Access to Pediatric Specialty Care in California:
Results of the Children’s Specialty Care Coalition 2022 Member Survey

Final Report
March 2023

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Acknowledgements:

Thank you to all of the CSCC members, who contributed generously of their time and organizational resources in order to complete this survey at a time of tremendous strain on the pediatric health care system. A special thank you to the members who participated in the survey advisory committee. Without your guidance and detailed input, this survey would not have been meaningful.

Thank you to the invaluable CSCC staff – Erin Kelly and Katie Layton – who provided their wisdom, expertise, and lots of patience in designing the survey and methods.

Finally, this survey could not have been conducted without funding from the Lucile Packard Foundation for Children’s Health and without instrumental support from its knowledgeable senior program officer, Allison Gray.

About the Lucile Packard Foundation for Children’s Health:

Support for this work was provided by the Lucile Packard Foundation for Children’s Health. The views presented here are those of the authors and do not reflect those of the Foundation or its staff. The Foundation’s Program for Children with Special Health Care Needs invests in creating a more efficient and equitable system that ensures high-quality, coordinated, family-centered care to improve health outcomes for children and enhance quality of life for families. Learn more at lpfch.org/CSHCN.

About the Children’s Specialty Care Coalition:

CSCC is an advocacy association that represents 18 pediatric specialty member medical groups that are closely aligned to children’s hospitals throughout California. CSCC’s mission is to ensure that children with complex health care needs have access to equitable, timely and high-quality care, provided by pediatric subspecialists who are able to thrive in California’s health care environment, through strong leadership, education and advocacy. For more information, go to www.childrens-coalition.org.

About Practical Research Solutions:

PRS is a private firm that provides independent, unbiased research and evaluation services to organizations with policy and practice questions. PRS specializes in healthcare services and other systems providing support to children and youth and their families. To contact us, email: tali@practicalresearch.org.
Background

In 2019, the Children’s Specialty Care Coalition (CSCC) conducted a survey of its members, medical institutions of varying size that are closely aligned with the majority of children’s hospitals in California. The survey focused on the pediatric subspecialty workforce and patients’ access to care in its members’ multi-disciplinary special care centers. The results highlighted trends related to challenges with physician recruitment and retention, and patient wait times that greatly exceeded network adequacy standards set by the California Department of Health Services.

In 2022, CSCC staff approached Dr. Klima at Practical Research Solutions (PRS) to conduct a follow-up survey of its members to understand the status of access to care in a post-COVID-19 environment. Much like the 2019 survey, Dr. Klima reached out to CSCC’s membership. The topics of physician recruitment and retention, as well as patient wait times, were assessed again. In addition, the current survey inquired about physician retirements as a potential indicator of current or looming physician workforce shortages that could impact access to care.

This report outlines key findings of the 2022 survey, which is a snapshot in time of access to pediatric specialty care in California. CSCC members represent medical groups throughout the state, and do not include private clinics that are unaffiliated with large academic or other medical systems (e.g., Sutter Health). Because most children who require specialty care are nearly always seen in such health care systems, it is assumed that the majority of pediatric specialty patients served in the state are represented by the data reported in this survey.

Survey Methods

Survey development

In Fall 2022, PRS designed a CSCC member survey that updated and built upon the 2019 survey. Survey development included collaboration with CSCC staff, its member advisory committee, and staff from the Lucile Packard Foundation for Children’s Health (LPFCH), who have an expertise in health care systems. Access to care was primarily defined through patient wait times (i.e., long wait times mean delayed access to care). CSCC was also interested in current and future physician workforce shortages, which could be related to delays in patient access.

Survey administration

The final survey contained 10 quantitative items, some of which were multi-part questions (e.g., asking about multiple specialties), and 6 qualitative items to gather additional context on provider experience related to access. The survey was programmed by PRS staff into the Survey Monkey online platform.

Each member institution designated one person as the point of contact (e.g., Chief Medical Officer, Chair of Pediatrics) to receive a unique survey link that could be shared internally with other staff members. The information requested is commonly accessed by different administrators within an institution; therefore, it was

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1 Kaiser Permanente is not a member of CSCC. Its’ website states that it serves over nine million Californians (adults and children).
important that each uniquely identifiable survey be editable by multiple individuals. The point of contact was responsible for reviewing all the data entered and submitting their institution’s survey.

The survey was launched at the end of November 2022 and remained open until early January 2023. Multiple invitations and reminders were sent to members to complete the survey. During this time, many members experienced an unprecedented surge in pediatric patients due to high rates of Respiratory Syncytial Virus (RSV), flu and COVID that strained the resources of their respective institutions. Nevertheless, 14 of 15 recruited member institutions participated in the survey.

Among responding institutions, 79% treat a pediatric patient population that is majority Medi-Cal (at least 50% of patients). Similarly, 62% of respondents treat a pediatric subspecialty population that is composed of at least 40% California Children’s Services (CCS) enrollees. In short, these institutions by and large rely on Medicaid reimbursement to pay for their patient care.

**Survey content**

**Specialties.** The issues investigated by this survey were believed to vary by pediatric specialty. Therefore, in consultation with the CSCC staff and advisory committee, 15 specialties were chosen as the focus of the survey, listed below.\(^1\) They represent expertise in a diverse range of child conditions, as well as intervention methods (i.e., surgical/procedural vs nonprocedural).

1. Allergy/Immunology
2. Cardiology
3. Developmental/Behavioral Pediatrics
4. Endocrinology
5. Gastroenterology
6. General Surgery
7. Hematology/Oncology
8. Infectious Diseases
9. Medical Genetics
10. Nephrology
11. Neurology
12. Ophthalmology
13. Otolaryngology
14. Pulmonology
15. Rheumatology

**Measures.** Access to care was centrally defined as patient wait times for new or initial clinic visits (see Table 1). Physician workforce shortages, which may be contributing to access problems for patients, was defined as: large numbers of pediatric specialist vacancies, long recruitment times for those vacancies, and problematic trends in physician retirements (Table 1).

\(^{1}\) Metabolic medicine was originally added as another specialty; however, very few members have such a division, so that sample sizes for these analyses were very small and could not be interpreted.
Table 1.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Definition (response choices)</th>
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<tbody>
<tr>
<td><strong>Patient wait time</strong></td>
<td>Average number of calendar days for initial (new), non-urgent patient visits from time of initial contact to visit (15 days or less, 16-30 days, 31-60 days, 61-90 days, 91-180 days, 181 days or more)³³</td>
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<tr>
<td><strong>Physician workforce</strong></td>
<td></td>
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<tr>
<td><strong>Physician vacancies</strong></td>
<td>1. Current number of openings (0...9, 10 and above)</td>
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<tr>
<td></td>
<td>2. Percent pediatric specialists that left institution for comparable position in other state (0%, 1-5%, 6-10%, 11-15%, 16-20%, 21% or more)</td>
</tr>
<tr>
<td><strong>Physician recruitment length</strong></td>
<td>Average recruitment time for openings during past 18 months (whole months)⁴⁴</td>
</tr>
<tr>
<td><strong>Physician retirements</strong></td>
<td>1. Percent pediatric specialists who have retired earlier than expected in last 3 years (0%, 1-5%, 6-10%, 11-15%, 16-20%, 21% or more, don’t know)</td>
</tr>
<tr>
<td></td>
<td>2. Specialties (if any) that institution has requested pediatric specialists to delay retirement or resume clinical role after retiring (mark all specialties that apply)</td>
</tr>
<tr>
<td></td>
<td>3. Specialties in which foresee &gt;20% retirements in next 5 years (mark all specialties that apply)</td>
</tr>
</tbody>
</table>

The quantitative survey results are presented below. Anecdotes from member institutions were taken from their responses to qualitative questions and are shown in quotes.

**Findings**

**Patient wait times**

As shown in Figure 2, wait times varied considerably by specialty. General Surgery, Hematology/Oncology, and Infectious Disease had the lowest median wait times (8 days/each). In fact, these are the only specialties with a median wait time below 15 business days (21 calendar days), which is the network adequacy standard. These specialties – which often treat urgent, even life-threatening, problems - also had relatively small ranges of wait times, with all responding institutions reporting between 8 and 46 days.

³³ To calculate median wait times, response choice ranges were converted into number of days based on the midpoint of the range selected (e.g., 31-60 days was converted into 43 days). This provides an approximation based on meaningful time ranges but cannot detect differences among respondents within the range (e.g., one respondent who selected 31-60 days may have been closer to 31 days whereas another who chose the same range may have a wait time that is closer to 60 days).

⁴⁴ A follow-up survey was sent to all respondents inquiring about total average recruitment lengths after results from the initial survey, which inquired about current openings not yet filled, yielded unrealistically short recruitment lengths. These underestimates were likely due to not capturing full periods of recruitment, as well as missing positions recently filled and positions “abandoned” due to very long recruitment times. In order to assess the full period of recruitment, a longer period of reporting for all positions opened (and closed) during this time were requested.
On the other hand, Developmental/Behavioral Pediatrics and Medical Genetics had median wait times of over 100 days (106 and 136 days, respectively). Importantly, these specialties have wide ranges of wait times that include more than 180 day wait times for some institutions. Although Endocrinology has a relatively low median wait time, it has a similar pattern of wide variability across institutions with a maximum wait time of over 180 days.

“New diabetic patients seen in the hospital at initial diagnosis are unable to be seen by the diabetic team as an outpatient in a timely fashion... It may take a few weeks to months for new diabetic patients to be seen in clinic and the impact this delay has on the family is consequential, given the chronic nature of the disease and burden on the patient and family.”

In order to examine trends over time, wait times data from the CSCC 2019 survey were compared to those from the current (2022) survey, which includes almost an identical group of institutional respondents to the early survey. For the purposes of an “apples-to-apples” comparison, the 2019 data, originally reported as means, were reanalyzed as medians to be consistent with the 2022 results. Figure 3 shows patient wait times for each of the 15 specialties.
The graph shows that some specialties have remained relatively stable in their wait times. However, among specialties that have experienced a change, wait times have consistently grown longer from 2019 to 2022. The most dramatic example is in Medical Genetics, where the median wait time in 2019 was 60 days and 136 days by 2022. Others, such as Developmental/Behavioral Pediatrics, Endocrinology, Gastroenterology, Neurology, Ophthalmology, and Pulmonology, have all increased by at least 25 calendar days. In addition, although both surveys indicated that many specialties exceed the network adequacy standard of 15 business days’ wait time (equivalent to 21 calendar days), six specialties that met the standard in 2019 – Cardiology, Endocrinology, Gastroenterology, Neurology, Otolaryngology, and Pulmonology – no longer met it in 2022.

“Our solo D[evelopmental]/B[ehavioral] P[ediatrics] provider has been struggling with burnout because of the demands from her practice. Her specialty is time intensive, labor intensive... Her wait list is over a year long and she reviews all the new referrals. DBP patients’ needs are very time sensitive, so she feels the burden to help everyone who calls to request an appointment. This burden to care for her patients is felt because the extremely high demand is contributing to significant burnout.”

**Physician vacancies and recruitment length**

For any given specialty, respondents reported the current number of pediatric specialists and the current number of open or vacant (unfilled) positions; thus, the “percent of missing
physicians” was calculated by dividing the number of unfilled positions by the total expected physicians (current physicians + unfilled positions). The cutoff representing a substantial shortage in physician workforce was set at 20% missing physicians. Among the 15 specialties, most reporting institutions exceeded the cutoff for substantial shortages in Allergy, Neurology, Ophthalmology, and Pulmonology.

Another indicator of physician vacancies is the number of pediatric specialists who have chosen to leave Californian institutions to pursue comparable positions in other states. Almost half of respondents (43%) indicated that in the last 3 years, they have lost 6-15% of their pediatric specialists to out-of-state institutions.

To understand the impact of physician vacancies on specialist workforce shortages, institutions were asked about the average length of time for physician recruitments in each of the 15 pediatric specialties during the last 18 months. Figure 4 shows recruitment lengths for those specialties in which a majority of institutions had openings.

![Figure 4. Average physician recruitment length](image)

Of the 14 specialties assessed, nine have a median recruitment length at or exceeding one year. In addition, it is notable that any institution reported an average recruitment length of two years or greater. In fact, this was true for nine specialties.

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* Only specialties for which at least 7 (of 13 possible) institutions reported openings in the last 18 months are shown in Figure 4.
Physician retirements

Anecdotal evidence suggests that because Californian pediatric institutions have had a difficult time recruiting new physicians, some have resorted to requesting that their physicians delay expected retirements or even return from retirement to resume clinical duties. In this survey, the majority of respondents (54%) reported that staff at their institution has requested that physicians delay or return from retirement in at least one pediatric specialty, with most of these reporting at least 2 specialties where this occurred.

It is well known that the COVID-19 pandemic has taken a heavy toll on health care workers. To examine another aspect of potential physician shortages, this survey investigated early retirements in the last 3 years. The majority of responding institutions (69%) reported 1-5% of their pediatric specialists retiring early during this time. It is perhaps especially telling that only 23% of respondents reported no early retirements among their physicians.

Finally, in looking at the future of pediatric specialties, institutional administrators were asked whether they foresee a substantial (defined as above 20% per division) number of retirements in the next 5 years. All but one respondent (92%) reported substantial expected retirements in at least 1 specialty. In General Surgery and Medical Genetics, at least one third of respondents were concerned about future retirements.

Conclusion

The Children’s Specialty Care Coalition initiated a survey in response to significant concerns from pediatric specialists in California about their patients’ ability to access care. When access to assessment and routine care by a pediatric specialist is delayed, patients may receive inappropriate or insufficient treatment, experience complications, and have potentially avoidable emergency department visits and hospitalizations.\textsuperscript{3, 4} The survey showed that for many specialties, patient wait times exceed 15 business days, which is the California Department of Health Care Services’ network adequacy standard for specialty care in Medicaid Managed Care.\textsuperscript{2} Moreover, when compared to results from a similar survey just three years ago, patient wait times have either remained the same or increased, in a number of specialties substantially. For seven specialties, the difference in wait times was at least 25 days longer, and six specialties that previously met network adequacy standards no longer do.

One of the factors contributing to reduced access to care may be a shortage of physicians throughout the state. In fact, according to the American Board of Pediatrics, across multiple specialties, California consistently ranks below the 50th

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“With limited access and limited hours in the day, these are the decisions that must be made; the child who needs injections to help with the pain of the muscle spasms in their lower body or the child who has minimal use of their dominant hand. This daily stress is taxing and...challenge[s] one to question if they are making a difference at all. The lack of specialty access has life or death implications and for a group of safety-net providers who want to make life better for a child, the implications of failure are emotionally draining when the outcome is poor.”
percentile in the number of pediatric specialists per 100,000 children. The survey indicates that physician shortages may be the result of specialists leaving the state to pursue positions elsewhere and specialists retiring early.

The survey further showed that replacing physicians who have left is not an easy undertaking: in most specialties, the average recruitment takes at least a year, with some institutions reporting longer, even up to two years or more. Thus, it appears that pediatric institutions in California are struggling to both recruit and retain their specialists. This finding may be related to lower physician compensation compared to their adult specialty counterparts, which may be especially problematic in a state with a high cost of living, like California. Physician compensation is, in turn, driven by reimbursement rates for treatment. Given that most of these pediatric institutions reported serving a patient population mostly comprised of Medicaid enrollees, Medicaid reimbursement rates are a key determinant in their income and physician compensations.

The qualitative data suggest that while institutions seek to fill physician vacancies, the specialists who remain assume greater responsibilities to meet patient demand, which may lead to burnout. Burnout has been shown to reduce productivity and treatment quality, and ultimately increases the likelihood of (additional) physicians leaving. In this way, lengthy vacancies may lead to significant staffing problems and diminished care for patients.

In assessing impending physician shortages, administrators from responding institutions were in agreement that they expect substantial numbers of pediatric specialists to retire in the next five years. This finding is especially worrisome when coupled with recent data showing diminishing numbers of trainees entering many pediatric specialties, suggesting that physicians who leave in the coming years will not necessarily be replaced by new physicians. It is also important to note that respondents to this survey identified a wide range of affected specialties for retirement; thus, this problem must be addressed across many fields.

This survey described delays in access to care and associated issues from a systems perspective. That is, each respondent represented an organization comprised of many physicians, staff, and divisions. While this perspective is necessary for understanding how systems of care are currently being challenged, it does not provide an understanding of how patients and their families are affected. Patients whose care is managed by pediatric specialists often have serious chronic illnesses and sometimes life-threatening conditions. When that care is delayed, the consequences may be dire. Thus, further research is needed to better understand how extended wait times may impact the health, well-being, and resources of California’s pediatric patients and their caregivers.
References


