Delaware Health and Social Services
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Delaware's Children with Medical Complexity Advisory Committee 2019 Year End Summary

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Background

In 2017, the State of Delaware's Legislature, 149th Generally Assembly, instructed the Delaware Department of Health and Social Services (DHSS) to develop and publish a comprehensive plan for managing the health care needs of Delaware's children with medical complexity by May 15, 2018. Under guidance from Kara Odom Walker, MD, MPH, MSHS, Cabinet Secretary of DHSS, the Division of Medicaid and Medical Assistance (DMMA) came together with multiple community partners, sister divisions, parents, caregivers, and other advocates to develop a comprehensive plan for identifying and managing the health care needs of Delaware's children with medical complexity. This group, the Children with Medical Complexity (CMC) Steering Committee, used a comprehensive approach with a range of goals and strategies to clearly identify the population, assess access to services, evaluate models of care, and analyze the relationships between insurance payers. The planning process was designed to take a systemic approach, focusing on how the current health care system is providing for Delaware's children with medical complexity, identifying areas where improvement could be made, and suggesting some strategies to strengthen the system so that Delaware can adequately meet the needs of this vulnerable population. The CMC Steering Committee, along with five CMC work groups[1], met for approximately six months to identify areas for improvement and suggest strategies to strengthen the system in order to improve access to care for children with medical complexity.

Through this collaborative planning process, the CMC Steering Committee developed a series of recommendations that ultimately formed Delaware's Plan for Managing the Health Care Needs of Children with Medical Complexity (the Plan), published May 15, 2018. The full text of the Plan can be found on the DMMA CMC webpage: https://dhss.delaware.gov/dhss/dmma/children_with_medical_complexity.html.

In 2019, the work of the CMC Steering Committee was passed to a new group, the CMC Advisory Committee (CMCAC), which was charged with implementing the recommendations described in the Plan. Several members of the CMCAC were actively engaged in development of the Plan. Other members not previously involved were requested to join the CMCAC to fill gaps that were identified during the planning process.

Organizing the Work for 2019 and Developing 2019 Objectives

One of the first orders of business for the CMCAC was to establish the foundation upon which the work would be conducted. During the CMCAC's first meeting in January 2019, the CMCAC established its purpose: "to strengthen the system of care, increase collaboration across agencies, encourage community involvement, and ultimately ensure that every child with medical complexity has the opportunity to receive the adequate and appropriate health care services they need and deserve." In addition to approving a purpose statement, the CMCAC established the DMMA Director as its chairperson and outlined the membership seats on the Committee. This information was formalized in the CMCAC Charter, which was posted on the DMMA CMC webpage:

[1] The five workgroups were: Population Workgroup, Data Workgroup, Access Workgroup, Payers Workgroup, and the Models of Care Workgroup. The Population Workgroup was established to aid in the development of a Delaware specific definition for Children with Medical Complexity. Once the steering committee approved the definition, the Population Workgroup disbanded.

https://dhss.delaware.gov/dhss/dmma/children_with_medical_complexity.html.

The group also established guiding principles that describe the beliefs and philosophy pertaining to the work of the CMCAC. The guiding principles reflect a commitment to consensus-based decision-making, a model where all opinions, ideas, and concerns are taken into consideration, and, through listening closely to each other, the group aims to come up with proposals that work for everyone. The guiding principles can also be found on the DMMA CMC webpage.

In addition to establishing a charter and guiding principles, the CMCAC also identified its short-term priorities. The CMCAC Planning Sub-Committee was formed in October 2018 for the sole purpose of developing recommendations for short-term goals for the CMCAC to address in 2019. Taken from the Plan, these priorities reflect areas where progress was needed to set up the CMCAC for long-term success and to begin addressing key concerns identified during the planning process. The short-term priorities can also be found on the DMMA CMC webpage.

Of the short-term priorities, the following five were selected as the top objectives for 2019. The first four were considered the building blocks. The fifth priority was chosen as the majority of the CMCAC identified this as the greatest concern for the families of children with medical complexity.

1. Keep the Children with Medical Complexity Steering Committee in place.
2. Uniformly circulate the Delaware-Specific Definition of Children with Medical Complexity through DMMA and managed care organizations' (MCO) provider quarterly bulletins.
3. Develop a CMC webpage on the DMMA website with links to resources and information.
4. Perform a comprehensive data analysis as it relates to children with medical complexity.
5. Strengthen the network of skilled home health nursing providers for children with medical complexity.

The CMCAC established two stakeholder Workgroups to implement the 2019 objectives — the Skilled Home Health Nursing (SHHN) Workgroup and the Data Workgroup — comprised of CMCAC members and facilitated by DMMA. As 2019 progressed, the Workgroups added members as needed to ensure adequate representation of stakeholders on the issues that the Workgroups were addressing. Each Workgroup was assigned broad areas of responsibility within the 2019 objectives and was charged with developing and implementing an associated work plan to accomplish assigned tasks. The areas of responsibility for each Workgroup are described below.

Skilled Home Health Nursing (SHHN) Workgroup
• Evaluate provider capacity of Skilled Home Health Nurses providing Private Duty Nursing (PDN) services. • Review and make transparent the prior authorization and approval process for Private Duty Nursing. • Work with the MCOs and PDN home health agencies to expand provider capacity where needed. • Develop competency/family-centered care training for home health providers and office staff. • Develop a process to address the need for PDN services for children with medical complexity when parents/caregivers are presented with emergent situations and are unable to provide care.

Data Workgroup
• Identify Medicaid/CHIP universe of children with medical complexity. • Review gaps in SHHN utilization. • Review utilization data for clinical services (i.e., emergency department usage and length of inpatient stays). • Review utilization data related to other home health services. • Conduct family focus groups and survey. • Conduct a provider survey.

Throughout 2019, these Workgroups met biweekly to share updates, make decisions, plan for upcoming activities, and keep their work plans up to date. Each Workgroup also reported back to the CMCAC at their quarterly meetings. The quarterly meetings also provided the CMCAC with an opportunity to provide feedback and guidance to the Workgroups as they continued their work.

Summary of 2019 Objectives

The following section summarizes the progress made in 2019 towards the CMCAC's objectives.

1. Keep the Children with Medical Complexity Steering Committee in place.

The first recommendation made as a result of the Plan development was for DMMA to continue working with stakeholders to address the needs of the population of children with medical complexity. As a result, the CMCAC was developed. As discussed above, the CMCAC established its charter and guiding principles in early 2019. The group met quarterly throughout the year to review updates from the Workgroups and provide feedback, plan next steps, and hear presentations from parent members of the group. These meetings were open to the public; all meeting dates, times, and locations were posted on the State's public meeting calendar at https://publicmeetings.delaware.gov.

2. Uniformly circulate the Delaware Specific Definition of Children with Medical Complexity.

An initial priority was to communicate the Delaware-specific definition of CMC developed by the CMC Steering Committee during the planning process[2]. The purpose of publishing the definition was to help the CMC stakeholder community move towards a common definition for and understanding of the population addressed.

[2] Children with medical complexity are a subset of children and youth with special health care needs because of their extensive health care utilization. For the purpose of this work, a child is considered medically complex if she/he falls into two or more of the following categories:

- Having one or more chronic health condition(s) associated with significant morbidity or mortality;
- High risk or vulnerable populations with functional limitations impacting their ability to perform Activities of Daily Living (ADLs);
- Having high health care needs or utilization patterns, including requiring multiple (three or more) subspecialties, therapists, and/or surgeries;
- A continuous dependence on technology to overcome functional limitations and maintain a basic quality of life.

DMMA launched a dedicated webpage for CMC-related activities in early 2019 and the Delaware-specific definition of CMC was among the first materials to be published on the webpage. Additionally, the definition was distributed to the Medicaid MCO provider network via the MCOs' first quarter provider bulletins. DMMA also published the official definition in March 2019 in the DMAP Quarterly Provider Bulletin under the EPSDT Corner.

3. Develop CMC webpage on DMMA site with links to resources and information.

Another key element of establishing the CMCAC was to establish broad communication channels so that information and resources could be communicated widely to stakeholders across Delaware's CMC community, including parents and caregivers. The CMC webpage on the DMMA site was established to serve as a centralized source of information regarding the CMCAC activities, other related efforts in Delaware, and additional resources of interest.

The initial information added to the webpage in 2019 consisted of:

- CMCAC Charter and Guiding Principles.
- CMCAC Meeting Agendas and Minutes.
- Information on a National Academy for State Health Policy (NASHP) webinar that DMMA participated in regarding Children and Youth with Special Health Care Needs (CYSHCN).
- Information from an Alliance for Health Policy public briefing that DMMA participated in regarding the quality, affordability, and accessibility of care for children with complex medical needs.

In 2020, the CMCAC will continue to identify information and resources to post to the webpage in 2020.

4. Perform a comprehensive data analysis as it relates to children with medical complexity.

During development of the Plan, it became evident early in the process that there would not be enough time to perform an in-depth analysis of the population of children with medical complexity from a demographic or service utilization perspective. The data needed to perform a quantitative analysis is very detailed and complex and would take more time and resources than what was available during the planning process.

In 2019, the Data Workgroup continued the work of the CMC Steering Committee in the area of data analysis. The Workgroup first met on February 26, 2019 and developed a work plan that identified six major tasks, described below.

Task 1. Identify Medicaid/CHIP population of children with medical complexity.

The Workgroup first turned to identifying the Medicaid/CHIP population of children with medical complexity in the state of Delaware. Using the Delaware-specific definition of CMC developed by the CMC Steering Committee (see previous page), the Workgroup identified data sources and query methods to estimate the total population of Medicaid and CHIP children with medical complexity in Delaware.

The analysis involved using claims data from calendar year 2017 and applying the logic found in Clinical Risk

Groups (CRGs), a population classification system that uses inpatient and ambulatory diagnosis and procedure codes, pharmaceutical data and functional health status to assign each individual to a single, severity-adjusted group. The CRG analysis allowed the Workgroup to identify and describe the health status and burden of illness in the population and identify medically complex individuals.

Of the CRG health status groups ranging from 1 (health individuals) to 9 (individuals with catastrophic conditions), the Workgroup selected CRG health status groups 5b, 6, 7, 8 and 9 as representing children with medical complexity. The choice to use these health status groups, in addition to the definition that was developed by the CMC Steering Committee, was to align with the Children's Hospital Association's identification of children with medical complexity[3]. Additional details on these health status groups are provided below.

CRG Health Status Group	Description
5b	Single Dominant Chronic Disease, such as Sickle Cell Disease or Congenital Heart Disease
6	Significant chronic disease in multiple organ systems
7	Dominant chronic disease in 3 or more organ systems
8	Malignancies requiring active treatment
9	Catastrophic condition status

The results of this work were presented to the CMCAC at their April 17, 2019 meeting, and can be found on the DMMA CMC webpage.

In summary, in calendar year 2017, of a total Medicaid and CHIP population of 112,184 children, there were 4,322 Medicaid children with medical complexity (3.85% of the Medicaid pediatric population).

On October 16, 2019, the Data Workgroup presented the results of an initial trend analysis of the CMC population that tracked demographic changes in the population between calendar years 2014 and 2017. For the purposes of this analysis, the Data Workgroup did not include CRG 8 (i.e., children with malignancies requiring active treatment) in the CMC group. In certain analyses, the count of individuals in this group is below the threshold allowed for public distribution per data privacy guidelines.

The high-level results of the demographic analysis are available on the Delaware CMC webpage. Additionally, the Workgroup has included more detailed demographic information in the appendix to this report.

Task 2. Review utilization data for clinical services.

The Data Workgroup also undertook an analysis of utilization data in 2019 to better understand how the CMC population was using key clinical services. The Workgroup determined an initial interest in focusing on emergency department visits and inpatient hospital stays. The results of this initial analysis were presented to the CMCAC at their July 17, 2019 meeting. The Workgroup found that children with medical complexity were more likely to have an emergency department visit and a hospital admission than children without medical complexity. Once admitted, the average length of stay for children with medical complexity was longer than

[3] https://www.childrenshospitals.org/-/media/Files/CHA/Main/Issues_and_Advocacy/Key_Issues/Children_With_Medical_Complexity/Fact_Sheets/Defining_Children_With_Medical_Complexities_100113.pdf

the general pediatric population. As with the demographic analyses described above, children in CRG 8 were suppressed from these utilization analyses due to low counts of individuals in this group. The Workgroup has included some analysis of emergency department visit and inpatient utilization data in the appendix to this report.

Task 3. Review utilization data related to other home services.

Due to other competing Workgroup priorities, this task was postponed during 2019. The Data Workgroup will continue this analysis in 2020, with a potential focus on services such as primary care visits, pediatric specialist visits, therapy visits, etc. This task will correlate with the work of other workgroups' initiatives throughout 2020.

Task 4. Review gaps in SHHN utilization.

To support the broader work of the CMCAC, and the activities of the SHHN Workgroup, in 2019 the Data Workgroup conducted an initial data analysis of potential service gaps in SHHN. In order to perform the analysis, the Data Workgroup requested data from the Medicaid MCOs on approved and covered PDN hours in Calendar Year 2018 for children with medical complexity, as well as any gaps in coverage. A gap in coverage was defined as hours that were authorized by the child's MCO but not covered by a PDN provider. The MCOs provided their data and the Data Workgroup worked with the MCOs to perform an analysis of the information. The Data Workgroup expects that this analysis will be completed for presentation to the CMCAC in 2020. The results of the analysis will help to inform the work of the SHHN Workgroup, described in the next section.

Task 5. Conduct family focus groups and survey.

While the State of Delaware had done substantial work to document barriers and challenges in accessing care through the development of the Plan, the CMCAC felt it important to conduct additional research into families' needs for and perceptions of services and access to services. In 2019, the Data Workgroup began efforts to conduct CMC family focus groups and a survey. The goal of the family focus groups and survey is to engage a broad range of families with children with medical complexity to better understand their experiences with accessing and receiving care and supports for their children. In 2019, Vital Research was identified to develop and conduct the family focus groups and survey. An application for the project was submitted to Delaware's Human Subject Review Board. Once approval for the project is granted, Vital Research will move forward with plans to conduct the focus groups, which will inform the final development of the family survey, to be distributed to families in 2020. The results of the focus groups and survey will be analyzed and presented to DMMA and the CMCAC to inform the direction of future CMCAC efforts to address gaps in care and improve the member and family experience.

Task 6. Conduct a provider survey.

In 2019, the Data Workgroup also identified the development of a provider survey as a priority task. The purpose of the provider survey is to better understand resources for providers caring for the CMC population, and to assess areas where additional resources and training may be needed. In 2020, the Data Workgroup anticipates continuing work to develop and implement the provider survey, the results of which will be presented to the CMCAC and, like the family focus groups and survey, will also inform future CMCAC work.

5. Strengthen the network of skilled home health nursing providers for children with medical complexity.

During the development of the Plan, a consistent concern surrounding the availability of adequate SHHN providers was apparent. Therefore, the CMCAC decided to make strengthening the network of home health providers, specifically skilled home health nurses that provide PDN services, one of its top priorities. As a result, the SHHN Workgroup was convened and held its first meeting on February 25, 2019. In order to guide this group's work, the first item the SHHN Workgroup developed was a work plan to complete five high level tasks, each consisting of multiple steps and associated goals for dates of completion. These are outlined below.

Task 1. Evaluate provider capacity of Skilled Home Health Nurses providing Private Duty Nursing services.

The Workgroup began the evaluation by compiling background and research specific to issues and challenges affecting SHHN workforce capacity. As a result, it was determined that the evaluation should focus on PDN services. Based on the research, the group developed a study framework and design for a PDN workforce capacity study. DMMA arranged for the University of Delaware's Center for Disability Studies and Center for Research in Education and Social Policy to conduct the PDN workforce capacity study. The scope of work and project timeline are under development; work is expected to begin no later than mid-2020.

As mentioned above, the Data Workgroup worked collaboratively with DMMA's MCOs in 2019 to gather information and begin an analysis on gaps in PDN services authorized versus provided to children in the Medicaid and CHIP programs during calendar year 2018, so as to identify strategies and develop a plan to minimize gaps in PDN care. The next steps for this work, anticipated for 2020, include completing the PDN workforce capacity study and analyzing the PDN gaps in care results. These results, in conjunction with the results of the family focus groups and surveys and the PDN Workforce Capacity Study, will be used to develop recommendations for action by the CMCAC.

Task 2. Review and make transparent the prior authorization and approval process for Private Duty Nursing.

Throughout the development of Delaware's Plan for Managing the Health Care Needs of Children with Medical Complexity, a recurrent theme surrounding confusion and frustration with the prior authorization process for various services was identified. As a result, the CMC Steering Committee made the recommendation to review and possibly revise the prior authorization process for a variety of services. In 2019, the SHHN Workgroup reviewed the PDN prior authorization process of each MCO and obtained information from the local children's hospitals and PDN home health agencies regarding their roles in the PDN prior authorization process. The Workgroup also reviewed DMMA's Private Duty Nursing Manual, with a focus on prior authorization, to streamline and revise the language as appropriate. As a result of this process, the MCOs have also made some revisions to their processes and provided training to providers. The MCOs continue to work collaboratively with the SHHN Workgroup to make additional revisions in processes and identify areas in which communication and training can be delivered to providers as needed and where appropriate.

In addition, the SHHN Workgroup completed a review of home health agency regulations and provided feedback for revisions.

The next steps include developing a toolkit for navigating the PDN prior authorization process with materials for

parents and caregivers to be made available to parents, caregivers, providers, and MCOs. This will be posted on DMMA's CMC webpage as a resource for all.

Task 3. Work with the Managed Care Organizations (MCOs) and PDN home health agencies to expand provider capacity where needed.

Many of the SHHN Workgroup and Data Workgroup's activities in 2019 are geared towards ultimately expanding provider capacity in the area of SHHN. In 2019, the Workgroups started foundational work such as the PDN workforce capacity study and the PDN gaps in care analysis, among other activities. DMMA will use the results of this work, which will be available in 2020, to continue to work collaboratively with key stakeholders including MCOs, the provider community, and the Delaware Association of Home and Community Care (DAHCC) to develop a plan to expand provider capacity where needed.

Task 4. Develop competency/family-centered care training for home health providers and office staff.

In 2019, the SHHN Workgroup started working with Family Voices to develop competency/family-centered training materials for providers. This work is anticipated to be completed in 2020. Once the curriculum is completed, the next step is to develop a plan for disseminating the training, as well as a plan to ensure material remain relevant and continue to be shared as the workforce evolves.

Additional training efforts will be informed by results of the family focus groups and surveys. The anticipated 2020 provider survey will also inform potential areas for additional provider training.

Task 5. Develop a process to address the need for PDN services for children with medical complexity when parents/caregivers are presented with emergent situations and are unable to provide care.

In 2019, the SHHN Workgroup developed a Private Duty Nursing Emergent Care Decision Tree with extensive family input, as well as input from MCOs, PDN home health agencies, and other providers. The Decision Tree was presented to the CMCAC for review and/or consensus at the October 16, 2019 meeting. Next steps include presenting the final version of the Decision Tree to the CMCAC for consensus at the January 15, 2020 meeting, and placing the Decision Tree on DMMA's CMC webpage as part of the PDN prior authorization toolkit.

Overview of 2020 Priorities

As detailed above, the CMCAC made great progress in 2019 towards achieving the short-term priorities drawn from Delaware's Plan for Managing the Health Care Needs of Children with Medical Complexity. The 2019 activities helped to solidify the future work of the CMCAC and provide a foundation of data and information upon which additional efforts will be built. The 2019 activities also brought focus on areas identified by parents and families during the planning process, and yielded resources and information to help ensure that every child with medical complexity can receive the adequate and appropriate health care services they need and deserve.

In 2020, the CMCAC and its Workgroups anticipate continued progress on the objectives identified in 2019. Carryover tasks include completing data analyses and surveys, developing parent, caregiver and provider resources, continuing to work to expand provider capacity, and continuing to post relevant materials and resources on the DMMA CMC webpage. These items will be presented to the CMCAC for review and, if endorsed,

the Workgroups will update their work plans to account for completion of the work. As these objectives are completed, the CMCAC will reevaluate the ability to take on additional priorities and will identify resources as needed to continue implementing recommendations from the 2018 Plan for Managing the Health Care Needs of Children with Medical Complexity.

CMC Data Appendix

Background

To inform the recommendations of the Advisory Committee and its workgroups, the Data Workgroup undertook in 2019 a comprehensive data analysis as it relates to children with medical complexity. As outlined previously in this report, the Medicaid/CHIP population of children with medical complexity in the State of Delaware was identified from Medicaid claims data from calendar year 2014 to 2017. To identify children with medical complexity, DMMA used logic found in Clinical Risk Groups (CRGs), a population classification system that uses inpatient and ambulatory diagnosis and procedure codes, pharmaceutical data and functional health status to assign each individual to a single, severity-adjusted group.

The CRG analysis allowed the Workgroup to identify and describe the health status and burden of illness in the population and identify medically complex individuals. Of the CRG health status groups ranging from 1 (healthy individuals) to 9 (individuals with catastrophic conditions), the Workgroup selected CRG health status groups 5b, 6, 7, 8, and 9 to represent children with medical complexity. However, as described in the data analysis caveats below, for the purposes of the demographic and utilization analyses described in this appendix, children in CRG 8 (children with malignancies requiring active treatment) were removed from the CMC population due to low data counts. Children in CRG health status groups 1-5a are referred to as the non-CMC pediatric population.

In addition to reviewing Medicaid claims, DMMA also pulled information (i.e., age, race, language, and county of residence) from Delaware's Assist Worker Web (AWW) system to inform a demographic analysis of the population. DMMA also undertook a utilization analysis based on Medicaid claims data to look at emergency department visits, inpatient admissions, and length of inpatient stays.

The information in the appendix presents the results of this analysis.

Data Analysis Caveats

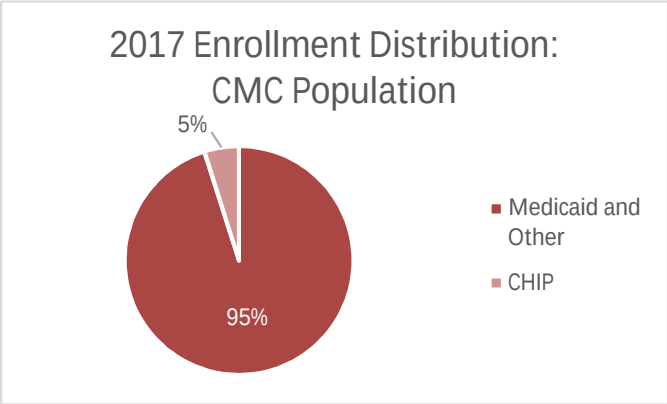
Due to data privacy regulations, DMMA does not release information in cases where counts of individuals are less than 10. Therefore, DMMA took measures in the analysis to combine data elements into broader categories where needed to comply with these regulations. For example, due to low data counts, individuals in CRG 8 were not included in the demographic or utilization analysis.

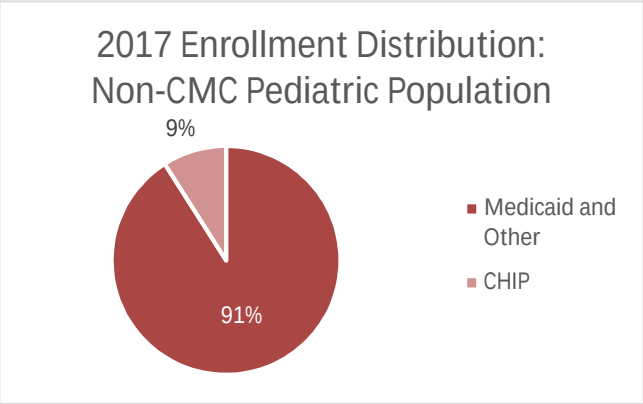
The data presented in this appendix are intended to describe the population from a high-level quantitative perspective. Due to small counts of individuals in several categories of the analysis, the data are not adequate for more sophisticated statistical testing. Therefore, DMMA is not offering any interpretation of these results in terms of causes or correlations.

Enrollment

	2017					2016					2015					2014				
	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All
Medicaid and Other[4]	98,159	1,041	3,031	4,072	102,231	100,006	1,070	2,949	4,019	104,025	99,679	971	2,626	3,597	103,276	100,821	874	2,439	3,313	104,134
CHIP	9,743	63	147	210	9,953	9,494	61	138	199	9,693	8,938	54	116	170	9,108	6,828	37	85	122	6,950
Total	107,902	1,104	3,178	4,282	112,184	109,500	1,131	3,087	4,218	113,718	108,617	1,025	2,742	3,767	112,384	107,649	911	2,524	3,435	111,084

In 2017, the distribution of Medicaid and Other eligibility categories versus CHIP was similar between children in the CMC population and children in the non-CMC pediatric population. There was a slightly higher percentage of children in the CMC population on CHIP than in the non-CMC pediatric population. We found a similar trend in previous calendar years.



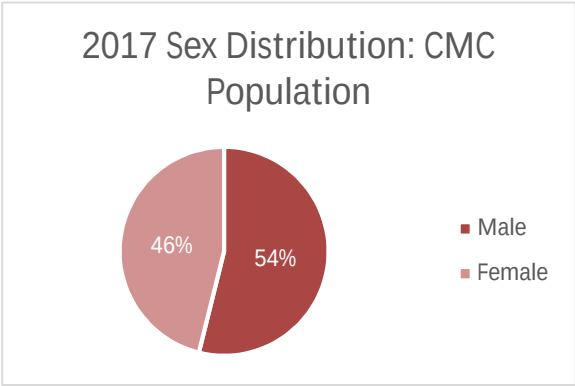


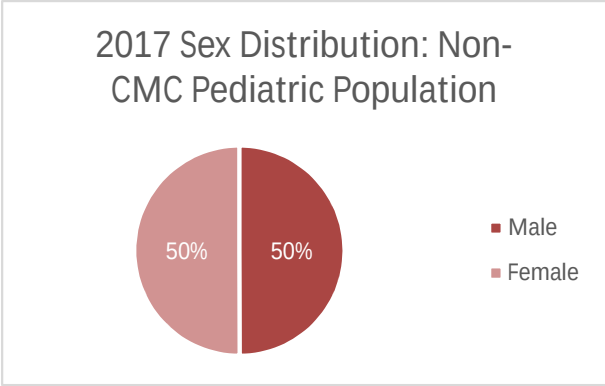
[4] This category includes children who are dually eligible for Medicaid and Medicare, in addition to other Medicaid eligibility categories.

Sex

	2017					2016					2015					2014				
	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All
Male	53,920	573	1,735	2,308	56,228	54,575	584	1,748	2,332	56,907	54,137	546	1,534	2,080	56,217	53,682	485	1,393	1,878	55,560
Female	53,982	531	1,443	1,974	55,956	54,925	547	1,339	1,886	56,811	54,480	479	1,208	1,687	56,167	53,967	426	1,131	1,557	55,524
Total	107,902	1,104	3,178	4,282	112,184	109,500	1,131	3,087	4,218	113,718	108,617	1,025	2,742	3,767	112,384	107,649	911	2,524	3,435	111,084

In reviewing the 2017 data, we found that there are slightly more males than females in the CMC population (54% versus 46%) than in the non-CMC pediatric population, which was more evenly distributed. We found a similar trend in previous calendar years.

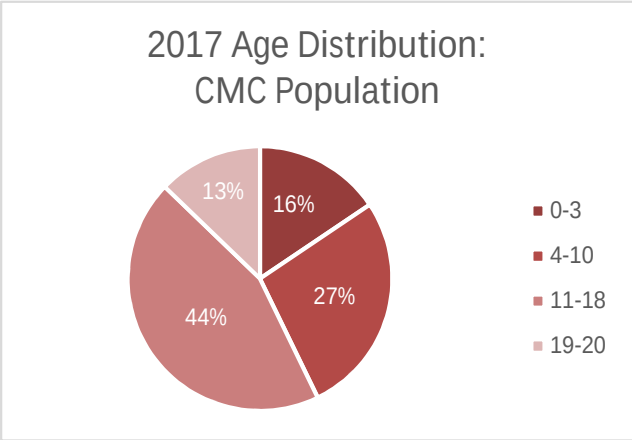


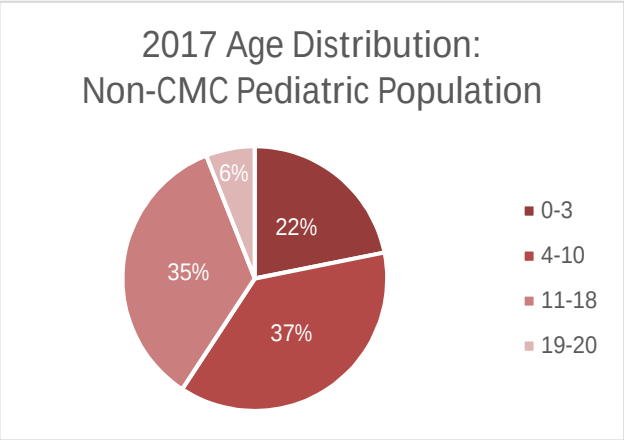


Age

	2017					2016					2015					2014				
	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All
0-3	23,569	183	484	667	24,236	23,759	210	505	715	24,474	23,785	184	374	558	24,343	24,157	173	368	541	24,698
4-10	40,379	240	926	1,166	41,545	41,379	235	931	1,166	42,545	41,532	213	857	1,070	42,602	41,105	185	794	979	42,084
11-18	37,492	522	1,379	1,901	39,393	37,732	521	1,328	1,849	39,581	36,775	457	1,192	1,649	38,424	35,649	403	1,073	1,476	37,125
19-20	6,462	159	389	548	7,010	6,630	165	323	488	7,118	6,525	171	319	490	7,015	6,738	150	289	439	7,177
Total	107,902	1,104	3,178	4,282	112,184	109,500	1,131	3,087	4,218	113,718	108,617	1,025	2,742	3,767	112,384	107,649	911	2,524	3,435	111,084

In 2017, the age distribution among children in the CMC population was different from the age distribution of children in the non-CMC pediatric population. Overall, children in the CMC population were a little older. The largest age group among the CMC population was children aged 11 through 18; whereas the largest age group among the non-CMC pediatric population was children aged 4-10. We found a similar trend in previous calendar years.

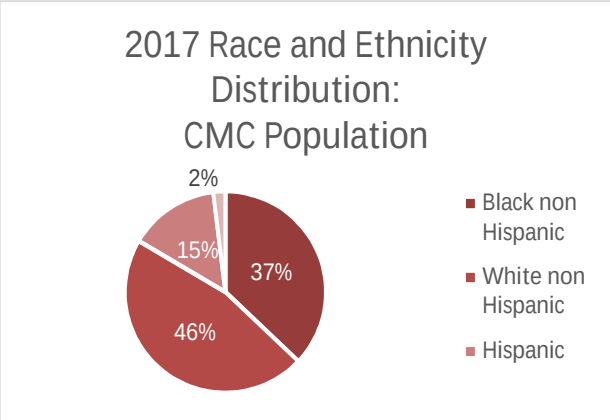


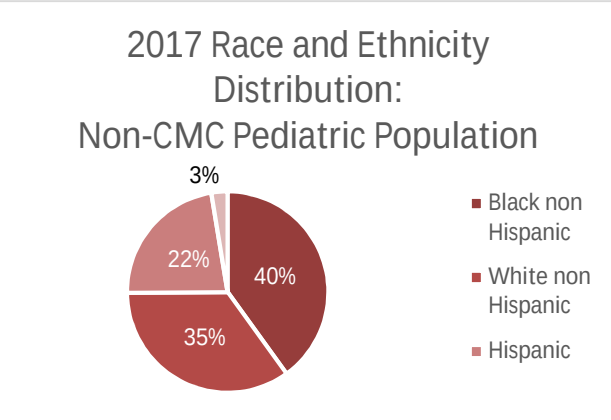


Race and Ethnicity

	2017					2016					2015					2014				
	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All
Black (not Hispanic)	43,214	415	1,173	1,588	44,802	44,062	432	1,117	1,549	45,611	43,750	368	1,048	1,416	45,166	43,686	304	926	1,230	44,916
White (not Hispanic)	37,558	533	1,454	1,987	39,545	38,683	539	1,394	1,933	40,616	38,904	506	1,254	1,760	40,664	38,984	476	1,155	1,631	40,615
Hispanic	24,332	134	490	624	24,956	23,907	138	519	657	24,564	23,189	135	397	532	23,721	22,392	115	400	515	22,907
Other[5]	2,798	22	61	83	2,881	2,848	22	57	79	2,927	2,774	16	43	59	2,833	2,587	16	43	59	2,646
Total	107,902	1,104	3,178	4,282	112,184	109,500	1,131	3,087	4,218	113,718	108,617	1,025	2,742	3,767	112,384	107,649	911	2,524	3,435	111,084

In 2017, the racial and ethnic distribution of children in the CMC population was slightly different from the non-CMC pediatric population. 54% of the CMC population was non-white (i.e., black, Hispanic or other) versus 65% of the non-CMC pediatric population. We found a similar trend in previous calendar years.



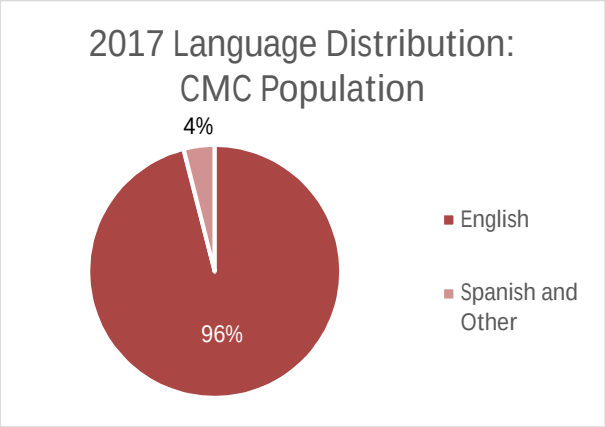


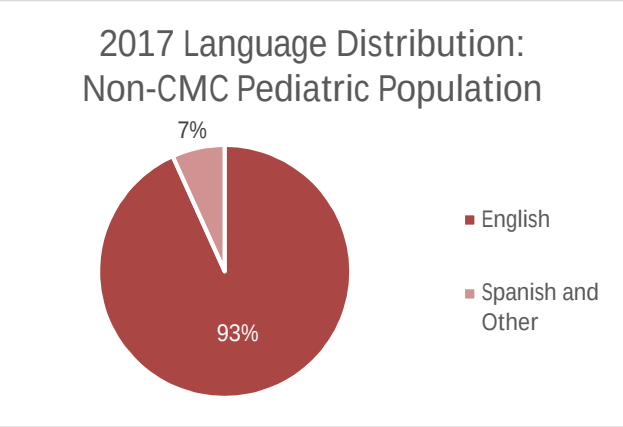
[5] "Other" includes multiple racial and ethnic groups.

Language

	2017					2016					2015					2014				
	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All
English	100,622	1,080	3,032	4,112	104,734	102,377	1,089	2,944	4,033	106,410	101,698	994	2,625	3,619	105,317	100,862	881	2,414	3,295	104,157
Spanish and Other	7,280	24	146	170	7,450	7,123	42	143	185	7,308	6,919	31	117	148	7,067	6,787	30	110	140	6,927
Total	107,902	1,104	3,178	4,282	112,184	109,500	1,131	3,087	4,218	113,718	108,617	1,025	2,742	3,767	112,384	107,649	911	2,524	3,435	111,084

Language refers to the primary language that a member or their family selects upon Medicaid enrollment. In 2017, English was the most common language among both children in the CMC population and the non-CMC pediatric population. In both populations, Spanish was the second most common language after English. We found a similar trend in previous calendar years.

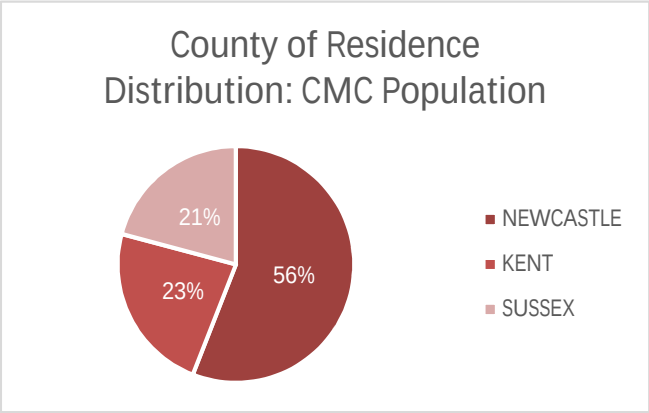


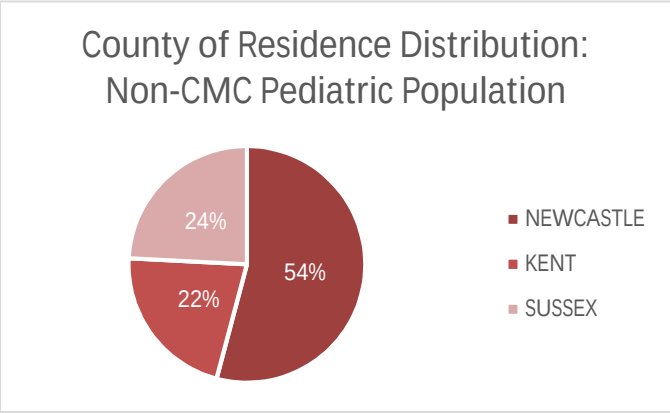


County of Residence

	2017				
	1-5a	5b	6, 7 & 9	Total CMC	Total All
New Castle	58,300	553	1,840	2,393	60,693
Kent	23,344	305	687	992	24,336
Sussex	26,063	244	648	892	26,955
Total[6]	107,707	1,102	3,175	4,277	111,984

In 2017, the distribution of county of residence among the CMC population was similar to the distribution among the non-CMC pediatric population. Slightly more than half of children lived in New Castle County. We did not review county of residence data for previous calendar years.



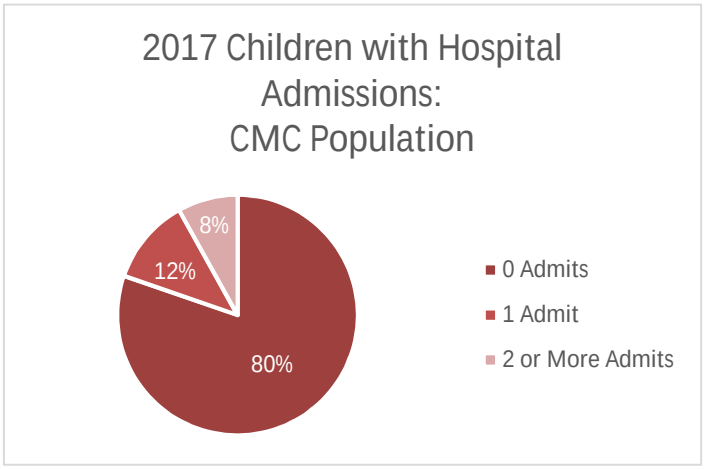


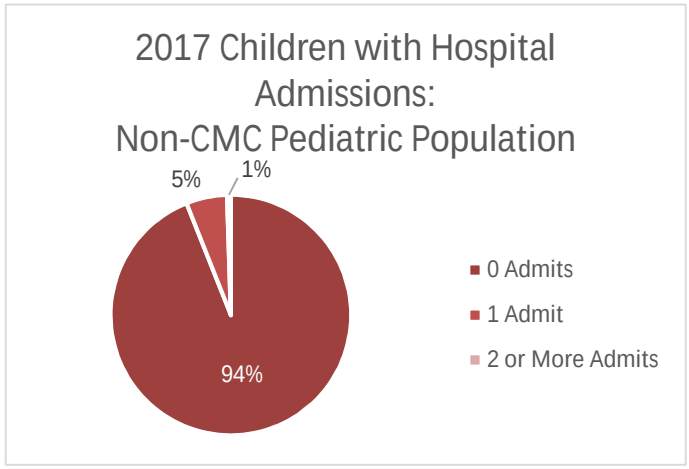
[6] Totals for county of residence do not match totals reported in other tables in this Appendix due to incomplete client address information for some individuals.

Children with Hospital Admissions

	2017					2016					2015					2014				
	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All
Children with 0 Admissions	101,443	793	2,645	3,438	104,881	102,009	799	2,174	2,973	104,982	101,234	734	2,020	2,754	103,988	100,519	665	1,860	2,525	103,044
Children with 1 Admission	5,912	197	301	498	6,410	6,877	223	555	778	7,655	6,828	204	442	646	7,474	6,624	164	391	555	7,179
Children with 2 or More Admissions	547	114	232	346	893	614	109	358	467	1,081	555	87	280	367	922	506	82	273	355	861
Total	107,902	1,104	3,178	4,282	112,184	109,500	1,131	3,087	4,218	113,718	108,617	1,025	2,742	3,767	112,384	107,649	911	2,524	3,435	111,084

In 2017, more children in the CMC population were admitted to the hospital than children in the non-CMC pediatric population. 20% of children in the CMC population were admitted to the hospital at least once in 2017, compared with 6% of non-CMC children. We found a similar trend in previous calendar years.

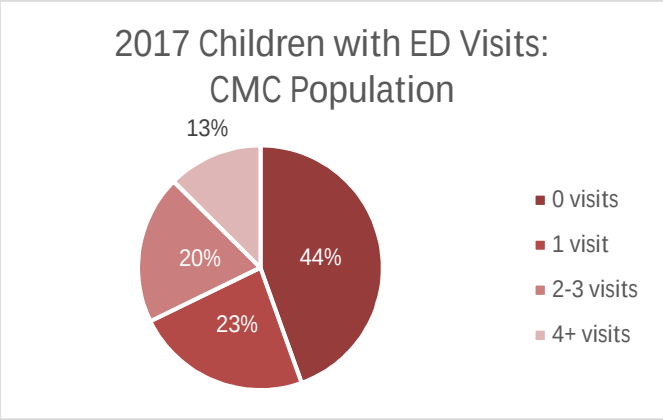


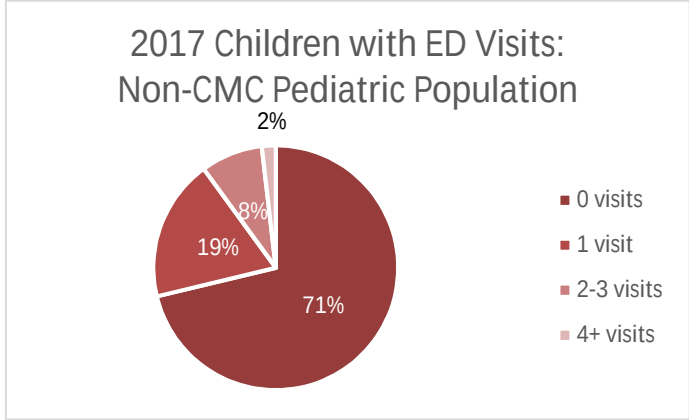


Children with Emergency Department Visits

	2017					2016					2015					2014				
	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All
Children with 0 Visits	76,855	488	1,419	1,907	78,762	76,059	479	1,276	1,755	77,814	75,140	52	1,082	1,134	76,274	74,312	367	972	1,339	75,651
Children with 1 Visit	20,220	289	707	996	21,216	21,095	264	674	938	22,033	21,298	275	639	914	22,212	21,329	226	603	829	22,158
Children with 2-3 Visits	8,834	212	630	842	9,676	9,995	247	692	939	10,934	9,891	594	652	1,246	11,137	9,783	213	570	783	10,566
Children with 4 or More Visits	1,993	115	422	537	2,530	2,351	141	445	586	2,937	2,288	104	369	473	2,761	2,225	105	379	484	2,709
Total	107,902	1,104	3,178	4,282	112,184	109,500	1,131	3,087	4,218	113,718	108,617	1,025	2,742	3,767	112,384	107,649	911	2,524	3,435	111,084

In 2017, more children in the CMC population had visits to the emergency department (ED) than children in the non-CMC pediatric population. 56% of children in the CMC population had at least one visit to the ED, compared with 29% of the non-CMC pediatric population.

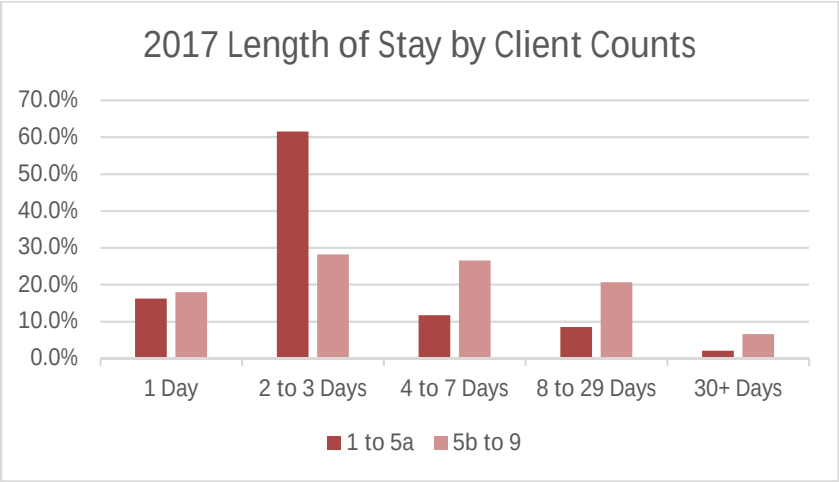




Hospital Inpatient Length of Stay[7]

	2017					2016					2015					2014				
	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All	1-5a	5b	6, 7 & 9	Total CMC	Total All
Children with Visits Lasting 1 Day	1,123	62	147	209	1,332	1,310	85	284	369	1,679	1,194	60	207	267	1,461	910	42	164	206	1,116
Children with Visits Lasting 2-3 Days	4,252	105	224	329	4,581	5,029	109	367	476	5,505	5,193	127	318	445	5,638	5,198	96	332	428	5,626
Children with Visits Lasting 4 to 7 Days	812	112	198	310	1,122	874	111	305	416	1,290	815	85	238	323	1,138	783	87	213	300	1,083
Children with Visits Lasting 8 to 29 Days	585	92	149	241	826	555	94	226	320	875	444	70	168	238	682	408	65	154	219	627
Children with Visits Lasting 30+ Days	141	29	48	77	218	130	20	103	123	253	121	12	68	80	201	132	17	60	77	209
Total	6,913	400	766	1,166	8,079	7,898	419	1,285	1,704	9,602	7,767	354	999	1,353	9,120	7,431	307	923	1,230	8,661

DMMA reviewed length of inpatient hospital stays in 2017 among children in the CMC population and non-CMC population. Of children in the CMC population who had an inpatient hospital stay in 2017, 54% had a stay that lasted 4 days or longer, compared with 22% of children in the non-CMC pediatric population. Hospital stays of 30 or more days were rare among children in the CMC and the non-CMC pediatric population.



[7] The totals include duplicates because children had more than one inpatient hospital stay during any given year.