into our treatment-oriented, administratively burdensome delivery system, they can be engaged in the work of prevention, primary care, and community-based services — roles with greater impact on societal health now and in the future.… This is not a moment just to rebuild, restore, or reopen health care as it was before. It is an opportunity to reorient our system to the new realities we face with a virus in our midst, as well as the persistent ones of high cost and poor performance." — Christopher Koller, President, Milbank Memorial Fund [8]

Emphasis of Inquiry

When I was a young boy and saw scary things in the news, my mother always said, "Look for the helpers. There are always helpers." – Fred Rogers[9]

Whether or not the immediate impacts of COVID-19 touch a child or a family, COVID-19 is frightening for so many. The social distancing and shelter-in-place requirements have added to that scare and stress. Young children thrive on routines that enable them to safely explore the world in the presence of nurturing and attentive parents and adults. Older children have the stability, teaching, and coaching from intentional learning environments (preschool and primary and secondary education), as well as other community activities and events. These have been disrupted. Virtually every child has experienced some adverse experiences and deprivations during this period. They and their families often have experienced new challenges to economic security that have created additional home stresses and distractions. The social ties and connections that give support and foster resiliency, if they have continued, have had to move from physical to virtual settings.

For many children and their families, particularly very young children, the primary care child health practitioner serves as a trusted and authoritative source of information and represents a helper and confidante to the child and families. Often, the primary health practitioner is the first contact and responder for a family not only for medical care but for social and developmental information and support.

In formulating its framework for child health care transformation, InCK Marks connected with, learned from, and drew upon that "change layer" of child health practitioner innovators and champions working on the frontline to advance child health. Many are located in medically underserved, poor and vulnerable communities most impacted by COVID-19 as well as general health challenges and inequities. All have advanced primary child health care that goes beyond medical care to respond to social and relational child and family concerns. Many had been previous leaders in using technology to reach and engage the children and families they serve and were in settings where it was more feasible for them to pivot to provide many more primary care services virtually.

InCK Marks recognized that these practitioners and their practices were at the frontlines of the COVID-19 pandemic. They also were those most likely to innovate and find ways to adapt and respond even during this time of crisis. They were those in the best position to inform the larger child health care field and those financing and regulating it on what needs to be learned from COVID-19 and how this needs to be incorporated into rebuilding and reorienting health care even after COVID-19 has passed.

To learn from this field, InCK Marks reached out to recognized child health practitioner leaders, innovators, and champions on the frontlines for their responses and insights and convened two "listening sessions" (on May 4th and May 11th) to hear from them. The practitioner participants in each of the listening sessions are listed in Appendix One.

The questions that framed these discussions are provided in Table One and were explicit to the disruptions to, adaptations by, and innovations within the practices themselves. While these practitioners also had important insights about the impact of COVID-19 on the children and families they served, the discussion framework emphasized that the focus of the listening sessions was on the practice responses and implication to future work on health care delivery and transformation. The views and voices of children and families also are essential to understanding COVID-19's impact, but these come best from conducting sessions with families themselves.

Table One: Listening Session Topics

1. How has **the COVID-19 crisis affected delivery of primary child health care for young children**? For example, how and how much have well-child visits been disrupted for young children? What structural changes have you put into place for face-to-face visits?
2. Have you been able to conduct a portion of **well-child visits through telehealth/virtual visits**? Have virtual well-child visits been reimbursed by Medicaid?
3. In your **experience of virtual contacts** with families, what has worked well and what has not, particularly in terms of providing or referring for the services and supports families need?
4. What **actions or innovations have you undertaken** to provide supportive, relational health care to those you serve during this time sheltering-in-place/physical distancing? Do you have **care coordination** support filling a role in this aspect of care?
5. How have you been able to **provide guidance, emergency resources, or materials** to children and families at this time? What have been your experiences in getting out resources/tools (e.g., Reach Out and Read books, COVID-19 information, and/or health education materials)?
6. What have you learned as a result of responding in this crisis that you think could be **incorporated into your primary and preventive care after the pandemic has ended**?

Listening sessions were conducted virtually via Internet and recorded for future review and to ensure accuracy of quotes. The findings provided here build upon those presented in an InCK Marks webinar for the field on May 21st, which included additional commentary from four of the participants from the

learning sessions. The purpose of the sessions was to identify common themes in challenges and responses across the practices, as well as to identify innovative practices and impressions of the impacts of those practices. While not inclusive of all experiences, responses, and innovations undertaken in the field, the authors believe that these practitioners and their actions and observations provide excellent initial and proximate answers to the posed questions.

The summary of these listening sessions regarding practice response has been organized into three sections, which emerged from the sessions themselves. First, all practices engaged in "rapid pivoting," which involved immediate restructuring of their offices and protocols to respond to the specific medical threats posed by COVID-19. Second, all practices engaged in "ramping up" their actions to continue to provide health and health-related services to children and their families, both generally and in light of the new stresses placed upon their families. Third, practices recognized the importance for their responses to be flexible and to use ingenuity in "doing the right thing" to help children and families in this time of stress, regardless of whether that was part of an established protocol or area of focus for the practice prior to COVID-19. In addition to gathering information about the responses, practitioners also provided reflections and insights regarding future implications and needed responses, provided in a fourth section.

Practitioner Adaptation and Innovation – Structural Changes and Rapid Pivoting

> "*It was all hands-on-deck to respond in a matter of days.*"
>
> "*We used every possible way to make it clean and safe*."

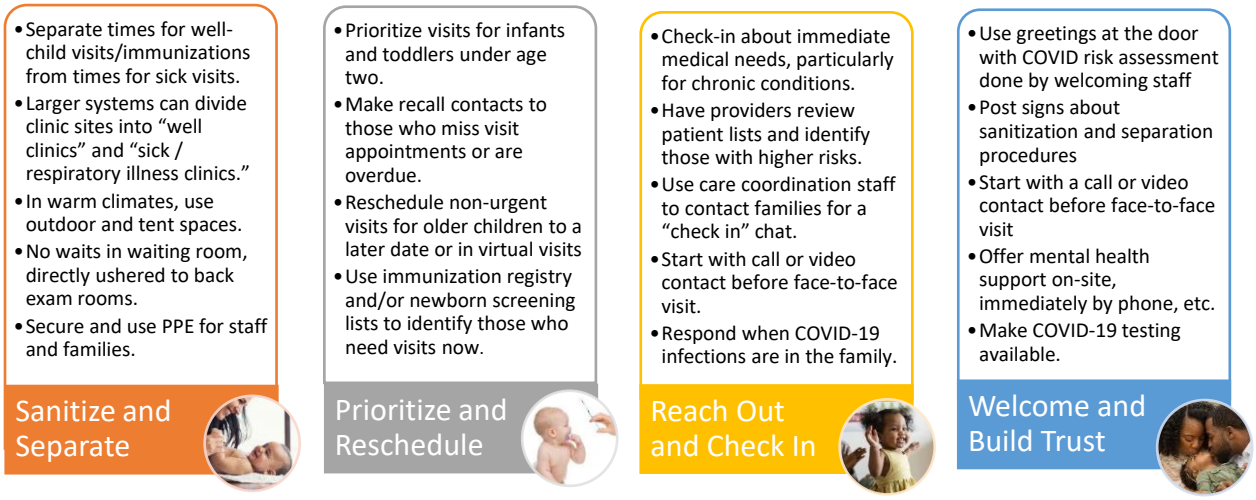
Once the severity of COVID-19 was recognized and first steps were being established to initiate physical distancing to slow its spread, child health care practices were faced with immediate needs simply to ensure safety in providing pediatric care. As health practitioners, they were on the frontline of responding to the pandemic while they also were on the frontline of maintaining essential medical care as well as primary, preventive, and developmental health services. Chart One summarizes the listening session discussion on such immediate responses, usually established and put in place at the very outset of public actions to initiate social distancing as a response to the pandemic.

As the quotes indicate, the first two actions alone involved immediate changes to existing practice that required dedicated staff time and effort across the practice. This involved leadership from the top but also initiative and extra effort down to administrative and support positions. Key to taking these steps was the quality of staffing and ownership of the organizational mission at all organizational levels. While such challenges could overwhelm systems (and likely have been the major focus of attention and concern for many primary care pediatric practices), practice participants felt they were equipped and able to respond quickly to these challenges.

In addition, practices responded to the new challenges and stresses their children and families were facing or were likely to face as a result of COVID-19. Practitioners described the steps they took to maintain continuity of care and connections with the children and families they served, related

both to medical services and to the new demands upon families. In this respect, the exemplary practices these practitioners already had adopted, particularly around extending their care coordination capacity to provide relational support (often through additional staffing directly linked to primary care visits), enabled them to pivot these roles to reach out and check in and offer additional information and support.

Chart One: Rapid Pivoting



Practitioners agreed that they were able to respond to the extent they did because they already had in place staffing and relational health goals that fit easily into providing such outreach and built upon relationships of trust – although the new demands at a minimum required even more time and staffing devoted to this work.

These responses also have been reflected in both the Center for Disease Control and Prevention and the American Academy of Pediatrics guidance to practices, as shown in Chart Two. They represent an initial, necessary first-stage response to provide stability to meet the most immediate needs during the pandemic crisis itself.

With respect to the rapid pivoting required in a disaster or crisis, these practices were able to respond. At the same time, it strained their current capacity and required much overtime work and activity. Their actions and the resources they accessed (often outside the mainstream financing from the health care system itself) deserve further attention as the nation develops strategies that facilitate such immediate responses in the future, whether to a medical epidemic, a natural disaster, or another event putting children's lives in chaos.

Chart Two: AAP and CDC Guidance for Providing Well Child Care During COVID-19

Bright Futures	Physical distancing	Medical care priorities	Social & emotional priorities
• Adhere to Bright Futures schedule • Recall those who miss visits	• Separate by location, space, or schedule • Use telehealth / virtual visits • Protect staff	• Immunization • Newborn screening • Breastfeeding	• Support emotional well-being and social connections • Help address concrete needs via partnerships

Sources: AAP. *Guidance on Providing Pediatric Well-Care During COVID-19* https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/guidance-on-providing-pediatric-well-care-during-covid-19/
Centers for Disease Control and Prevention (CDC). *COVID-19 Resources*. https://www.cdc.gov/coronavirus/2019-ncov/hcp/pediatric-hcp.html

Practitioner Adaptation and Innovation – Virtual Visits and Ramping Up

"*70% of sick kids were determined not to need to be seen in the office.*"

"*We went from 5,000 virtual visits per year to 5,000 virtual visits per week*."

In addition to providing medical care, child health practitioners provide guidance to children and families on healthy child development. They are effective in doing so through both their provision of authoritative and accurate information and their credibility as a trusted source of guidance and advice. National guidance and growing consensus in the field emphasizes the fundamental importance of child health care to be family-centered, to engage and partner with children and families, and to build upon child and family strengths and aspirations. The practitioner champions who were part of these listening sessions have embodied these attributes as they have delivered primary and preventive health services as high performing medical homes.

The COVID-19 pandemic presented new challenges in this aspect of their work because, for most children and families, personal contact through well-child visits or other health-related preventive services were not possible. Instead, virtual contacts and other ways of sharing of information and guidance was required. While there already had been some movement toward telehealth, virtual care visits, and other use of technology and online platforms to provide guidance and information, all the practitioners quickly accelerated their own use of technology – particularly in providing well-child visits virtually and devising other methods for providing vaccinations and other examinations which only can be done through direct contact.

In effect, these practitioners all engaged in rapid cycle testing and development in the use of virtual visits. While not conducted as large-scale, randomized trials, this real-world experimentation produced practical innovations that can inform the future of child health care.

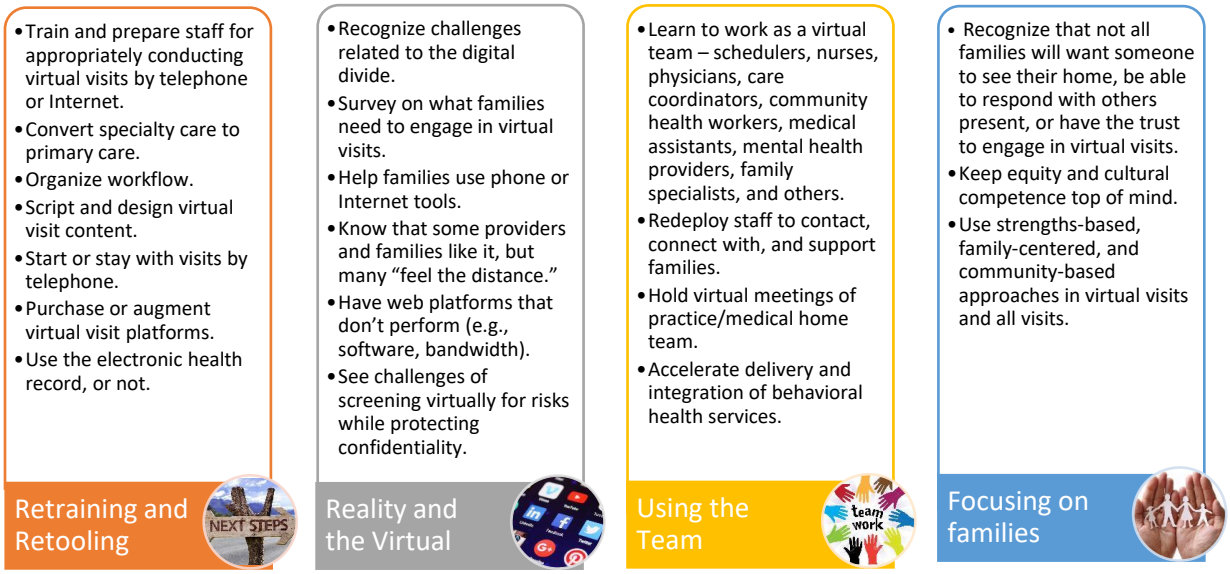
The general consensus from practitioners was that virtual visits could be both effective and efficient for some aspects of well-child care, particularly in providing anticipatory guidance and addressing social as well as child-specific medical determinants of health. At the same time, some children and families were more responsive than others to virtual visits, face-to-face visits remained important to providing specific medical examination and interventions (e.g., immunizations, treatment for chronic conditions) and establishing or continuing relational health care. One plus side of virtual visits was that they sometimes proved more convenient and comfortable for the child and family and enabled more interaction and exchange.

All participants recognized that telehealth, online anticipatory guidance and developmental and relational promotion activities were going to become a bigger part of meeting the child health care needs in the future, and the key to effectiveness will be the degree to which they augment and support relational health and social and professional connections and not serve as a substitute for that.

Participants described their work in ramping up virtual visits and using other tools to substitute for face-to-face contacts as they responded both to providing primary child health care and addressing specific new challenges presented by COVID-19. Chart Four describes many of the actions participants undertook as they moved to make use of technology in their practices.

At the operational level, moving to extended virtual well-child visits requires technology on both ends – on the practice side and for the family. Practices generally indicated that they were able to develop "good enough" connections with most children and families for such visits – but this required attention to both ends. Practice staff required training and preparation and restructuring of workflows to accommodate such visits. This included development or use of new virtual platforms, reorganizing the workflow from scheduling through virtual visits, and working as a team when many staff were sheltering at home. It also required preparing children and families for virtual office visits and addressing issues related to their own technology—whether by telephone or Internet. Practitioners reported that many families had smart phones and general technology savvy, but that some did not have sufficient technological resources (e.g., limited minutes, no home WIFI, outdated computers) or were in areas with spotty or no Internet coverage.

Chart Four: Ramping Up and Virtual Visits



While practices and families experienced some frustrations in using new technologies and finding their platforms were not ideal for their work, they generally believed, with concerted attention and additional development within the technology community, platforms and responses could be developed that would work smoothly. Several practitioners noted that family response was often positive to virtual visits, particularly in providing a more relaxed environment and reducing the time and challenges of transportation to the practice office (which could be quite challenging for those without their own vehicles or easy access to public transportation). One practitioner noted that follow-up visits scheduled with families to address social and emotional concerns actually had fewer cancellations or no-shows when scheduled virtually.

Practices also noted providing tablets or securing extended smart phone minutes were effective in enabling families currently without Internet access or limited in minutes in their contracts to participate. Such actions also were appreciated by families and helped strengthen trust and engagement. In particular, practitioners stressed the value of virtual contacts by care coordination or other staff related to maintaining or advancing relational health care and responding to social as well as medical determinants of health.

Practices further noted that there was a heightened role for the medical home team to have a staff charged with primary contacts with the child and family to prepare for virtual visits so they are most effective. While this staff did not require in-depth medical expertise, it required relational skills (including motivational interviewing, appreciative inquiry, empathetic conversations) and general child health and development knowledge. Under different names and designations, the exemplary practices already had members of their medical team playing this role (as family navigators or advocates, community health workers, family development specialists, or care

coordinators). All saw this as a role that needs to be more prominent in the future, not only in movements toward telehealth but in maintaining and enhancing relational health care.

Overall, participants expressed hope in moving toward greater use of technology generally, and virtual visits specifically, provided these contributed to building the continuity of their responses in providing primary care and enhancing their relationships with the child and family. They expressed concern that technology not be viewed as a substitute for the help that personal engagement was required in order to provide.

Practitioner Adaptation and Innovation –

Family Well-Being and Doing the Right Thing

"It's not about what is on your professional agenda to accomplish but rather about responding to and supporting the family."

The overall COVID-19 pandemic has created new stresses on virtually all families. For some, it has produced a crisis. Some of these have been medical in nature, but many are related to social determinants of health. The practitioner participants were selected for these listening sessions precisely because they have been on the cutting edge – even before the COVID-10 pandemic – of responding to children and families with more than medical care needs. They have done so within different organizational structures and the addition of different staff and programmatic elements, but what has undergirded their work has been a focus upon supporting and strengthening families in order to support and advance healthy child development. InCK Marks has described this as an organizational culture that is directed to recognizing and valuing families, supporting and partnering with them in realizing their hopes for their children, and doing so through empathetic and relational care. This requires a flexibility in response and an underlying organizational culture and belief system – throughout the organization and its staff – that puts the child and family first.

The two listening sessions highlighted the need to sustain such an approach during a pandemic or other disasters and crises, and to have flexibility to respond to unique needs during that time. The listening sessions also underscored the need for adequate financing to support such efforts beyond the pandemic times. While the pandemic placed many more families in jeopardy, the inequities in current systems have produced such vulnerabilities and the child health care system needs to play a significant role in rectifying those.

Chart Five summarizes the discussion and reflections of practitioners on maintaining this focus specifically during the COVID-19 pandemic.

Chart Five: Family Well-Being and Doing the Right Thing

The COVID-19 pandemic placed new demands and stresses upon children and families, well beyond their ability to participate in well-child visits or secure medical care. Some of these involved meeting basic needs – including food, diapers, and other basic supplies. Some involved maintaining consistency and continuity in day-to-day interactions, including nurturing and play with young children. Others involved reassuring children and families that there were helpers and supports for them in these scary times. Some involved substituting home activities for what otherwise would have been available through social connections outside the home and in community activities.

Particularly for young children, child health practitioners often found themselves in the role of "first responders," still open and available to provide services and reassurance. While schools stepped up in providing virtual instruction of their own and reaching out to families, for preschool-aged children, particularly those not yet in preschool or formal early care programs, the participating practices recognized they often were the first source for information – including the first ones to hear about household needs.

Because they already had relationships with children and families that extended beyond providing medical care, practices found themselves on the front lines of providing or connecting families with these additional services. Practices found ways to provide some services and connections virtually, but also to employ drop-offs or mailing of other resources and materials.

A Central Focus on Family-Centered Care

- Engage parents as partners.
- Emphasize the role of relationships and encourage hope.
- Respond to parents' using strengths-based approaches and without bias.
- Support parents in overcoming systemic obstacles.
- Use a combination of promotion, intervention, and coordination for primary care, developmental services, and mental/behavioral health services.

Adapted from ideas shared by Pradeep Gidwani, MD, MPH, FAAP, from Healthy Development Services and First Step Home Visiting of San Diego County; and Lily Valmidiano, MPH, director of the AAP California Chapter 3, based on presentation to the California First 5 Statewide Summit.

This also included using online resources and supports, particularly those geared to providing developmentally appropriate activities and games. Again, practitioner participants emphasized the appreciation that families and their children expressed for any such help and care. This helped, in some measure, to mitigate or manage the stresses families experienced, which practitioners recognizes as important to healthy development.

Practitioner Reflections: The Paths Ahead

"*All of the issues facing our families are exacerbated by this… not all families are safer at home*."

*"Societal weaknesses [*such as racism*] have worsened the crisis for communities of color*."

"We need to carry forward the focus on equity, social determinants, and community partnerships."

Societal Challenges Exacerbated and Child Equity Issues Elevated. Practitioner participants emphasized that the COVID-19 pandemic had differential impacts which exacerbated, but did not create, inequities. Inequities of discrimination, racism, and marginalization were elevated both in terms of family vulnerability and challenges faced by the practices in seeking to redress them. They expressed particular concern that child safety and protection itself was compromised for children in vulnerable households, and the impacts of such adversity, will result in greater health challenges over the life course. They sought greater partnerships at the community level and with child protective services, to prevent or mitigate new dangers and threats to child safety.

Practitioners also recognized that the most affected by COVID-19 itself and by the social and economic impacts of COVID-19 were within poor communities and communities of color. They took on more roles in providing basic essential services (food, diapers, thermometers, etc.) and also making more connections within community services in these communities. At the same time, they recognized that responses were far from sufficient. Moreover, they also recognized that differential medical impact and mortality within communities of color was likely to increase mistrust of systems, which practitioners had worked hard to counter in their own practices and with their communities.

At the same time, however, practices expressed their own resolve to use the COVID-19 experiences to press for greater attention to rectifying these inequities and accelerating child health care transformation in a broader role of partnering with families and communities to address social determinants of health.

"Telehealth is not going away. It will be part of the business model going forward."

"The horizon for use of technology has greatly expanded."

Technology as Tool But Not Solution. All practices made substantial new use of technology (e.g., telephone, Internet, electronic health records) to maintain their connections with children and families. Necessity is the mother of invention, and participants also expressed that technology, when used to support practice and family engagement, enhanced their capacity to respond. They emphasized, however, that technology was a tool and not a substitute for providing family-centered care.

In addition to virtual child health care visits, practices employed other technologies, including online resources on child development, to respond to family questions and needs. They also employed drop-offs and mail to get specific resources to families.

They recognized that the social side of their engagement with families was at a beginning level of using "high tech" to support "high touch." They made use of what they knew was available – such as online screening and preparation tools for well-child visits, digital calendars and scheduling programs, video tools for guiding families, and online or text message tips on child development, but felt they only partially tapped current resources and those current resources only partially provided families and practitioners the information and support they needed.

Practitioners expressed that their experiences with technology in the COVID-19 pandemic had been mixed, with maintaining medical records and patient encounters more geared to meeting billing needs and often frustrating to use. Practitioners concluded that making greater use of technology required more readily available family-friendly and family-and-practitioner helpful tools and apps than exist today – and that barriers to their use must be addressed both for practices and for families. They emphasized that the digital divide is a concern for many of the most vulnerable families. (Appendix Two provides an enumeration of some of the current online resources which represent early efforts to provide interactive and family-practitioner friendly.)

"No going back to normal."

"Some practices and clinics will not survive. Will there be critical gaps in terms of geography or equity?"

"This pushes us forward in terms of population health. We need better practice tools and approaches."

"Much of the innovation has been in partnerships."

Choice of Going Forward or Backward. As practices at the cutting-edge of child health care transformation that have become valued within larger systems (community health centers, children's hospitals, or larger community medical systems), the practices themselves did not feel they were threatened with closure, but they recognized that many smaller practices would be.

Pediatric practice both represents one of the least-compensated parts of the health system and one that relies most on a volume of primary and preventive care through office visits. The COVID-19 pandemic dramatically reduced this volume, even where practices could pivot quickly to virtual visits and were compensated for them.

While, with the exception of older practitioners who may decide to retire in the wake of COVID-19, most primary child health care practitioners (pediatricians, family physicians, physician assistants, and nurse practitioners) will still seek to continue their careers and will find places to do so, even if within a different practice setting.

At the same time, practices recognized that primary child health care was already coming to a crossroads and the COVID-19 pandemic has moved this crossroads that much closer.

> *"While we want to address social determinants of health, going forward many models and approaches are not viable without sustainable funding."*
>
> *"This time has demonstrated that current funding structures do not support transformed practice. That will be the funding model for the future?"*

Financing as Investing in High Value Care and Transformation. The practitioner leaders and champions who were part of the listening sessions are at the forefront of child health care transformation. Because of their passion and ingenuity, they have been able to leverage additional resources to establish their own programs, practices, and approaches that have extended far beyond the current general standard of practice.

They were selected for the listening sessions precisely for this reason – because they were in the best position to respond, had the best financial support and acumen to adapt, and had the underlying commitment to do "whatever it takes" to serve their patients in this time.

They also largely have been able to innovate and transform their own practice settings through their entrepreneurship in leveraging additional resources, but largely not through what is provided as reimbursement through health insurance systems (particularly Medicaid). These final direct quotes were uniformly shared by practice champions – that the current financing of child health care is simply insufficient to support the higher value care they provide.

Conclusion

> *"Let's resolve to make children a greater national priority today and into the future. As a first step, child advocates must stop selling ourselves short. Child advocates are notorious for compromising with ourselves and shying away from asking politicians to support children unless we know it will likely be supported.… The latter is self-fulfilling. Policymakers might ignore us or say "no" to our requests, but they will never say "yes" unless they are at least asked. We cannot back away from demanding positive change and progress for our kids.* — Bruce Lesley, President, First Focus [10]

The purpose of InCK Marks and the InCK Marks Resource Network is to "help leaders advance child health care transformation." InCK Marks has developed a framework for this transformation that recognizes four core elements – starting with practice transformation, undergirded by culture transformation, and supported by alignment of both metrics and finance transformation.

There is no doubt that COVID-19 both has shown the need for this transformation in order to protect children's health (particularly in times of crisis and destruction). At the same time, it has disrupted even the current system of basic medical care and pushes change toward a better imagined future.

The policy and health care financing question now is whether child health care transformation will go forward – with greater attention and investment to that transformation – or backward to even more minimal, medically-circumscribed care. Vaccinations and medical treatments for childhood illnesses could be performed in urgent care and walk-in clinics in pharmacies and supercenters, who rely upon high volume to sustain themselves. This might be good enough for some children and families (those more affluent and resourced parents and their children, who have access to and resources to secure and use services and developmental supports for their child's healthy development). It will work even more poorly, however, for a large share of the child population, where the child health care practitioner retains some continuity in care and attention and, whether or not financed or resourced to do so, does seek to look and respond to the whole child and provide guidance to the parent.

Fortunately, we have the science and the will within the child health community to transform child health care. The listening sessions provide positive indications that the COVID-19 pandemic can stimulate further transformation in practice, metrics, and finance and may be foreshadowing the future.

For children, this transformation starts with a comprehensive definition of healthy development, an understanding of the home and community as well as individual child factors producing this healthy development, and an according structuring of the health practitioner's responsibility to advance that healthy development. The need for this transformation already has been recognized by the medical field and we can get practitioners to go there. It is in the definition of child health and health equity and in

the principles for a medical home and in the goals of frontline child health practitioners and well-child, primary care visits.

In many respects, COVID-19 has created a crisis that also calls the question and demands changes to child health care practice. We have an opportunity, as child health practitioners, champions, and ultimately advocates, to use this moment to truly transform child health care.

> *Transformation is not incremental – it is foundational. For children, we have a medical care system we must transform into a health care system. We know what this transformation from child medical care to health care entails. We have ample science, research, and exemplary practice to guide the transformation. While transforming child health care alone will not address all child needs and rectify all current inequities, it will go a long way to do so and we will not achieve full success without it. We know enough to act.* — InCK Marks National Advisory Team [11]

APPENDIX ONE: Practitioner Participants in Listening Sessions

This working paper represents a summary of the two listening sessions conducted by InCK Marks as reviewed by the participants. Some additional reflections were incorporated from the comments and reflections made by four of the participants, who presented at the May 21st webinar.

Participants in May 7th Listening Session

Kay Johnson, facilitator (Charles Bruner, PhD, Melissa Bailey, Martha Davis, Maxine Hayes, MD, MPH, FAAP, and David Willis, MD, FAAP as National Advisory Team silent listeners)

Practitioner Leaders

- Center for Youth Wellness; Bayview Child Health Center (San Francisco): James Hickman
- Cincinnati Children's Hospital Medical Center, Hopple Street Clinic (Cincinnati, OH): Mary Carol Burkhardt, MD, FAAP
- Connecticut Children's Medical Center & Child Health and Development Institute: Lisa Honigfeld, PhD
- Connecticut Children's / Pediatrics Associates (Bristol, CT): Susan Adeife Lee, MD, FAAP
- Healthy Development Services (San Diego, CA): Dr. Pradeep Gidwani & Dr. Lily Valmidiano
- Health Share of Oregon: Peg King
- Mary's Center (Washington, DC): Seiji Hayashi, MD, MPH, FAAFP & Jessica Schroeder, MD, FAAP
- Metropolitan Pediatrics (Providence, OR): Resa Bradeen MD, FAAP
- Seattle Children's Odessa Brown Children's Clinic (Seattle, WA): Benjamin Danielson, MD, FAAP
- Primary Health Care (Des Moines, IA): Bery Engebretsen, MD

Participants in May 11th Listening Session

Kay Johnson, facilitator (Charles Bruner, PhD, Melissa Bailey, Martha Davis, Maxine Hayes, MD, MPH, FAAP, and David Willis, MD, FAAP as National Advisory Team silent listeners)

Practitioner Leaders

- Children's Hospital of Colorado (Denver, CO): David Keller, MD, FAAP
- Cincinnati Children's Hospital Medical Center (Cincinnati, OH): Robert Kahn, MD, MPH, FAAP
- Boston Medical Center for the Urban Child's Pediatric Practice of the Future (Boston, MA): Megan Bair-Merritt, MD, FAAP & Carey Howard, MD, FAAP
- Connecticut Children's Medical Center: Cabrini Merclean
- Connecticut Children's / Pediatrics Associates (Bristol, CT): Julie Schiff, MD, FAAP
- NYC Health + Hospitals, Gotham Health/Gouverneur Health Care: Marion Billings, MD, FAAP
- New York Pediatrics (Flushing, NY): Rachel Sharret, MD, FAAP
- NYU Langone Medical Center (New York, NY): Caitlin Ford Canfield, PhD, Anne Seery, PhD, & Mary Matalon, MPH
- Primary Health Care (Des Moines, IA): Heidi Schreck, MD, FAAP
- University at Buffalo Pediatrics (Buffalo, NY): Dennis Kuo, MD, FAAP

Note: While unavailable for either of the two sessions, Dr. Elsa Nicholas and Jina Lee Lawler from The Children's Clinic (DBA - TCC Family Health) (Long Beach, CA) participated in an interview on May 11.

Presenters at May 21st National Webinar

- Benjamin Danielson, MD, FAAP, Seattle Children's Odessa Brown Children's Clinic
- Robert Kahn, MD, MPH, FAAP, Cincinnati Children's Hospital Medical Center and University of Cincinnati, lead on Population and Community Health
- Resa Bradeen, MD, FAAP, Metropolitan Pediatrics, Portland, Oregon
- Seiji Hayashi, MD, MPH, FAAFP, Chief Transformation Office and Medical Director, Mary's Center, Washington, DC

APPENDIX TWO: High Tech Resources and Tools Supporting Child Health Care Transformation

Both from the listening sessions and from other queries and reviews, InCK Marks identified a number of resources in the field that offer tools for practices that can enhance relational health care and, in effect, use "high tech" to support "high touch." The chart below (from the webinar slides) provides an initial list of resources in the field to support and strengthen families and their engagement in their child's healthy development.

High Tech Resources to Enhance High Touch Engagement

- **Restructure and enhance office visits**

Online screening and family engagement/agency – Well-Visit Planner & Cycle of Engagement (2.0) https://www.wellvisitplanner.org/

Telehealth and virtual well-child visits as appropriate

- **Advance relational care coordination**

Telecommunications to identify and respond to developmental and social issues – build upon existing models such as Help Me Grow, DULCE, and Medical Legal Partnerships

Community health worker/medical home team member connecting virtually with parents

- **Link to and finance health-related services (provided in-person and virtually)**

Rapid Response Virtual Home Visiting (https://institutefsp.org/covid-19-rapid-response)

Online peer support/patient groups with (or without) professional facilitation

- **Link to other resources and supports for continuous connections**

Resources supporting parents as child's first teacher/nurse – Vroom, the Basics, Small Moments-Big Impact, Mahmee

Be Strong Families Parent Cafes

Parentivity.org

VersaMe - The Starling Early-Education Wearable

Jennifer Garner SAVEWITHSTORIES // Save the Children

Barack Obama and Steph Curry on My Brother's Keeper, Fatherhood, and Toxic Masculinity

APPENDIX THREE: Resources on COVID-19 and Child Health Care Transformation

InCK Marks ***Short Takes***

- *COVID-19 and Young Child Health Care Transformation*. Bruner and Johnson. April 10, 2020. https://www.inckmarks.org/docs/COVID19InCKMarksShortTakeTransformationpdf.pdf
- *COVID-19 and Health Equity*. Johnson, Hays, and Bruner. April 15, 2020. https://www.inckmarks.org/docs/covid-19/shorttakecovidhealthequity.pdf
- *COVID-19, Helpers, Public Policy, and Young Children*. Bruner. April 15, 2020. https://www.inckmarks.org/docs/covid-19/HelpersCoronavirusElectionsPDF.pdf
- *COVID-19 What's Equity Got to Do With It?* Ellis and Hild. April 30, 2020 (posted at www.inckmarks.org)

Other Resources

American Academy of Pediatrics (AAP). *Critical Updates on COVID-19*. https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/
AAP *Pediatrics* COVID-19 Collection. https://www.aappublications.org/cc/covid-19 and **#PedsPutKids1st Vignettes**. https://www.aappublications.org/news/2020/04/21/covidvignettes042120

Centers for Disease Control and Prevention (CDC). *Coronavirus (COVID-19)*. https://www.cdc.gov/coronavirus/2019-nCoV/index.html _CDC. *Coronavirus (COVID-19): Take steps to protect children and others from getting sick*. https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/children.html

Center for the Study of Social Policy (CSSP). *Connecting the Medical Home and the Community: Needed by Families Now More Than Ever*. Blog. Willis, Doyle, and Johnson. April 21, 2020. https://cssp.org/2020/04/connecting-the-medical-home-and-the-community-needed-by-families-now-more-than-ever/

Child Health and Development Institute of Connecticut, Inc. (CHDI). *COVID-19 Resources for Pediatrics*. https://www.chdi.org/our-work/health/educating-practices-community-epic/educating-practices-covid-19-trainings-and-resources/

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Diversitydatakids.org. *Neighborhood Inequities and COVID-19*. Acevedo-Garcia. April 14,2020. http://www.diversitydatakids.org/research-library/blog/neighborhood-inequities-and-covid-19

Harvard University Center on the Developing Child. *A guide to COVID-19 and Early Childhood Development*. https://developingchild.harvard.edu/guide/a-guide-to-covid-19-and-early-childhood-development/

Healthy Outcomes from Positive Experiences (HOPE). Blog posts related to *COVID-19 and HOPE*. Various authors. https://positiveexperience.org/blog/

Ounce of Prevention Fund. Early Childhood Connector. www.ecconnector.org

Robert Wood Johnson Foundation. *COVID-19 Collection*. https://www.rwjf.org/en/library/collections/coronavirus-disease-2019--covid-19.html

Zero to Three. *Supporting Families with Infants and Toddlers During the COVID-19 Pandemic*. Partner Resource Sheet. April, 2020. https://www.thinkbabies.org/wp-content/uploads/2020/04/COVID-Think-Babies-Partner-Resources.pdf

ENDNOTES

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[11] See notes 3 and 4.