COMMUNICATION AND SWALLOWING DISORDERS IN CHILDREN: BUDGET AND POLICY IMPLICATIONS FOR STATE MEDICAID AGENCIES

A Dissertation

by

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Submitted to the Office of Graduate and Professional Studies of Texas A&M University in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

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May 2018

Major Subject: Health Services Research

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ABSTRACT

Increasing enrollment in state Medicaid programs combined with a significant increase in the prevalence of pediatric communication and swallowing disorders over the past decade will challenge state Medicaid budgets. This research identifies payment and policy trends related to the provision of pediatric speech therapy services across state Medicaid programs and proposes alternative payment models for the provision of services.

Fee-for-service payment rates for 2017 were evaluated to determine overall patterns of Medicaid reimbursement in the United States (U.S.). Descriptive statics were calculated to determine the mean and median national Medicaid published rates. These rates were compared to the 2017 Medicare fee schedule and publicly available private market fee data to assess their adequacy. The accompanying therapy policies were also analyzed to identify trends across state Medicaid agencies related to qualified provider provisions, prior authorization requirements, benefit limits, and telepractice. Additionally, pediatric speech-language pathologists were surveyed to identify their perceptions of clinical and administrative quality. The cost data identified was combined with provider perceptions of quality to propose alternative payment models that could be used instead of the fixed, fee-for-service payment model.

An analysis of published payment rates with the comparison programs revealed that Medicaid payments for individual treatment services were 30% less, on average, than comparable Medicare or commercial rates. Texas Medicaid payment rates were significantly higher than those paid by other state Medicaid agencies, strongly suggesting that policymakers should consider cost containment action. An analysis of the related therapy policies showed that most states have established parameters related to qualified providers requirements, have

developed language regarding benefits limits, and require referrals and prior authorization before the initiation of services. Further, pediatric speech-language pathologists placed greater emphasis on measures of clinical quality than on measures of administrative quality, providing a framework for the development of alternative payment models.

The use of episodic payments and top performing provider designations for claims payments is a promising option to potentially reduce the incentive Texas Medicaid providers currently have to prescribe more health care services than are necessary and can also reduce variations in payments to providers resulting in a cost savings for state Medicaid agencies.

ACKNOWLEDGEMENTS

I would like to thank my committee chair, Dr. Morrisey, and my committee members, Dr. Radcliff, Dr. Ohsfeldt, and Dr. Bullock. I would also like to thank Dr. DeRuiter for his willingness to serve as an external advisor to my committee. This work would not have been possible without their guidance and support throughout the course of this research. I am particularly grateful they allowed me to pursue a research topic that I am deeply passionate about and that I was given the flexibility to think outside the box throughout this experience.

Thanks also go to my friends and colleagues and the department faculty and staff for making my time at Texas A&M University a great experience. I have made both professional and personal friendships that I will carry forward for the course of my career. I am looking forward to collaborating together on future projects.

Finally, nobody has been more important to me in the pursuit of this project than my family members. I would like to thank my parents and in-laws whose love and guidance are with me in whatever I pursue. They are an endless source of encouragement. Not to mention, they spent countless hours helping with my son so that I could continue to pursue this dissertation. I want to thank my sister-in-law Amy, as well as other members of my staff, who took on extra responsibilities at my office when I needed to be away from class. Most importantly, I wish to thank my husband, David, for his relentless love and support. He was a constant source of motivation. He pushed me to keep going after the birth of our son and played the role of both mom and dad more times than I will ever be able to count. Despite the sacrifices he made so I could pursue and finish my PhD, he was and will always be my biggest cheerleader. I will be forever grateful to him and my family.

CONTRIBUTORS AND FUNDING SOURCES

This work was supervised by a dissertation committee consisting of Professor Morrisey, advisor, and Professors Radcliff and Ohsfeldt of the Department of Health Policy and Management and Professor Bullock of the Public Service and Administration Department. All work for the dissertation was completed independently by the student without outside financial support.

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CHAPTER I

INTRODUCTION

Overview

The percentage of uninsured children in the United States is at an historic low. The Georgetown University Center for Children and Families (2017) estimates that the uninsured rate among all children dropped from 7.1% in 2013 to 4.8% in 2016. The recent increase in coverage can be attributed to numerous initiatives including the expansion of the Medicaid and the Children's Health Insurance Program, the availability of subsidies offered through the Affordable Care Act's Marketplace, the streamlining of enrollment processes, and focused outreach and enrollment projects (Kaiser Family Foundation, 2017). Currently, more than 45 million children are insured through the Medicaid and Children's Health Insurance Program with Medicaid serving as the primary source of insurance for low-income children (Center for Children and Families, 2016; Kaiser Family Foundation, 2017; Rosenbaum and Wise, 2007).

The current fee-for-service reimbursement model used by state Medicaid agencies is not sustainable on a long-term basis. Federally mandated Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) requirements related to the provision of treatment services and a two-fold increase in the prevalence of communication disorders over the past decade will stretch state Medicaid budgets beyond their capacity with respect to the provision of pediatric speech therapy services. We have already seen evidence of this in the Social Security Administration's Supplemental Security Income program (SSI). Over the past decade, the program has seen the number of children qualifying for benefits based on the presence of a severe speech and language delay increase three-fold (National Academies of Sciences, Engineering, and Medicine, 2016).

Significance

Increasing enrollment in state Medicaid programs combined with a significant increase in the prevalence of pediatric communication and swallowing disorders over the past decade will challenge state Medicaid budgets (Houtrow, Larson, Olson, Newacheck, & Halfon, 2014)., 2014). This will also force state Medicaid agencies to rethink traditional service delivery models as they relate to the provision of pediatric speech therapy services. The goal of this research is to identify measures of clinical and administrative quality that pediatrics speech-language pathologists value in their everyday practice and to propose alternative service delivery and payment models for the provision of pediatric speech therapy services in state Medicaid programs.

There is a significant need for research in this area as it relates to the provision of speech therapy services due to increasing utilization rates and escalating costs to state Medicaid programs. To date, no study has been completed that takes a comprehensive look at payments rates for pediatric speech therapy services paid by state Medicaid agencies. When evaluating payment rates, prior studies have considered only a smaller number of states resulting in providers expressing concern about the accuracy of those studies. The Kaiser Family Foundation undertook an examination of the availability of speech therapy benefits in state Medicaid programs in 2012 that included children and adults, but there is not a more recent study available. Having knowledge of the payment trends in state Medicaid programs related to the provision of pediatric speech therapy services and finding commonalities among states concerning the availability of the benefit is essential to reshaping payer policy moving forward, especially as the prevalence of pediatric communication disorders increases. It is unlikely that state Medicaid agencies can continue to fund pediatric speech therapy services at the same level

and intensity as they have done in the past unless they overhaul the payment mechanisms used to reimburse speech-language pathologists.

This research fills a void in the literature. No prior studies have evaluated the feasibility of nor proposed using alternative payment models to pay claims related to the provision of pediatric speech therapy services. The hope is that this research provides some mechanism whereby state Medicaid agencies can reduce claims expenditures for pediatric speech therapy without compromising the quality of care provided or reducing access to care.

Specific Aims

The research addressed three aims. First, this research examined trends in payment and policy related to the provision of pediatric speech therapy services in state Medicaid programs. Included as part of this analysis, the researcher looked in-depth at speech therapy services provided by through the Texas Medicaid program as there has been significant legislative and legal activity centered around payment rates to therapy providers. Second, the study identified measures of administrative and clinical quality that speech therapy providers deem most important in their everyday practice. Understanding provider perceptions of administrative and clinical quality are essential should policymakers and insurers wish to adopt alternative payment models as a mechanism to improve quality and control costs. Finally, the research proposes alternative payment models that could be used instead of fee-for-service payment models for claims paid to pediatric speech therapy providers.

Aim 1: Texas Medicaid

Spending on pediatric speech therapy services in the Texas Medicaid program increased from \$412 million in fiscal year 2009 to \$699 million in fiscal year 2014. This increase has caused policymakers and lawmakers to express concern about the rate of increase and question

whether payment rates to providers are consistent with those paid in other programs (Texas Health and Human Services Commission Strategic Decision Support Unit, 2015). This aim addresses those concerns. First, the research identified basic descriptive statistics related to published payment rates for the most commonly used current procedural terminology (CPT®) codes associated with the provision of pediatric speech therapy services in state Medicaid programs. This aim also identified trends across state Medicaid programs concerning the availability of speech therapy benefits and prior authorization processes. Specific to Texas, the research investigated whether utilization rates for pediatric acute care speech therapy services within the Medicaid program are stable and consistent with reported rates on the estimate of childhood disability. Additionally, the research compared published payment rates for speech therapy services provided in the Texas Medicaid program to published payment rates in comparison programs for the most commonly used procedure codes. It is hypothesized that published payments rates for speech therapy services in the Texas Medicaid program are higher than the published payment rates in the comparison programs for the most commonly billed procedure codes. Finally, the research identified the cost savings achievable if the Texas HHSC were to implement provider billing practices and payment rates consistent with those paid in the identified comparison programs based on current utilization rates and enrollment numbers.

Hypothesis 1: Published payments rates for speech therapy services in the Texas Medicaid program are higher than the published payment rates in the comparison programs for the most commonly billed procedure codes.

Aim 2: Provider Perceptions of Quality

Understanding provider perceptions of administrative and clinical quality are important should policymakers and insurers wish to adopt alternative payment models as a mechanism to

improve quality and control costs. The research identified the extent to which speech therapy providers are aware of alternative payment models and their possible impact on reimbursement rates and provider practice patterns. The study also identified the extent to which Medicaid and commercial insurers are currently using alternative payment models instead of fee-for-service payment models for claims paid to speech-language pathologists. Additionally, the researcher identified measures of administrative and clinical quality that speech-language pathologists value most in their everyday practice. Failure to consider these measures could result in providers refusing to accept payment arrangements that incorporate alternative payment models and jeopardize access to care for beneficiaries. Given the lack of research and in-the-field experience with alternative payment systems, the study hypothesized that:

Hypothesis 2: Speech-language pathologists have limited knowledge of alternative payment models and their possible impact on their reimbursement rates and practice patterns.

Hypothesis 3: Speech-language pathologists place greater importance on measures of clinical quality than they do measures of administrative quality.

Aim 3: Alternative Payment Models

There are a variety of alternative payment models that have been implemented or that are under consideration in healthcare. Increasing costs and utilization related to the provision of pediatric speech therapy services imply that such models should be considered. The project proposes multiple alternative payment models that incorporate relevant cost data as well as provider perceptions of administrative and clinical quality measures. Based on the anticipated growth in utilization and the expected increase in enrollment in the Texas Medicaid program, the

researcher will also propose policy changes that are needed within the acute care therapy program to sustain the availability of the benefit long term.

Methods

The analysis proceeded in three phases. Where necessary, Microsoft Excel and Stata 14 were used to complete the statistical analysis related to this project. Related to Aim 1, the research calculated basic descriptive statistics and analyzed published fee schedules in state Medicaid programs. The research also examined published policies related to the provision of pediatric speech therapy to identify similarities and difference across state Medicaid programs. Specific to Texas, the research compared the number of Medicaid recipients who received speech therapy per year to total Medicaid enrollment for the corresponding years (FY 2009 to 2014) to determine if utilization rates as a percentage of Medicaid enrollment were stable during this period. Additionally, the research undertook a comparison of published payment rates for the most commonly used procedure codes across the comparison programs using published fee schedules. Further, the research determined the potential savings if policymakers were to maintain a fee-for-service payment model but set payment rates consistent with comparison programs.

Phases two and three of the analysis related to an electronic survey. The survey was intended to identify the impact of alternative payment models on pediatric speech therapy business practices and identify measures of administrative and clinical quality that are of vital importance to providers. The survey included 16 questions that identified a provider's familiarity with alternative payment models including the extent to which they are used in their current work setting. The survey asked questions about how alternative payment models have impacted the provider's practice patterns and whether the use of alternative payment models has impacted

their organization's financial stability. Additionally, the survey asked providers to rank measures of administrative and clinical quality as being of low, moderate, or of significant importance. Related to Aim 2, survey responses were analyzed to determine the percentage of speech-language pathologists who reported experience using alternative payment models and identify measures of clinical and administrative quality providers deem of low, moderate, and significant importance. Related to Aim 3, the results related to phases one and two of the study were combined to propose alternative payment models that promote value, innovation, and increased quality and coordination or care.

Discussion

Nationally, Medicaid published payment rates for individual treatment services (CPT® 92507) are 30% less on average than those paid in comparison programs. Regarding existing state Medicaid agency policies, there is wide variance in the provision of pediatric speech therapy services. Specific to the Texas Medicaid program, published fee-for-service payment rates for the provision of acute care speech therapy services are substantially higher than those of other state Medicaid programs, private insurance, and Medicare. This result provided strong evidence that Texas policymakers, in collaboration with the managed care organizations, should consider further cost containment action to better align Medicaid payments with other state Medicaid programs, commercial insurance, and Medicare. In consideration of this, it is recommended that policymakers consider the use of alternative payment models instead of the fixed, fee-for-service payment model.

Within healthcare circles, there is general agreement that payment and service delivery models need reform. Looking forward, it will be necessary to consider whether initiatives to increase value and achieve economic efficiency at the expense of quantity (volume) compromise

the quality of care consumers receive or create the perception that there has been a reduction in the quality of care provided. Consumers accustomed to a high level of intervention may perceive any reduction in services or change in service delivery model as compromising quality even if better outcomes are achieved. Significant consumer education will be needed to explain the transition from volume to value-based purchasing especially as it relates to the potential cost-savings that could be passed on to consumers.

Careful monitoring of alternative service delivery models will also be needed to ensure that their use does, in fact, result in an improvement in quality and that cost-savings are achieved. For example, if a provider is moved to an episodic payment and reduces or limits the frequency and duration of treatment in response to a lower payment without consideration for how that decision might impact a consumer's outcomes, the change in reimbursement structure could end up having unintended consequences. Should individuals experience a reduction in the quantity of healthcare goods and services received without any noted improvement in quality, this is likely to lead to high levels of dissatisfaction among consumers.

Additionally, it will also be necessary to consider whether changes to the payment structure and the introduction of alternative payment models create access to care issues for consumers. Access to care issues for consumers could arise under various circumstances. First, if an insurer's use of a narrow network results in a reduction in the availability of specialty providers or results in consumers having to travel greater distances to obtain healthcare services, this could result in high levels of dissatisfaction among consumers. Consumers could also be adversely impacted with respect to access if the price point offered during the contracting process is below the rate at which providers are willing to accept payment arrangements. This

could result in consumers having difficulty finding healthcare providers willing to accept new patients or in their ability to maintain their preferred healthcare provider.

Limitations

Much of this research is exploratory and is expected to be used to generate hypotheses for further investigation. There is an insufficient body of research as it relates to the use of alternative practice and payment models for the provision of pediatric speech therapy services in state Medicaid programs. Further, information about the influence of Medicaid managed care on provider reimbursement rates is mostly unknown due to the proprietary nature of the information. Therefore, it was necessary to rely on the researcher's existing knowledge of managed care practices, published news articles, and anecdotal information provided by other speech-language pathologists when it was necessary to make judgement about the influence of Medicaid managed care on provider payment rates.

Organization of the Research

Chapter two of this research provides relevant background information related to the prevalence of pediatric communication disorders and other areas of interest related to the provision of pediatric speech therapy services in state Medicaid programs. Chapter three includes the theoretical framework. Chapter four is dedicated to payment and policy trends in state Medicaid programs and includes a discussion of speech therapy services provided within the Texas Medicaid program. Chapter five includes an analysis of speech-language pathologists' familiarity with the use of alternative payment models as well as an analysis of provider perceptions of measures of clinical and administrative quality. Chapter six summarizes research conducted related to provider perceptions of clinical and administrative quality. Chapter seven

summarizes the scope of this research, outlines proposed alternative payment models that could be used to pay claims for pediatric speech therapy services, discusses the research findings and contributions, points out limitation of the current work, and outlines opportunities for future research.

CHAPTER II

BACKGROUND

Introduction

This chapter includes pertinent background information related to the field of pediatric speech-language pathology. Current estimates on childhood disability are discussed and operational definitions of communication and swallowing disorders are provided. Demographic data and employment characteristics regarding speech-language pathologists are included. A discussion of the importance intervention services for communication and swallowing disorders is included along with a detailed analysis of the variances in coverage requirements by payer source. Current cost estimates associated with the provision of pediatric speech therapy services are also reviewed.

Current Estimates of Childhood Disability

Over the past two decades, the rate of pediatric disability has increased significantly. According to research conducted by Houtrow and colleagues (2014), the percentage of children with disabilities increased nearly 16% percent between 2000-2001 and 2010-2011 Using parent-reported data contained in the National Health Interview Survey for children birth to seventeen years of age, they estimated that the number of children under the age of eighteen with a disability increased from approximately 4.9 million to 5.9 million for this same time period. Based on their analysis, children from low-income homes experience higher rates of disability than children from homes with greater income. Children living in homes with incomes below the federal poverty line experienced a 10.7% rise in the rate of disability between 2000-2001 and 2010-2011 resulting in an incidence rate of 102.6 cases per 1000 population (Houtrow, Larson, Olson, Newacheck, and Halfon, 2014).

In a second study, Boyle et al. (2011) evaluated the prevalence of developmental disabilities in the United States between 1997 and 2008. Using data from the 1997-2008 National Health Interview Surveys, Boyle and colleagues examined disability data for children between the ages of three and seventeen. They excluded data for children birth to three years of age because they noted many developmental disabilities are not diagnosed this early in life. The disability categories considered in their study were ADHA, cerebral palsy, autism, seizures, stuttering, mental retardation, moderate to profound hearing loss, blindness, learning disorders, and other developmental delays. On the basis of parent report, Boyle, et al. concluded that 15% of children between the ages of three and seventeen presented with a developmental disability between 2006 - 2008. This represents nearly ten million children. Similar to Houtrow and colleagues, Boyle, et al. noted a 17% increase in the prevalence of developmental disabilities between 1997 and 2008. Further, Boyle and colleagues noted that the rate of any developmental disability was higher for children living in poverty. They noted that the rate of developmental disability was nearly twice as high among children insured by Medicaid as compared to those with private insurance. They also noted that boys had twice the prevalence of any developmental disability as compared to girls (Boyle et al., 2011).

One type of developmental disability that requires intervention provided by a speech-language pathologist is a communication disorder. According to the American Speech-Language-Hearing Association (1993), a communication disorder is

an impairment in the ability to receive, send, process, and comprehend concepts or verbal, nonverbal and graphic symbol systems. A communication disorder may be evident in the processes of hearing, language, and/or speech. A communication disorder may range in severity from mild to profound. It may be developmental or acquired. Individuals may

demonstrate one or any combination of communication disorders. A communication disorder may result in a primary disability or it may be secondary to other disabilities.

There are multiple types of communication disorders including speech disorders (articulation, voice, or fluency impairment), language disorders, hearing disorders, and central auditory processing disorders (American Speech-Language-Hearing Association, 1993). An individual may present with one communication disorder or multiple communication disorders simultaneously. Communication disorders may occur by themselves or as a result of a medical or developmental disorder such as autism, down syndrome, cerebral palsy, or other neurodevelopmental disorders (American Speech-Language-Hearing Association, n.d.). It is estimated that more than 40% of children with communication disorders experienced some type of comorbidity (National Academies of Sciences, Engineering, and Medicine, 2016).

A second type of developmental disability that requires intervention provided by a speech-language pathologist is a swallowing disorder. According to the American-Speech-Language Hearing Association (n.d.):

feeding and swallowing disorders (also known as dysphagia) include difficulty with any step of the feeding process—from accepting foods and liquids into the mouth to the entry of food into the stomach and intestines. A feeding or swallowing disorder includes developmentally atypical eating and drinking behaviors, such as not accepting age-appropriate liquids or foods, being unable to use age-appropriate feeding devices and utensils, or being unable to self-feed. A child with dysphagia may refuse food, accept only a restricted variety or quantity of foods and liquids, or display mealtime behaviors that are inappropriate for his or her age.

Related to communication and swallowing disorders, a 2015 National Center for Health Statistics Data Brief reflects that 7.7% of children between the ages of three and seventeen presented with a communication and/or swallowing disorder during the 12 months preceding the administration of the 2012 National Health Interview Survey (Black, Vahratian, and Hoffman, 2015). Among children ages three to ten who presented with a communication disorder, 34% presented with more than one communication disorder. Among children ages eleven to seventeen years who presented with a communication disorder, 25.4% presented with more than one communication disorder. Speech disorders were the most common type of communication disorder (Black, Vahratian, and Hoffman, 2015).

The prevalence of communication disorders varies by gender, race, and age. According to information reported by the National Institute on Deafness and Other Communication Disorders (2016), 9.6% of boys have a communication and/or swallowing disorder whereas 5.7% of girls have a communication and/or swallowing disorder. Regarding race, nearly one in ten (9.6%) black children between the ages of three and seventeen have a communication and/or swallowing disorder. Comparatively, 7.8% of white children present with a communication disorder and/or swallowing disorder and 6.9% of Hispanic children present with a communication disorder. (National Institute on Deafness and Other Communication Disorders, 2016). The prevalence of communication and swallowing disorders decreases with age. The National Institute on Deafness and Other Communication Disorders (2016) reports that 11% of children between the ages of three and six present with a communication and/or swallowing disorder whereas 9.3% of children between the ages of seven and ten present with a communication and/or swallowing

disorder. Among children eleven to seventeen years of age, 4.9% present with a communication and/or swallowing disorder.

Speech Language Pathologists: Demographic Data and Employment Characteristics

Speech-language pathologists (SLPs) "work to prevent, assess, diagnose, and treat speech, language, social communication, cognitive-communication, and swallowing disorders in children and adults" (American Speech-Language-Hearing Association, n.d.) The American Speech-Language-Hearing Association (ASHA) represented more than 160,000 certified speech-language pathologists in 2016 (2017). Nearly 40% of SLPs were employed in healthcare settings including residential and nonresidential health facilities and hospitals. Just under 9% of speech-language pathologists self-identified as working full-time in private practice (American Speech-Language-Hearing Association, 2017). Based on these numbers, nearly 65,000 members could be affected by payment changes related to the provision of speech therapy services to children and adults.

Importance of and Access to Intervention Services

Speech therapy intervention may be provided in a variety of service delivery settings. Children birth to three years of age may access speech therapy through early childhood intervention programs, and children three to twenty-one years of age may access intervention through the public school system (Individuals with Disabilities Education Act, 2004). Additionally, speech therapy may be a covered benefit through a private health plan or a state Medicaid agency (American Speech-Language-Hearing Association, n.d.). In these instances, intervention services may be provided by private practitioners in a clinic, home or community center. Services may also be provided in an inpatient or outpatient hospital setting or by home

health agencies. Depending on state regulations, services may also be provided via telepractice (American Speech-Language-Hearing Association, n.d.).

Access to intervention services provided by speech-language pathologists is vital to optimizing a child's communication potential. According to researchers at the Center on the Developing Child at Harvard University (2007), intervention is most beneficial and less costly when it is provided earlier in life. The center notes that the neural circuits for learning, behavior, and health are most flexible during the first three years of life. The American Speech-Language-Hearing Association (ASHA) also supports starting intervention as soon as a communication disorder is identified, noting that a crucial period of speech and language development occurs during the first five years of life (American Speech-Language-Hearing Association, n.d.).

ASHA notes that if intervention is delayed, it takes significantly longer to achieve results through therapy and that the outcome of treatment is frequently less successful. According to Cincinnati Children's Hospital Medical Center (n.d.), communication disorders, if left untreated, can adversely impact a child's educational and vocational potential as well as their mental health. (Cincinnati Children's Hospital Medical Center, n.d.). Similarly, a report prepared by the National Academies of Sciences, Engineering, and Medicine (2016) regarding speech and language disorders in children notes that communication disorders can impact academic achievement and have lifelong economic and social impacts.

Despite research that supports providing intervention services to children with communication and swallowing disorders, more children are in need of intervention than are currently receiving services. The Healthy People 2020 initiative, a project of the Office of Disease Prevention and Health Promotion, designated increasing the proportion of children who have hearing, voice, speech, and language disorders as a nationwide health improvement priority

concerning accessing intervention services (HHS, n.d.). Specific objectives related to voice, speech, and language included:

- 1. **ENT-VSL-19** (Developmental) Increase the proportion of persons with communication disorders of voice, swallowing, speech, or language who have seen a speech-language pathologist (SLP) for evaluation or treatment
- ENT-VSL-20 (Developmental) Increase the proportion of persons with communication disorders of voice, swallowing, speech, or language who have participated in rehabilitation services
- 3. **ENT-VSL-21** (Developmental) Increase the proportion of young children with phonological disorders, language delay, or other developmental language problems who have participated in speech-language or other intervention services
- 4. **ENT-VSL-22** (Developmental) Increase the proportion of persons with communication disorders of voice, swallowing, speech, or language in the past 12 months whose personal or social functioning at home, school, or work improved after participation in speech-language therapy or other rehabilitative or intervention services

Using data from the 2012 National Health Interview Survey, Black, Vahratian, and Hoffman (2015) identified the percentage of children receiving services by demographic characteristics. Black and colleagues reported that 55.2% of children ages three to seventeen with a communication disorder received intervention in the 12 months before the completion of the 2012 National Health Interview Survey. It was more common for children with speech and language disorders to receive intervention than it was for children with voice and swallowing disorders to receive intervention (Black, Vahratian, and Hoffman, 2015). Further, the percentage of children ages three to seventeen who received intervention services varied by age, sex, and

race. Among children with any communication disorder, younger children were more likely to receive intervention services than older children for the twelve-month period preceding the survey. Black and colleagues (2015) reported that among children with communication disorders, 59.8% of children between the ages of three and six received intervention and 61.3% of children between the ages of seven and ten received intervention whereas 42.6% of children between the ages of eleven and seventeen received intervention. Among children with any communication and/or swallowing disorder, 59.4% of boys received intervention whereas 47.8% of girls received intervention. Among children with any communication and/or swallowing disorder, 60.1% of white children received intervention whereas 47.3% of Hispanic children received intervention and 45.8% of black children received intervention (Black, Vahratian, and Hoffman, 2015).

Insurance Coverage Requirements

The percentage of uninsured children is at an historic low. Using data obtained from the State Health Access Data Assistance Center's American Community Survey Public Use Microdata Sample, the Center for Children and Families at Georgetown University (2016) estimates that four percent of children under the age of six were uninsured in 2015. Similarly, The Kaiser Family Foundation (2017) estimates that the uninsured rate among all children is five percent. The recent increase in coverage can be attributable to numerous initiatives including the expansion of the Medicaid and the Children's Health Insurance Program, the availability of subsidies through the Affordable Care Act Marketplaces, the streamlining of enrollment processes, and focused outreach and enrollment projects (Kaiser Family Foundation, 2017).

Currently, more than 45 million children are insured through Medicaid and Children's Health Insurance Program with Medicaid serving as the primary source of insurance for low-income children (Center for Children and Families, 2016; Kaiser Family Foundation, 2017; Rosenbaum and Wise, 2007). During fiscal year 2015, 36.8 million children were covered through the Medicaid program (Kaiser Family Foundation, 2017). This represents 39% of children overall and 44% of children with special health care needs (Kaiser Family Foundation, 2017). During fiscal year 2015, 53% of children were covered by employer-sponsored plans or by other private plans.

Although the percentage of uninsured children is at historic lows, coverage requirements for pediatric speech therapy vary depending on the source of insurance. State Medicaid agencies are required to provide Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) benefits whereas coverage offered by private health plans varies depending on whether a plan is protected from state and federal insurance mandates through the Employee Retirement Income Security Act of 1974 (Morrisey, 2014; Rosenbaum and Wise, 2007). This results in insurers providing different levels of coverage for pediatric speech therapy despite children presenting with similar conditions across the various sources of insurance.

State Medicaid programs provide broad, comprehensive coverage to beneficiaries under the age of 21. Per EPSDT requirements, state Medicaid programs must provide all medically necessary care to children under the age of 21, including regular medical, hearing, vision and dental services. State Medicaid programs must also make treatment services available when they are required to "correct or ameliorate" physical or mental health conditions (Centers for Medicare & Medicaid Services, 2014, p.2; Kaiser Family Foundation, 2017). Per the EPSDT

Guide for States provided by the Centers for Medicare & Medicaid Services (2014), treatment services include:

physician, nurse practitioner and hospital services; physical, speech/language, and occupational therapies; home health services, including medical equipment, supplies, and appliances; treatment for mental health and substance use disorders; treatment for vision, hearing and dental diseases and disorders, and much more (p. 2).

EPSDT intends to ensure that low-income children receive the right care, in the right setting, at the appropriate time. To do this, states must determine what services are medically necessary on a case-by-case basis (Centers for Medicare & Medicaid Services, 2017). The Centers for Medicare & Medicaid Services (CMS) stipulates that EPSDT services may be provided through the schools, in medical settings, or in both environments. CMS (2014) encourages states to provide services for children in the home and community settings as the provision of services in these settings is in line with best practice and is "generally more cost-effective" (p. 20-21).

According to the American Speech-Language-Hearing Association (n.d.), as it relates to the provision of speech therapy services in state Medicaid programs, EPSDT requires states to provide the following services:

- 1. the identification of children with communication and swallowing disorders,
- 2. diagnosis and appraisal of communication and swallowing disorders,
- referral for medical or other professional services necessary for the rehabilitation of communication and swallowing disorders,
- 4. provision of speech and language services,
- 5. counseling and guidance for parents, children, and teachers, and
- 6. Hearing aids and augmentative communication devices when medically necessary.

Per statutes outlined in the Affordable Care Act, plans not protected from state and federal insurance mandates as a result of ERISA and marketplace plans are required to provide rehabilitative and habilitative services including speech therapy services as part of the essential health benefits package. Rehabilitative and habilitative speech therapy services must be provided in accordance with each state's essential health benefits benchmark plan. While many private health plans had historically covered rehabilitation services, the provision of habilitation services was less frequent (Rosenbaum and Wise, 2007). As a result, and to ensure consistent coverage by insurers, a uniform definition of habilitative services was developed in 2015 and implemented beginning in 2016. The U.S. Department of Health and Human Services (HHS) (2015) recognizes the following definition of habilitation services:

Concerning habilitation services and devices: Cover health care services and devices that help a person keep, learn, or improve skills and functioning for daily living (habilitative services). Examples include therapy for a child who is not walking or talking at the expected age. These services may include physical and occupational therapy, speech-language pathology and other services for people with disabilities in a variety of inpatient and/or outpatient settings (p. 450).

Further, CMS (2015) stipulates that insurers subject to state and federal insurance mandates may not impose coverage limits for habilitative services and devices that are less favorable than the limits imposed on the coverage of rehabilitative services and devices. Additionally, for plan years beginning on January 1, 2017, or after, private insurance products subject to state and federal insurance mandates and marketplace plans may not impose combined visit limits on habilitative and rehabilitative services and devices. If for example, an insurer offers 30 visits

related to the provision of rehabilitative services, they must also provide 30 sessions related to the provision of habilitative services.

Plans protected through the Employee Retirement Income Security Act of 1974 (ERISA) are not regulated by detailed statutory standards. ERISA broadly preempts state law to establish exclusive federal regulation of self-insured health insurance plans. As such, self-insured plans are exempt from state insurance mandates, premium taxes, and other regulations (Morrisey, 2014). Rosenbaum and Wise (2007) note that, historically, these plans have been designed for and utilized by employers with healthy employees who also have healthy children. As such, coverage provisions look fundamentally different than those established by state Medicaid agencies. Often, insurance plans exempt from ERISA requirements have narrowly-drafted coverage terms that do not include coverage for chronic and developmental conditions (Rosenbaum and Wise, 2007). In instances where plans exclude coverage for chronic and developmental conditions, beneficiaries, including children, would lack coverage for habilitation services and devices including speech therapy.

In addition to narrowly-drafted coverage terms, plans protected by ERISA may also stipulate limitations or exclusions by place of service setting and by diagnosis code.

Additionally, plans protected by ERISA may establish hard visit limits (Rosenbaum and Wise, 2007). There is no publically available data on the average number of visits plans protected by ERISA provide to beneficiaries as it relates to the provision of speech therapy services. Because private health plan contracts are proprietary and not publically available, it is difficult to determine the percentage of plans that provide speech therapy benefits for both rehabilitative and habilitative services. Anecdotally, speech-language pathologists report that the number of available visits ranges between 20 and 60 visits annually and that occasionally plans offered an

unlimited number of visits annually. In some instances, there are separate visit limits for speech, occupational, and physical therapy services and, in other instances, there is a combined visit limit. ASHA (n.d.) advocates for an unlimited benefit provided the beneficiary demonstrates measurable and positive functional change. When visit limits are established by insurers, ASHA advocates that the speech-language pathologist should be given the flexibility to determine the frequency, duration, and length of each treatment session.

Escalating Costs Related to the Provision of Pediatric Speech Therapy Services

Increasing rates of prevalence, changes in coverage requirements, and initiatives to increase access to intervention for children with communication disorders have increased costs to private health plans, state Medicaid programs, and early childhood education agencies. This has caused policy- and law-makers to evaluate expenditures specifically related to the provision of services for individuals with communication and swallowing disorders more closely. There are three recently completed studies related to spending for individuals with communication disorders.

The National Academies of Sciences, Engineering and Medicine, in collaboration with the Social Security Administration (2016), recently evaluated the impact the increase in reported cases of speech and language impairment has had on the Supplemental Security Income Program. Between 2004 and 2014, the total number of children receiving federal disability benefits for speech and language impairments nearly tripled, increasing from 78,827 to 213,688 children. This increase parallels the rise in prevalence of communication and swallowing disorders for the same period. Their research findings suggest that children born to low-income families are more likely to experience disabilities, including speech and language impairments. Additionally, members of the committee appointed to the project also noted that there is a

"significant presence" or financial impact on the Supplemental Security Income Program as a result of the increase in the prevalence of speech and language impairment. In a press release related to the report and published by the National Academies of Sciences, Engineering and Medicine (2016), Sara Rosenbaum, committee chair for the project stated,

The evidence clearly shows that children with severe speech and language disorders, especially those from low-income families, are at increased risk for poor academic achievement, mental health and behavior disorders, persistent underemployment, and other lifelong, serious consequences. Although treatment can help improve their conditions, children with these severe disorders are likely to face substantial functional limitations and will continue to remain medically eligible for SSI benefits (n.p).

The Texas Health and Human Services Commission (HHSC) has undertaken two studies evaluating expenditures on speech therapy services in the Medicaid program. The first was published by HHSC's Strategic Support Division in 2015 and completed in collaboration with researchers from Texas A&M University's School of Public Health. According to their findings, claims expenditures for all pediatric acute care therapy services, inclusive of physical, occupational, and speech therapy increased from \$412 million in fiscal year 2009 to \$699 million in fiscal year 2014. Costs to the Texas Medicaid program for pediatric acute care therapy services were highest in fiscal year 2012, with total expenditures exceeding \$731 million (Texas Health and Human Services Commission Strategic Decision Support, 2015).

Additionally, data provided by the Texas Health and Human Services Strategic Support Division Commission reflects that expenditures on pediatric speech therapy services exceeded total expenditures for occupational therapy and physical therapy services combined during this period. Total expenditures on acute care speech therapy services increased from \$233 million in fiscal year 2009 to greater than \$397 million in fiscal year 2014. Expenditures for the five-year period were most significant in 2012, with expenditures for acute care speech therapy surpassing \$426 million. Despite HHSC taking action to contain escalating costs related to the provision of acute care speech therapy services, expenditures remained an on-going concern. As such, HHSC undertook a second study evaluating the recent increase in spending on speech therapy services within the Texas Medicaid program.

In 2017, the Texas Health and Human Services Commission's Office of Inspector General (OIG) prepared an information report on payment trends and service delivery related to the provision of speech therapy services in the Medicaid program. The OIG noted that the Texas Medicaid program made \$1.6 billion in payments for acute care speech therapy services between fiscal years 2013 and 2016. In most regions of the state, spending on speech therapy services represented between one and three percent of total Medicaid payments. Home health agencies provided the most Medicaid speech therapy with respect to services provided and payments. Additionally, 95% of all paid claims for speech therapy services related to Current Procedural and Terminology (CPT®) code 92507 (Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual).

Review of Cost-Benefit Analysis Data Related to Intervention Programs for Children with Communication and Swallowing Disorders

Although studies highlight the importance of intervention services to combat the adverse impact communication and swallowing disorder can have on a child's development, there is limited research available on the cost-effectiveness of targeted interventions including speech therapy. Law et al. (2012) completed a literature review where they analyzed the cost-effectiveness literature related to intervention services for children with communication disorders

for a thirty-year period. Their review determined that there is limited information combining effectiveness and cost data related to communication disorders. As part of this research, the Tufts Cost-Effectiveness Analysis Registry was used in an attempt to identify existing studies on the cost-effectiveness of interventions related to communication disorders. The research attempted multiple searches using the following keywords or phrases: communication disorder, communication delay, articulation delay, speech therapy, speech delay, language delay, language disorder, and language. The searches did not return results related to the cost-effectiveness of interventions for pediatric communication disorders. Following this, the researcher searched the literature to identify potential sources of information related to the cost-effectiveness of interventions for pediatric communication disorders. Again, the search did not return results related to the cost-effectiveness of interventions for pediatric communication disorders. In the absence of available data related to the cost-effectiveness of speech therapy to treat pediatric communication and swallowing disorders, the researcher reviewed related cost data. A study conducted by Ruben (2000) estimates that "communication disorders may cost the United States from \$154 billion to \$186 billion per year" (p. 241). This study has been cited more than 350 times, including by organizations such as the National Academies of Sciences, Engineering, and Medicine (2016) and the American Speech-Language-Hearing Association (2013).

Summary

Communication and swallowing disorders impact nearly 8% of children 18 years of age and younger. There is strong support for access to intervention services provided by SLPs.

Intervention is most effective when it is provided early in life, however, coverage requirements for pediatric speech therapy vary depending on the source of insurance. State Medicaid agencies are required to provide EPSDT benefits whereas coverage offered by private health plans varies

depending on whether a plan is protected from state and federal insurance mandates through ERISA (Morrisey, 2014; Rosenbaum and Wise, 2007). Increasing rates of prevalence, changes in coverage requirements, and initiatives to increase access to intervention for children with communication disorders have increased costs to private health plans, state Medicaid programs, and early childhood education agencies. This has caused policymakers to evaluate expenditures related to the provision of services for individuals with communication and swallowing disorders more closely in hopes of identifying opportunities for cost savings.

CHAPTER III

THEORETICAL FRAMEWORK

Introduction

This chapter includes a discussion of the tradeoff between quantity and quality. It also includes a discussion of the theoretical framework including outlining various alternative payment models that are relevant to this research. The chapter concludes with an examination of the extent to which alternative payment models are currently used to reimburse speech therapy providers for services rendered.

Tradeoffs Between Quantity and Quality

Any time a paradigm shift in healthcare service delivery models is considered or made, it is necessary to consider program effectiveness and evaluate the trade-offs. In this case, there is a need to examine potential trade-offs between quantity and quality. Pauly (2011) has previously considered the economic theory related to the role the markets play in producing a suitable level of quality for consumers who have varying preferences and resources as it relates to healthcare goods and services.

First, Pauly notes that medical care is a service, not a good. As such, services are customized to the consumer in a way most products are not. To receive a healthcare service, a medical provider and patient must be together, either in-person or via telehealth, or have some other means of contact. While a benefit of the service is that the medical provider can tailor the service to the patient during an encounter, there are also circumstances that lead to a lack of uniformity across patient encounters. For example, a service provider being behind schedule or distracted by other issues may cause a patient's need to go unmet during an encounter which could lead to a perceived problem related to quality. This lack of uniformity typically does not

exist when providing untailored products as manufacturers try to reduce variations and product defects to any extent possible.

Second, Pauly (2017) notes that issues with quality appear to work themselves out in industries other than healthcare as he notes there have been no exhaustive efforts to devise "complex payment schemes" in other sectors (p. 575). However, he cites two reasons why healthcare markets behave contrary to basic economic theory with respect to quality. First, healthcare consumers do not respond to variations in price and quality like they do in other service industries. This is because healthcare consumers may not have an adequate choice in providers and because they may lack knowledge about other available service delivery options. Second, insurance protects consumers from paying full price for medical goods and services. Thus, they act differently than they would if they were responsible for the total cost of care (Pauly, 2017). The notion that healthcare consumers respond differently when faced with different cost-sharing requirements was evidenced by the RAND health insurance experiment. The results of this research showed that individuals reduced their use of necessary and discretionary healthcare services when they were responsible for a more significant portion of the cost. (Newhouse and Rand Corporation, 1993). Although this study was completed decades ago, it is still considered the gold standard study regarding consumer spending on healthcare services.

Theoretical Framework

Historically, claims payments for pediatric speech therapy services have been made using fee-for-service payment models. In essence, a speech therapy provider performed a service and subsequently received a predetermined reimbursement amount regardless of the quality of the intervention or the client's outcome. In this model, providers benefit from increased revenue and

profit by delivering more healthcare services or more expensive procedures. While the fee-for-service payment model is the most common way to pay for health care services, the model also encourages volume rather than value and is a major driver of escalating healthcare costs (Miller, 2009; Schroeder and Frist, 2013). Additionally, fee-for-service payment models are frequently criticized as being inefficient in that they encourage the duplication of services across settings and discourage the coordination of care among healthcare providers (Schroeder and Frist, 2013).

The rate of healthcare inflation continues to increase and is expected to increase throughout the next decade (Centers for Medicare & Medicaid Services, 2015). Experts predict that the current pace of spending on healthcare goods and services is not sustainable (Chernew, 2003; Chernew, Sabik, & Newhouse, 2010). Recognizing that fee-for-service payment models contribute to higher spending in healthcare, there has been a push to transform payment and service delivery models across the continuum. The Patient Protection and Affordable Care Act (ACA) contains multiple provisions designed to resolve the problems inherent in the fee-for-service payment model. These provisions include paying for value and outcomes rather than volume and testing new service delivery models (Abrahams et al., 2015). The Centers for Medicare & Medicaid Services (2017) notes that value-based payments reward healthcare providers with incentive payments for the quality of care they provide rather than for the quantity of care provided. Further, the Centers for Medicare & Medicaid Services states that value-based reimbursement programs support healthcare's "Triple Aim":

- 1. Better care for individuals,
- 2. Better health for populations, and
- 3. Lower costs.

At present, there are numerous value-based payment models in existence that have been implemented in various sectors of the healthcare industry as it relates to the provision of healthcare services for adults. These include accountable care organizations, episodic or bundled payment, pay-for-performance programs, narrow networks, and primary care medical home models (Miller, 2009; The Center on Health Insurance Reforms, 2014; The Commonwealth Fund, 2016). Where alternative payment models have been implemented, insurers and providers assumed shared risk for the healthcare services delivered. This shared risk is designed to improve the efficiency of healthcare and reduce associated costs. Burwell (2015) notes that it is the goal of CMS to build a healthcare system that provides better care, promotes smarter spending and that improves health. As such, CMS established initiatives within the Medicare program to target having 50% of Medicare payments tied to quality or value through alternative payment models by the end of 2018 (Burwell, 2015). Relevant to this dissertation is a discussion of the following types of alternative payment models: episodic or bundled payments, pay-for-performance programs, and narrow networks.

Episodic or Bundled Payments

One type of alternative payment model is an episodic or bundled payment. An episodic payment involves an insurer paying a single payment for all services delivered during a defined period of care. The incentives under this type of payment model include reducing the reduplication of services, promoting increased coordination of care among healthcare providers across multiple settings, and compensating physicians for the efficient use of resources (Mechanic and Altman, 2009; Mechanic, 2011). A payment may be made to a single provider or the payment may be bundled and provided for all services and devices provided by multiple providers.

Using an episodic payment model, the payment represents a single price for the entire episode regardless of the type or volume or services provided within the episode. A defined episode could be a single date, a 60-day event window or even a year depending on the exact nature of a patient's illness. The length of the episode is established by the payer. Additionally, the payment is typically adjusted up or down based on the severity of the patient's condition (Miller, 2009). In the case of speech pathology services, a provider working with a child with a mild speech impairment would not receive the same payment as they would when working with a more involved impairment. This is because the level and intensity of services needed to treat the conditions are different. To accomplish this differentiation in payments, insurers assign patients to tiers or levels based on the use of ICD-10-DM diagnosis codes and the clinical information submitted. Thus, a sick child gets assigned an episode but a very sick child gets assigned the same episode but with a higher payment level.

Miller (2009) notes that there are advantages to this type of payment model over the traditional fee-for-service payment model. First, the payment model reduces the incentive providers have to prescribe more healthcare services than are necessary. A second advantage is that the model reduces variations in payments in that similar patients have similar expenditures. Another advantage is that it gives providers the flexibility to decide the scope of services provided during the episode as compared to being tied to the services authorized during a predetermination review. For example, if a speech-language pathologist wanted to provide more sessions at the beginning of an episode then taper the frequency as therapy progressed, they would be able to do so without adversely affecting their payment.

While the use of episodic payments has numerous conceptual advantages, the use of the model has also raises potential concerns. Those include concerns that providers potentially limit medically necessary services to maximize profits and that they will seek to avoid patients with more complex conditions (Mechanic and Altman, 2009). A third concern is that the model does not discourage unnecessary episodes (Mechanic, 2011). To prevent these concerns from arising, it is possible to embed patient safeguards when designing episodic payments. First, a payer could institute a policy whereby they audit providers to detect instances where providers are reducing or restricting medically necessary services. Indeed, Medicare introduced "Peer Review Organizations" when hospital prospective payment was implemented in the 1980s to monitor potentially untoward provider behavior. Insurers could also structure their episodic payments using tiers or levels such that providers who treat more complex patients are compensated with higher payments. In addition, prior authorization could also be considered as a potential mechanism to protect against the provision of unnecessary episodes.

Pay-for-Performance

A second type of alternative payment model is a pay-for-performance model. These models are also referred to as pay-for-quality programs. According to James (2012), pay-for-performance is an "umbrella term for initiatives aimed at improving the quality, efficiency and overall value of health. [Pay-for-performance] arrangements provide financial incentives to hospitals, physicians, and other health care providers to carry out such improvements and achieve optimal outcomes for patients" (n.p.). In the typical pay-for-performance program, a payer provides a financial incentive to providers who meet or exceed specified quality standards. A payer, for example, might reward primary care physicians who complete a specified percentage of all preventative health screenings. Quality measures associated with pay-for-

performance programs fall into four categories including process measures, outcome measures, patient experience, and structural measures (James, 2012).

Pay-for-performance programs link payments to a provider's ability to meet or exceed the measures of quality specified by the insurer. Most often, any financial incentive earned is paid in addition to the agreed upon fee-for-service compensation. Additionally, some pay-for-performance programs are designed such that they penalize providers financially when they do not meet baseline performance standards (Baird, 2016). Conceptually, it is believed that the financial incentives offered are motivating enough to change provider behavior such that patients benefit from improved quality.

Pay-for-performance programs are popular with private and public payers. Medicare uses pay-for-performance programs as do some state Medicaid agencies. Private insurers also utilize pay-for-performance models. James (2012) notes that there are more than 40 private-sector pay-for-performance initiatives currently in existence. An example where a pay-for-performance program has been implemented is the Premier Hospital Quality Incentive Demonstration Project. Between 2003 and 2009, the hospital system worked alongside CMS to determine the extent to which financial incentives would improve the quality of healthcare services delivered related to pneumonia and selected cardiac conditions (Health Affairs, 2012). Within the Medicaid program, the MassHealth, the Massachusetts Medicaid program, tested a hospital-based pay-for-performance program where hospital systems received financial bonuses for meeting a set of quality measures for cases related to pneumonia and surgical infection prevention.

Although the use of pay-for-performance initiatives is popular with insurers, studies evaluating program effectiveness suggest they may not lead to improvements in quality. Ryan and Blustein (2011) evaluated whether the MassHealth hospital-based, pay-for-performance

program had resulted in improvements in quality related to surgical infection prevention and care for patients with pneumonia. They concluded that the program did not improve quality despite participating hospital systems being offered significant financial incentives. Similarly, a study conducted by Rosenthal, et al. (2005) found that paying healthcare providers to reach predetermined quality targets "may produce little gain in quality for the money spent and will largely reward those with higher performance at baseline" (p. 1788).

In addition to studies that suggest pay-for-performance programs may not work as intended, Mechanic and Altman (2009) note that there are significant design issues that remain unsolved. Those issues include whether pay-for-performance initiatives should reward individual physicians or groups of physicians and the amount of the financial incentive needed to influence a change in behavior. Further, there are concerns that pay-for-performance programs lack "meaningful, actionable performance measures" (Mechanic and Altman, 2009, p. w264). Another concern is that most pay-for-performance programs set target measures based on process measures rather than true measures of clinical quality.

Narrow Networks

When a health insurer contracts with a limited or relatively small panel of providers it is referred to as a narrow network. In the private insurance markets, the use of narrow networks allows an insurer to contract with providers at a lower price point. In turn, savings are passed along to the consumer in the form of lower premiums (Polsky and Weiner, 2015). A provider's inclusion in the narrow network may be based on their utilization patterns, willingness to contract at a lower price point, or both. There is research that suggests insurers offer quality providers contracts and that those providers willing to contract at a lower price get an increase in volume (Morrisey, 2014). Once an insurer has established a network of providers, they can split

the network into tiered levels and vary the consumer's cost-sharing requirements. Consumers who select providers in lower tiers have lower cost-sharing requirements than consumers who pick providers in higher tiers. As Polsky and Weiner (2015) note, this results in a "de facto narrowing of the network for price-conscious consumer" (p. 1).

While the use of narrow networks can achieve cost-savings and increase quality through the inclusion of providers who have conservative utilization patterns, they also place consumers at risk. If a panel of providers is established that is too small, it could force consumers to wait long periods of time for care, seek care outside their immediate geographic area, or seek care outside of the network with a provider who is not contracted. As such, marketplace insurers who use narrow networks are required to meet network adequacy standards (Polsky and Weiner, 2015). Similarly, the Centers for Medicare & Medicaid Services (n.d.) also has parameters in place that state Medicaid agencies must meet when restricting a beneficiary's choice of provider.

There are three approaches a state Medicaid agency or contracted managed care organization could use related to the use of narrow networks. These include the use of varied cost-sharing requirements, selective contracting techniques, and utilization management strategies.

Although the use of narrow networks by state Medicaid agencies and Medicaid managed care agencies is feasible, the strategies used to create narrow networks must be carefully considered as it is more challenging to integrate cost-sharing requirements into their design.

Any use of a narrow network that incorporates cost-sharing requirements must take into account the income level of the beneficiary and their ability to pay (Draper, Hurley, and Short, 2004). As it relates to the provision of pediatric speech therapy services, the focus of this research, it is conceptually possible to develop a narrow network of providers using cost-sharing requirements. In a model such as this, consumers who chose a designated preferred provider would

have waived cost-sharing requirements whereas consumers who select any other in-network provider would have a cost-sharing requirement of \$1 per treatment session provided.

A second approach would be to rely on the use of selective contracting techniques. Selective contracting occurs when insurers negotiate a lower price with a limited number of providers in exchange for an increase in patient volume (Morrisey, 2014). This results in an insurer restricting the number of providers within a network, and it effectively limits beneficiary choice. To protect consumers, CMS requires that State Medicaid agencies interested in creating a narrow network of providers via selective contracting strategies apply for and obtain an 1915(b)(4) waiver from CMS (Center for Medicare & Medicaid Services, n.d.). State Medicaid agencies may see this as a barrier to using this particular strategy.

Instead of cost-sharing requirements and the use of selective contracting strategies, which are often unpopular with providers and consumers in Medicaid and present design challenges, insurers could use utilization management strategies to effectively narrow provider networks. Although there has been movement away from the use of utilization management strategies among private insurers, Medicaid plans continue to rely heavily on the use of the approach. This is because cost-sharing options are more limited (Draper, Hurley, and Short, 2004). As such, there is opportunity to amend the use of the strategy to effectively create a narrow network.

To create a narrow network of pediatric speech therapy providers, insurers could consider designate a subset of providers within a network as "top performers" and offer reduced or waived provider prior authorization requirements for those providers who demonstrate patterns of conservative utilization and meet specified quality guidelines concerning the provision of care and documentation standards. Waived or reduced prior authorization requirements would likely be popular with physician who are often responsible for obtaining prior authorization on behalf

of a therapy provider as this would reduce their administrative burden. A study conducted by Mora, et al, (2011) found that nursing staff, including medical assistant, spent an average of 13.1 hours per week working to obtain prior authorizations from insurers. In a model such as this, volume would shift to the designated group of preferred providers due to the reduction in paperwork associated with obtaining prior authorization. This model would also provide insurers an opportunity to renegotiate prices with providers who received a preferred provider designation in exchange for an increase in patient volume. The use of the model would also decrease the insurer's reliance on utilization management programs which are usually expensive to operate (Morrisey, 2014).

Alternative Payment Models and the Provision of Speech Therapy Services

There is limited research about the extent to which speech-language pathologists are participating in alternative payment models. A 2017 survey conducted by the American Speech-Language-Hearing Association suggests providers have limited experience with the use of alternative payment models. Although not limited to pediatric speech-language pathologists, 22.9% of providers surveyed reported their facility/practice was not part of an alternative payment model. Another 54.4% of providers surveyed indicated they did not know if their facility/practice was associated with an alternative payment model. Among those reporting experience with alternative payment models, bundled or episodic payments was the most commonly used model. Speech-language pathologists working with adults more widely reported experience using alternative payment models than speech-language pathologists working with children (American Speech-Language-Hearing Association, 2017).

The available literature suggests that among the models that include speech pathologists, many have been limited to the treatment of adults, particularly in the Medicare program.

Medicare's demonstration project involving bundled payments for joint replacement included speech-language pathologists. The Comprehensive Care for Joint Replacement Model (CJR) was implemented in April 2016 and was mandated for providers in 67 geographic areas. The CJR bundled payments for lower-extremity joint replacements or the reattachment of a lower extremity procedures assigned to the inpatient payment categories MS-DRG 469/470 (with/without major complications or comorbidities). According to the American Speech-Language-Hearing Association, speech therapy services were included in the episode of care because "Part B services for communication, cognition or swallowing-related diagnoses [were] included because they are due either to they are due to chronic conditions whose care may be affected by the joint-replacement procedure or post-surgical care, or to complications of the procedure, such as stroke" (Grooms, 2016, p. 30-31). Although the use of the bundle was intended to last through December 2020, CMS proposed changes to the CJR in August 2017. Those changes included reducing the mandatory number of participating geographic regions from 67 and 34 and allowing participants in the remaining areas to participate on a voluntary basis (CMS, 2017).

Aside from the CJR, speech-language pathologists working with Medicare Part B beneficiaries will be subject to the Merit-Based Incentive Payment System (MIPS) beginning in 2019. MIPS is a hybrid reimbursement model that continues to reimburse providers based on volume but also embeds financial incentives for quality, outcomes, and efficiency. MIPS consolidates existing Medicare incentive and penalty program measures into four performance categories. Those categories include quality reporting, meaningful use of electronic health records, cost efficiency, and clinical practice improvement. Once MIPS takes effect, payments to speech pathologists working with Part B Medicare enrollees could increase by as much as 21%

or decrease by as much as 7% from the base fee schedule depending on the score a provider receives (Nanof, 2016).

Fewer details are known regarding the use of alternative payment models to pay for claims related to pediatric speech therapy services; however, it is believed they are used in a more limited capacity. In April 2017, CMS issued a request for information related to the feasibility of developing alternative payment models for pediatric services. In addition to efforts undertaken by CMS to transform service delivery models, a small number of alternative practice or payment models related to the provision of pediatric speech therapy services are known to exist in Georgia and in Texas.

WellCare utilizes an alternative payment model in Georgia. WellCare, an entity contracted as a Medicaid managed care organization, subcontracts with the Therapy Network of Georgia (TNGA), to administer their therapy services program. Operating on behalf of WellCare, TNGA utilizes a case rate payment methodology to reimburse pediatric speech therapy providers for services rendered to Medicaid beneficiaries for all programs except the Babies Can't Wait program (Therapy Network of Georgia, 2015).

There are pilot or demonstration projects that have been attempted in the Texas Medicaid program with mixed results. In March 2017, Superior Healthplan, a Medicaid managed care organization, introduced a program that waives prior authorization requirements for initial evaluations and reevaluations for those providers who have achieved "value-based status" (Superior Healthplan, 2017). An additional alternative practice model that is in use is in the Texas Medicaid program is the patient-centered medical home model. The patient-centered medical home is a "medical relationship between a primary care physician and a child or adult patient in which the physician provides comprehensive primary care to the patient, and facilitates

partnerships between the physician, the patient, acute care and other care providers, and, when appropriate, the patient's family" (Texas Health and Human Services Commission, 2013, December). As it applies to pediatric speech therapy providers, several managed care organizations operating in Texas require that a primary care physician or other mid-level practitioner submits requests for prior authorization for therapy services on behalf of the speech-language pathologist servicing the Medicaid beneficiary. Providers have also anecdotally reported that there is also a Medicaid managed care organization in Texas that uses a pay-for-performance compensation scheme. However, limited information about the program is available because the specifics of the program are protected by provider confidentiality agreements in effect with the insurer.

Anecdotally, pediatric speech therapy providers in Texas with whom the researcher is familiar report dissatisfaction with the models used thus far. Based on claims expenditures, there is no evidence that suggests the use of alternative payment models to pay claims related to acute care speech therapy services in the Texas Medicaid program have resulted in overall cost savings to the state thus far. Based on a report prepared by the Office of Inspector General Texas Health and Human Services Commission (2017), total claims expenditures for acute care speech therapy services were approximately \$400 million in fiscal year 2016. This is consistent with expenditures in prior years dating back to 2012.

Summary

The models discussed in this chapter provide a brief, historical overview of the existing literature about alternative payment models. Further research is needed related to the development of alternative payment models for the provision of pediatric speech therapy services. The next chapter lays the foundation for identifying payment and policy trends in state

Medicaid programs. Understanding provider payment rates and the accompanying therapy policies is viewed as a critical first step in the development of pediatric alternative payment models that could be adopted by state Medicaid agencies, contracted managed care organizations, and private insurers.

CHAPTER IV

THE NATIONAL MEDICAID LANDSCAPE

Introduction

This chapter examines 2017 Medicaid therapy reimbursement for pediatric speech therapy in 48 states and the District of Columbia. This chapter also analyzes the accompanying Medicaid therapy policies to identify trends across state Medicaid agencies related to (1) benefit limits, (2) qualified provider provisions, (3) referral requirements, (4) prior authorization processes and (5) the use of telepractice. This research is important because it characterizes payment and policy trends in state Medicaid programs which are currently unknown and because prevalence rates of services are increasing.

Fee-for-service payment rates for pediatric speech therapy services were evaluated to determine overall patterns of Medicaid reimbursement. Descriptive statics were calculated to determine the mean and median national Medicaid published rates. The minimum and maximum rates were also identified. Because the provision of individual treatment services (CPT® 92507) is the predominant code used by pediatric speech therapy providers, states were then grouped by quartile to determine if there were regional differences in Medicaid reimbursement. A multivariate regression analysis was conducted to test whether the Medicaid rate in state (i) for individual treatment services (CPT® 92507) is a function of state population, the federal Medicaid match rate, whether the state expanded Medicaid, the personal health care price index, and state unemployment rates. Finally, this chapter compares the median Medicaid fees by procedure code against the published 2017 Medicare fee schedule and available private market fee data to assess their relative generosity. The median was used instead of the mean because the median is less susceptible to the influence of outliers.

The majority of state Medicaid programs used fixed fee schedules as their reimbursement method for the provision of pediatric speech therapy services. Most schedules had been updated sometime in 2016 or 2017. Medicaid reimbursement rates for the eleven most commonly used evaluation and treatment *Current Procedural Terminology*® (CPT) codes varied substantially across states, but there were no detectable patterns among geographic regions. The results of the multivariate regression analysis suggest that a state's decision to expand Medicaid does have a statistically significant impact the reimbursement rate for the provision of individual treatment services. However, state population, the federal Medicaid match rate, the personal health care price index, and state unemployment rates do not significantly predict the reimbursement rate for individual treatment services. Thus, the current Medicaid reimbursement rates for the provision of individual treatment services appear somewhat arbitrary, strengthening the need to consider alternative payment models.

An analysis of Medicaid published payment rates revealed that Medicaid payments for individual treatment services (CPT® 92507) were 30% less on average than the published payment rates in the comparison programs considered. An analysis of the related therapy policies showed that most states have established parameters related to the use of clinical fellows and speech therapy assistants, have developed language regarding benefits limits, and require referrals and prior authorization before the initiation of services. More than half the states do not have laws or regulations related to the use of telepractice for the provision of speech therapy services.

Policy implications include the need to develop reimbursement methodologies that incorporate alternative payment models such that state Medicaid agencies compensate providers for the quality and value of service provided rather than volume. Additionally, policymakers

should consider revising regulations related to EPSDT requirements or use available waivers to modify the availability of the Medicaid speech therapy benefit such that is consistent with the available benefit provided by private insurers. Further, state Medicaid agencies should consider utilizing telepractice as a way to increase access to services in rural areas and underserved communities.

Background

There has been a significant increase in the prevalence of developmental disabilities over the past two decades, including children being diagnosed with communication and swallowing impairments (Black, Vahratian, and Hoffman, 2015). According to a study published by the National Academies of Sciences, Engineering, and Medicine, in collaboration with the Social Security Administration (2016), speech and language disorders affect between 3 and 16 percent of U.S. children. A 2015 National Center for Health Statistics Data Brief reflects that 7.7% of children between the ages of three and seventeen presented with a communication and/or swallowing disorder during the 12 months preceding the administration of the 2012 National Health Interview Survey (Black, Vahratian, and Hoffman, 2015). Among children who present with communication or swallowing disorders, approximately 40% present with significant comorbidities (National Academies of Sciences, Engineering, and Medicine, 2016).

In addition to seeing an increase in the prevalence of pediatric communication and swallowing disorders over the past decade, the percentage of uninsured children is at an historic low of 5% (Kaiser Family Foundation, 2017). The recent increase in coverage can be attributed to numerous initiatives including the expansion of the Medicaid and the Children's Health Insurance Program, the availability of subsidies offered through the Affordable Care Act's Marketplace, the streamlining of enrollment processes, and focused outreach and enrollment

projects (Kaiser Family Foundation, 2017). Currently, more than 45 million children are insured through the Medicaid and Children's Health Insurance Program with Medicaid serving as the primary source of insurance for low-income children (Center for Children and Families, 2016; Kaiser Family Foundation, 2017; Rosenbaum and Wise, 2007).

State Medicaid programs provide broad, comprehensive coverage to beneficiaries under the age of 21. Federal Early and Periodic, Screening, Diagnostic and Treatment (EPSDT) requirements state that Medicaid programs must provide all medically necessary care to children under the age of 21. This includes regular medical, hearing, vision and dental services. State Medicaid programs must also make treatment services available when they are required to "correct or ameliorate" physical or mental health conditions (Centers for Medicare & Medicaid Services, 2014, p.2; Kaiser Family Foundation, 2017). The *EPSDT Guide for States* provided by the Centers for Medicare & Medicaid Services (2014) stipulates that treatment services include the provision of speech therapy services.

Increasing enrollment in state Medicaid programs combined with the significant increase in the prevalence of pediatric communication and swallowing disorders over the past decade will challenge state Medicaid budgets. This should encourage state Medicaid agencies to rethink traditional service delivery models as they relate to the provision of pediatric speech therapy services. It is unlikely that state Medicaid agencies can maintain the current fixed reimbursement model and provide all medically necessary evaluation and treatment services as required by EPSDT. This would seem particularly so in light of the changes in reimbursement policies that have been common in other clinical areas over the past two decades.

Methods

The Medicaid fee-for-service fee schedules compiled in this chapter were obtained electronically through state health agency websites. The data are based on publically available documentation identified in August and September 2017. The fee schedules for New Jersey and Tennessee were eliminated from the analysis. New Jersey was excluded due to the inability to locate the published fee schedule through the state health agency website. Tennessee was excluded because its Medicaid fee schedules were established by managed care organizations operating within the state. As such, they are not publically available and are considered proprietary. When more than one fee schedule existed, facility and non-facility fee schedules for example, the outpatient (non-facility) fee schedules were utilized in the analysis because the outpatient setting is the most common place of service related to the provision of pediatric speech therapy. In instances where states had established fee schedules specific to speech therapy services, this fee schedule was used unless otherwise noted.

Some states have home health and early childhood intervention fee schedules that differ from the published fee-for-service fee schedule. These rates were not considered in this analysis, but efforts were made in the accompanying data tables to notate states where different fee schedules existed. This analysis does not take into account possible managed care rate reductions nor does it look at variances in published rates for services provided through the schools. Comprehensive information about specific fee schedules used in the analysis, effective dates, and accompanying notes is reflected in Appendix A. When information was unclear, efforts were made to verify the accuracy of the information through state agency employees or the American Speech-Language-Hearing Association.

State fee-for-service Medicaid policies for services related to pediatric communication and swallowing disorders were obtained electronically through state health agency websites. Data related to the provision of telepractice was obtained through the American Speech-Language-Hearing Association. All data is based on publically available documentation identified in August and September 2017. Information is considered from all fifty states and the District of Columbia. Where incomplete information existed, the researcher used NA to reflect this in the data tables. When information was unclear, efforts were made to verify the accuracy of the information through state agency employees or through the American Speech-Language-Hearing Association.

Managed care is the dominant service delivery model for children's Medicaid. Based on data compiled by the Kaiser Family Foundation (2017), 38 states and the District of Columbia rely on managed care organizations to administer their children's Medicaid programs, and the number of managed care organizations operating within a state varies from state to state. The percentage of children enrolled in managed care exceeds 80% in in all but of the five states that rely on the use of managed care organizations (Kaiser Family Foundation, 2017). This research does not take into account possible variations in referral and prior authorization requirements due to the influence of managed care organizations' policies. At a minimum, managed care organizations are required to mirror the benefit established by each state Medicaid agency, but they are not required to maintain similar requirements regarding prior authorization policies.

The eleven most commonly used evaluation and treatment codes for the provision of pediatric speech therapy were identified from the Current Procedural Terminology 2017 code book. Produced by the American Medical Association, the CPT® manual identifies codes for medical, surgical, and diagnostic services performed by medical professionals including speech-

language pathologists. It is updated annually. This information is typically used for medical records as well as for billing purposes. Table 1 includes a description of the codes used in this analysis.

Table 1: Description of CPT Codes Used in the Analysis

CPT® Code	Description
92507	Treatment of speech, language, voice, communication, and/or auditory processing disorder, individual
92508	Treatment of speech, language, voice, communication, and/or auditory processing disorder, group, two or more individuals
92521	Evaluation of speech fluency (e.g., stuttering, cluttering)
92522	Evaluation of speech sound production (e.g., articulation, phonological process, apraxia, dysarthria)
92523	Evaluation of speech sound production (e.g., articulation, phonological process, apraxia, dysarthria) with evaluation of language comprehension and expression (e.g., receptive and expressive language)
92524	Behavioral and qualitative analysis of voice and resonance
92526	Treatment of swallowing dysfunction and/or oral function for feeding
92610	Evaluation of oral & pharyngeal swallowing function
92607	Evaluation for prescription for speech-generating augmentative and alternative communication device; face-to-face with the patient; first hour
92608	Evaluation for prescription for speech-generating augmentative and alternative communication device; face-to-face with the patient; each additional 30 minutes
92609	Therapeutic services for the use of speech-generating device, including programming and modification

A multivariate regression analysis was conducted to test whether the Medicaid rate in state (i) for individual treatment services (CPT® 92507) is a function of state population, the federal Medicaid match rate, whether the state expanded Medicaid, the personal health care price index, and state unemployment rates. The outcome variable, the Medicaid rate in state (i) for individual treatment services, was used in the regression analysis because the procedure code for individual treatment services is the predominant code billed by pediatric speech-language pathologists. A skewness-kurtosis test was conducted to confirm the outcome variable was normally distributed (skewness = 0.08, kurtosis 0.05). All statistical analysis was completed using Stata 14.1. Table 2 includes the variable name, a description of the key variables used in the analysis, and the source of data for each variable considered.

Table 2: Description of Key Variable Used in the Regression Analysis

Variable Name	Description	Data Source and Notes
indtx	Individual treatment services	2017 Medicaid Fee-for-service published reimbursement rate for CPT 92507
pop	State population as of July 2017	U.S. Census Bureau's Annual Estimate of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2017
exp	Reflects whether a state expanded Medicaid (coding structure: 0=no, 1 = yes)	The Henry J. Kaiser Family Foundation's Status of State Action on the Medicaid Expansion Decision
fmap	Federal Matching Medicaid Rate for fiscal year 2017	The Henry J. Kaiser Family Foundation's Federal Medical Assistance Percentage (FMAP) for Medicaid and Multiplier

Table 2: Description of Key Variable Used in the Regression Analysis, continued

index	Health Care Expenditures per Capita by State of Residence	Centers for Medicare & Medicaid Services, Office of the actuary, National Health Statistics Group. National Health Expenditure Data: Health Expenditures by State of Residence, June 2017.
emp	December 2017 State Unemployment Rate	Bureau of labor Statistics' Local Area Unemployment Statistics

To assess the relative generosity of payment rates, the ratios of median Medicaid reimbursement rates to published Medicare reimbursement rates were calculated using 2017 national data from the Medicare Physician Fee Schedule for Speech-Language Pathologists. In addition, the ratios of Medicaid reimbursement to publically available market fee data for CPT® codes 92507 and 92508 were calculated using data obtained from a report regarding the Texas Medicaid acute care therapy program (Texas Health and Human Services Commission's Strategic Support Division, 2015). During a review of the Texas Medicaid Acute Care Therapy Program, staff compared Texas Medicaid rates to fiscal year 2013 commercial insurance rates using claims data obtained through Truven Health Analytics MarketScan© Commercial Claims and Encounters Database.

The fee-for-service therapy policies promulgated by state Medicaid programs were obtained electronically through state health agency websites. Data were considered from all fifty states and the District of Columbia. Limited information was available for the following states:

Louisiana, New Jersey, New Mexico, Pennsylvania, Rhode Island, Tennessee, and Virginia.

Limited information was also available for the District of Columbia. Where information was unclear, efforts were made to verify the accuracy of the information through state agency staff or

the American Speech-Language-Hearing Association. This analysis does not take into account possible variations in managed care prior authorization requirements.

Medicaid Rate Results

State Medicaid agencies use fixed fee schedules to reimburse for pediatric speech therapy services in their fee-for-service programs. There is no evidence to suggest state Medicaid agencies have implemented alternative payment models for claims payments related to the provision of these services. The majority of Medicaid agencies (46), have reviewed or updated their fee schedule since January 2016. This does not necessarily mean they have made a change to their published rates. At least three states (Arizona, Tennessee, and Texas) give Medicaid managed care organizations the flexibility to establish fee schedules specific to their organization's needs. Anecdotal reports from providers suggest this may occur in other states as well, but there is no way to independently verify those reports as managed care organization fee schedules are proprietary. Additionally, while CMS approves state plans and state Medicaid agencies approve managed care contracts, these entities do not monitor the rate-setting process used by managed care organizations. The adequacy of payments to providers through managed care may be indirectly monitored through access to care standards established by CMS (Medicaid and CHIP Payment and Access Commission, 2016). If payments rates are established that are arbitrarily low, consumers may have difficulty accessing services within their geographic region or within a timely manner.

State Medicaid agencies consistently provided coverage for individual speech and language therapy (92507), fluency evaluations (92521), speech production evaluations (92522), and speech production and language evaluations (92523). Coverage for group speech and language therapy lagged behind coverage for individual speech and language therapy. Eight

states do not have a published reimbursement rate for CPT® 92508. Similarly, coverage for the evaluation and management of feeding and swallowing disorders also lagged behind. Six states do not have a published reimbursement rate for feeding and swallowing evaluations, and seven states along with the District of Columbia do not have a published reimbursement rate for the treatment of feeding and swallowing disorders. Coverage for services related to the use of augmentative communication devices is inconsistent across state Medicaid agencies. Seventeen states do not have a published rate for augmentative communication evaluations, and fifteen states do not have a published reimbursement rate for therapeutic services for the use of augmentative communication devices. Presumably, when clients need services related to the use of augmentative communication devices and there is not a published procedure code, a speech-language pathologist would assign CPT® 92523 for an evaluation and CPT® 92507 for treatment activities.

Table 3 reports the national Medicaid minimum, mean, median, and maximum published rate for each CPT® code considered as well as the standard deviation. Appendix B includes information about Medicaid reimbursement rates by state for the evaluation and treatment codes related to speech and language interventions. Appendix C includes information about Medicaid reimbursement rates by state for the evaluation and treatment codes related to swallowing disorders and augmentative communication devices.

Table 3: Medicaid Physician Reimbursement Rates for Selected Evaluation and Treatment Codes, Summary

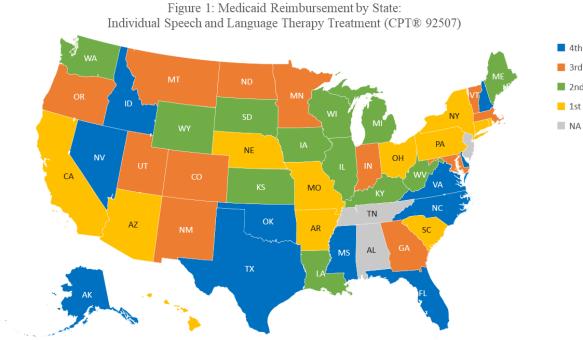
Procedure by CPT®	National Medicaid Minimum	National Medicaid Mean	Standard Deviation	National Medicaid Median	National Medicaid Maximum
92507: Treatment of speech, language, voice, communication, and/or auditory processing disorder, individual	\$18.00	\$53.70	19.55	\$55.50	\$113.86
92508: Treatment of speech, language, voice, communication, and/or auditory processing disorder, group, two or more individuals	\$5.94	\$19.89	10.36	\$18.38	\$64.92
92521: Evaluation of speech fluency (e.g., stuttering, cluttering)	\$22.51	\$82.17	22.79	\$83.13	\$158.53
92522: Evaluation of speech sound production (e.g., articulation, phonological process, apraxia, dysarthria)	\$24.58	\$70.19	19.42	\$67.95	\$132.75
92523: Evaluation of speech sound production with evaluation of language comprehension and expression	\$40.00	\$139.64	47.12	\$140.57	\$276.31
92524: Behavioral and qualitative analysis of voice and resonance	\$25.62	\$70.39	17.60	\$70.60	\$129.35
92526: Treatment of swallowing dysfunction and/or oral function for feeding	\$21.47	\$60.69	20.59	\$62.19	\$112.98
92610: Evaluation of oral & pharyngeal swallowing function	\$23.74	\$71.19	31.12	\$63.57	\$205.12
92607: Evaluation for prescription for speech-generating augmentative and alternative communication device; face-to-face with the patient; first hour	\$51.96	\$97.18	29.20	\$95.08	\$178.77
92608: Evaluation for prescription for speech-generating augmentative and alternative communication device; face-to-face with the patient; each additional 30 minutes	\$12.18	\$31.95	14.43	\$31.97	\$73.58
92609: Therapeutic services for the use of speech-generating device, including programming and modification	\$12.50	\$66.32	28.56	\$66.55	\$154.68

Analysis of Reimbursement Rates for the Most Commonly Used Procedure Codes

Among the elven procedure codes studied, there are five that are more commonly used by pediatric speech-language pathologists. These include CPT® codes 92507, 92522, 92523, 92526, and 92610. State Medicaid agencies consistently provided reimbursement for the provision of services related to these procedures. The study examined Medicaid fee data to identify trends related to payments rates for these procedures.

CPT 92507:

This is the primary procedure code used to bill for pediatric speech therapy services. It relates to the provision of individual speech therapy services. Based on national coding standards, CPT® 92507 is billed per encounter regardless of the length of the treatment session. Anecdotal reports suggest 30 minutes is representative of the typical session length. According to the American Speech-Language-Hearing Association (2017), the organization conducted a survey and found that 45 to 60 minutes was representative of the typical session length. ASHA (2017) notes that the length of an individual treatment session will vary depending on a number of factors including patient age, complexity and the purpose of the session. State Medicaid reimbursement rates for individual speech therapy session range from a low of \$18.00 in Rhode Island to a high of \$113.86 in Alaska. The mean reimbursement rate is \$53.70, and the median reimbursement rate is \$55.50. Rates for nearly half the states fell within \$10 of the median, 13 states had rates that were more than \$10 below the median, and 12 states had rates that were more than \$10 above the median. No regional trends in reimbursement were identified as shown in Figure 1.



NOTE: 1st represents the lowest paying quartile of state. 4th represents this highest paying quartile

The results of the multivariate regression indicated the five predictors explained 5.8% of the variance (Adj. R2 =0.0574, F(5, 42)=1.57, p = 0.19). A state's decision regarding Medicaid expansion did significantly predicted the reimbursement rate for individual treatment services (β =-13.40, p = 0.05). However, state population (β = -1.06e-07, p = 0.80), the federal Medicaid match rate (β = -21.26, p = 0.62), the personal health care price index (β = 0.00, p = 0.84), and the unemployment rate (β = 6.12, p = 0.07) did not significantly predict the reimbursement rate for individual treatment services. Current Medicaid reimbursement rates for the provision of individual treatment services appear somewhat arbitrary. Regional patterns in reimbursement are not detected and the regulatory indicators considered do not appear to significantly predict reimbursement rates. Table 4 includes a summary of the regression coefficients.

 Table 4: OLS Regression Coefficients Predicting Medicaid Payment Rates

	β	Standard Error	t	P - value	
Population	-1.06e-07	4.12e-07	-0.26	0.80	
Medicaid Expansion	-13.40	6.49	-2.06	0.05	
Federal Medicaid Match Rate	-21.26	41.98	-0.51	0.62	
Personal Health Care Price Index	0.00	0.00	0.84	0.41	
Unemployment Rate	6.12	3.25	1.88	0.07	
constant	30.90	38.72	0.80	0.43	
Dependent variable: individual treatment (indtx)					

CPT 92522:

This is the primary procedure code used to bill for a speech sound production (articulation) evaluation. Based on national coding standards, CPT® 92522 is billed per encounter regardless of the length of the treatment session. State Medicaid reimbursement rates for a speech sound production evaluation range from a low of \$24.58 in Wisconsin to a high of \$132.75 in Alaska. The mean reimbursement rate is \$70.19, and the median reimbursement rate is \$67.95. Rates for 15 states fell within \$10 of the median, and 14 states had rates that were more than \$10 below the median while 16 states had rates that were more than \$10 above the median. Two states (Hawaii and Tennessee) did not report rates for this procedure code.

CPT 92523:

This is the primary procedure code used to bill for a speech and language evaluation. Based on national coding standards, CPT® 92523 is billed per encounter regardless of the length of the treatment session. State Medicaid reimbursement rates for a speech and language evaluation range from a low of \$40.00 in Connecticut to a high of \$276.31 in Alaska. The mean reimbursement rate is \$139.64, and the median reimbursement rate is \$140.57. Rates for 16 states fell within \$10 of the median, and 16 states had rates that were more than \$10 below the median while 16 states had rates that were more than \$10 above the median. Two states (Hawaii and Tennessee) did not report rates for this procedure code.

CPT 92526:

This is the primary procedure code used to bill for the treatment of swallowing dysfunction and/or oral function for feeding. Based on national coding standards, CPT® 92526 is billed per encounter regardless of the length of the treatment session. State Medicaid reimbursement rates for swallowing treatment range from a low of \$21.47 in Rhode Island to a high of \$112.98 in Alaska. The mean reimbursement rate is \$60.69, and the median reimbursement rate is \$62.19. Rates for 17 states fell within \$10 of the median, 14 states had rates that were more than \$10 below the median while 13 states had rates that were more than \$10 above the median. Six states (Arkansas, Connecticut, Florida, Illinois, and New York) did not report rates for this procedure code.

CPT 92610:

This is the primary procedure code used to bill for a swallow function evaluation. Based on national coding standards, CPT® 92610 is billed per encounter regardless of the length of the treatment session. State Medicaid reimbursement rates for a swallow function evaluation range from a low of \$23.74 in Rhode Island to a high of \$205.12 in Texas. The mean reimbursement rate is \$71.19, and the median reimbursement rate is \$63.57. Rates for 16 states fell within \$10 of the median, 11 states had rates that were more than \$10 below the median, and 14 states had rates that were more than \$10 above the median. Six states (Arkansas, Connecticut, Florida, Missouri, New York and South Carolina) and the District of Columbia did not report rates for this procedure code.

Ratio of Medicaid Rates to Medicare Payments

To assess the relative generosity of Medicaid reimbursement rates, the study compared current Medicaid median fee data with the Medicare maximum allowed amount for the same procedure codes obtained from the 2017 Medicare Physician Fee Schedule. Overall, Medicaid fees for the eleven CPT® codes analyzed were consistently lower than the Medicare maximum allowed amount, ranging from 0.59 to 0.79 of Medicare allowed fees. On average, state Medicaid programs pay speech-language pathologists 70% of the allowed Medicare maximum allowed amount for five of the most commonly billed procedures (CPT® codes 92507, 92522, 92523, 92526, and 92610). Table 5 summarizes the ration of median Medicaid fees to allowed Medicare charge.

 TABLE 5: Ratio of Median Medicaid Fees to Allowed Medicare Charges

Procedure by CPT® Code	Medicaid	Medicare	Ratio
92507: Treatment of speech, language, voice, communication, and/or auditory processing disorder, individual	\$55.50	\$80.03	0.69
92508: Treatment of speech, language, voice, communication, and/or auditory processing disorder, group, two or more individuals	\$18.38	\$23.33	0.79
92521: Evaluation of speech fluency (e.g., stuttering, cluttering)	\$83.13	\$112.69	0.74
92522: Evaluation of speech sound production (e.g., articulation, phonological process, apraxia, dysarthria)	\$67.95	\$93.31	0.73
92523: Evaluation of speech sound production with evaluation of language comprehension and expression	\$140.57	\$199.18	0.71
92524: Behavioral and qualitative analysis of voice and resonance	\$70.60	\$90.08	0.78
92526: Treatment of swallowing dysfunction and/or oral function for feeding	\$62.19	\$87.21	0.71
92610: Evaluation of oral & pharyngeal swallowing function	\$63.57	\$87.21	0.73
92607: Evaluation for prescription for speech-generating augmentative and alternative communication device; face-to-face with the patient; first hour	\$95.08	\$129.56	0.73
92608: Evaluation for prescription for speech-generating augmentative and alternative communication device; face-to-face with the patient; each additional 30 minutes	\$31.97	\$53.83	0.59
92609: Therapeutic services for the use of speech-generating device, including programming and modification	\$66.55	\$111.97	0.59

Ratio of Medicaid Rates to Private Market Fees

To further assess the relative generosity of Medicaid reimbursement rates, the study compared current Medicaid median fee data with available private market fees for CPT® codes 92507 and 92508. The private market fee data used in this portion of the analysis was obtained from a previously published study regarding the Texas Medicaid acute care therapy program (Texas Health and Human Services Commission's Strategic Support Division, 2015). During a review of the Texas Medicaid Acute Care Therapy Program, Texas Medicaid rates were compared to fiscal year 2013 commercial insurance rates using claims data obtained through Truven Health Analytics MarketScan© Commercial Claims and Encounters Database. It is not possible to complete the analysis for the remaining procedure codes evaluated in this chapter as there is no publically available private market fee data related to these codes.

Because the two data sets are not entirely comparable, caution is required in interpreting the results. In spite of limitations, however, a number of reasonable conclusions can be drawn. Overall, reimbursement rates related to the provision of individual and group speech therapy services are consistently paid less by Medicaid than by private payers, as shown in Table 6. The degree of underpayment by Medicaid as compared to private insurers for the provision of individual speech and language therapy (CPT® 92507) was similar to the degree of underpayment when comparing Medicare. The degree of underpayment by Medicaid as compared to private insurers for the provision of group speech therapy sessions (CPT® 92508) was greater than the degree of underpayment when comparing Medicare. Table 6 summarizes the ration of median Medicaid fees to Median private market fees.

TABLE 6: Ratio of Median Medicaid Fees to Median Private Market Fees for Selected CPT® Codes

Procedure by CPT®	Medicaid	Private Market	Ratio
92507: Treatment of speech, language, voice, communication, and/or auditory processing disorder, individual	\$55.09	\$81.00	0.68
92508: Treatment of speech, language, voice, communication, and/or auditory processing disorder, group, two or more individuals	\$18.15	\$38.00	0.48

Medicaid Policy Results: Services for Pediatric Communication and Swallowing Disorders

State Medicaid agencies varied concerning benefit limits, qualified provider requirements, referral and prior authorization requirements, and the use of telepractice. Table 7 includes summary information related to the policy provisions discussed in this chapter.

Appendices D, E, and F include state-specific information related to the policy provisions discussed in this chapter. Among Medicaid agencies with policy language related to benefit limits (33), twenty-seven specify some type benefit limit, and six have an unlimited benefit related to the provision of speech therapy services.

TABLE 7: Summary of State Medicaid Agency Policy Provisions

State Policy Provisions	Yes	No	Unknown*
Established Benefit Limits	27	6	18
Qualified Provider Requirements – Allow Speech-Language Pathology Assistants	26	13	12
Qualified Provider Requirements – Allow Clinical Fellows	25	10	16
Require Physician Referral Prior to the Initiation of Services	32	2	17
Prior Authorization Requirements - Evaluations	5	26	20
Prior Authorization Requirements – Treatment Services	27	11	13
Allow the use of Telepractice	19	2	30

^{*} Unknown represents states where the language was not clear or the policy was unavailable.

Qualified provider requirements concerning clinical fellows and speech-language pathology assistants varied by state. As described in greater detail later in this chapter, clinical fellows are individuals who have completed a master degree and are completing an internship under the supervision of a qualified speech-language pathologist. Speech-language pathology assistants (SLPAs) are individuals who have completed at least an associate's degree. Twenty-five agencies studied allow clinical fellows to provide services to Medicaid beneficiaries, ten agencies restrict the use of clinical fellows, and sixteen agencies either have policy language that is not clearly defined or the data was unavailable. Patterns were similar regarding the use of

SLPAs. Twenty-six agencies allow SLPAs to provide services to Medicaid beneficiaries, thirteen restrict the use of SLPAs, and twelve agencies either have policy language that is not clearly defined or the data was unavailable.

There are identifiable patterns regarding referral and prior authorization requirements. Among state agencies with clear policy language (34), thirty-two require that a written referral or verbal order be on file prior to the completion of an initial evaluation. There are seventeen agencies that either have policy language that is not clearly defined or the data was unavailable. Related to prior authorization requirements for initial referrals, data was available for thirty-one state Medicaid agencies. Among the thirty-one Medicaid agencies where information was available, five require prior authorization prior to the completion of an initial evaluation whereas twenty-six do not require a prior authorization for an initial evaluation. Prior authorization requirements for treatment services were more common. Among the thirty-eight agencies with verifiable data, twenty-seven required prior authorization for treatment services either at the initiation of treatment or after a designated benefit limit is exceeded.

Twenty-one Medicaid agencies have language related to telepractice. Of those, twelve Medicaid agencies permit the use of telepractice in healthcare settings, and an additional seven agencies allow the use of telepractice in the schools. Two state Medicaid agencies have language that restricts the provision of telepractice services. Thirty agencies do not have laws or regulations related to the provision of telepractice services provided by speech-language pathologists.

Benefit Limits

State Medicaid programs provide broad, comprehensive coverage to beneficiaries under the age of 21. Per EPSDT requirements, state Medicaid programs must provide all medically necessary care to children under the age of 21, including regular medical, hearing, vision and dental services. State Medicaid programs must also make treatment services, including those related to the provision of speech therapy services, available when they are required to "correct or ameliorate" physical or mental health conditions (Centers for Medicare & Medicaid Services, 2014, p.2; Kaiser Family Foundation, 2017). Although eligible Medicaid beneficiaries under the age of 21 must have access to all medically necessary care, state agencies are responsible for determining what services are medically necessary on a case-by-case basis (Centers for Medicare & Medicaid Services, 2017). Because states decide what services are medically necessary, variances in the availability and generosity of the benefit can be identified across state Medicaid agencies.

The study reviewed state Medicaid policies to identify states which have established benefit limits. Individual state-level data including relevant notes is available in Appendix E. Among Medicaid agencies with policy language related to benefit limits (33), twenty-seven specify some type benefit limit, and six have an unlimited benefit related to the provision of speech therapy services. The remaining Medicaid agencies either have policy language that is unclear or the data was not located. There are a variety of methods state Medicaid agencies use to establish benefit limits. For this analysis, Medicaid agencies were identified as establishing a benefit if they used any of the following strategies:

- 1. Limit the number of encounters per day,
- 2. Establish weekly, monthly or annual visit limits for evaluations or treatment services,
- 3. Exclude coverage for maintenance therapy,
- 4. Identify eligibility criteria for services based on the use of standard scores, or

5. Limit speech therapy services such that claims expenditures do not exceed a designated amount.

Establishing daily, weekly, monthly, or annual visit limits was a common strategy used by state Medicaid agencies. For example, the Alaska, Colorado, Georgia, Indiana, and Maryland Medicaid programs limit speech therapy services to one encounter per day. The Georgia Medicaid program also limits speech therapy to a maximum of eight visits (encounters) per month. Other states limit speech therapy services to a designated number of visits yearly including New Hampshire, North Dakota, and South Carolina. South Carolina's visit limit was a combined limit shared with occupational therapy and physical therapy. The North Carolina and Utah Medicaid programs rely on the use of standardized testing results to help determine a beneficiary's eligibility for speech therapy services. Two states, Idaho and Iowa, state that speech therapy services are limited to a designated dollar amount, annually. Additionally, Hawaii, Montana, and Nebraska exclude coverage for maintenance therapy. A limited number of states have published policies that restrict Medicaid speech therapy services to the school setting or stipulate that the services may be provided in the schools or by a private provider but not both. Language referencing EPSDT requirements is common throughout the state policies reviewed. Numerous states that have established benefit limits also have language that stipulates if medically necessary therapy services are needed in excess of the limit, those services may be obtained through a prior authorization process.

It is not clear what affect these limits have on the provision of care. Limiting speech therapy treatments to one encounter daily is consistent, in practice, with most private health plan policies. Similarly, most private health plans have established annual visit limits; therefore, it would not be unreasonable for a state Medicaid agency to do the same provided the agency is

providing all medically necessary care as required by EPSDT statutes. States with policy language stipulating the coverage of services based on the results of standardized testing and states that use a dollar amount to establish annual limits are an anomaly of sorts as these are not commonly used strategies by private health plans.

Qualified Provider Requirements

The study reviewed state Medicaid policies to identify states which allow the use of speech-language pathology assistants and clinical fellows. Individual state-level data including relevant notes is available in Appendix F. Speech- pathology assistants (SLPAs) are "support personnel who, following academic coursework, fieldwork, and on-the-job training, perform tasks prescribed, directed, and supervised by ASHA-certified speech-language pathologists" (American Speech-Language-Hearing Association, n.p.). ASHA (2013) has developed minimum recommended qualifications for a speech-language pathology assistant which include:

- 1. An associate's degree in an SLPA program or a bachelor's degree in a speech-language pathology or communication disorders,
- 2. Successful completion of at least 100 hours of supervised fieldwork experience or clinical experience equivalent, and
- 3. Demonstration of competency in the skills required of an SLPA.

Figure 2 depicts qualified provider requirements by state for speech-language pathology assistants.

No regional patterns are detected.

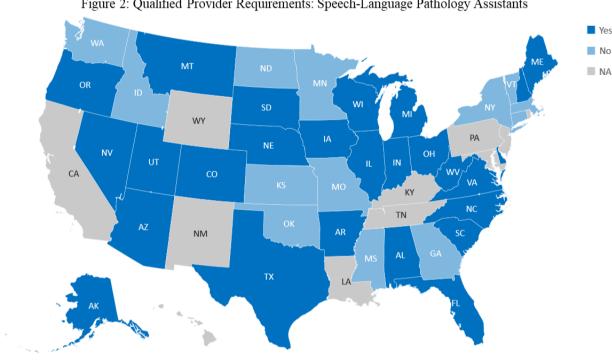


Figure 2: Qualified Provider Requirements: Speech-Language Pathology Assistants

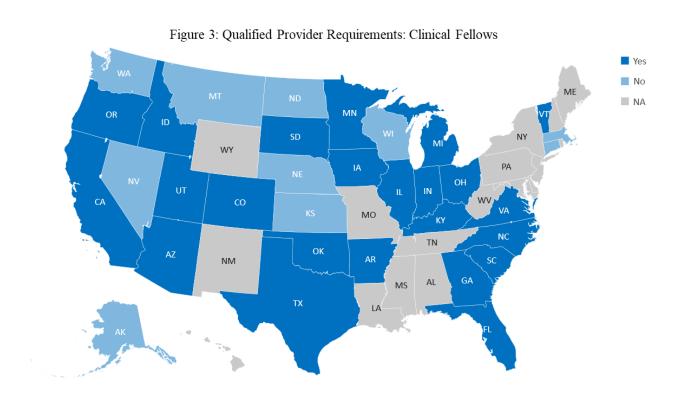
Based on an analysis of the data, 26 states allow the use of SLPAs, 13 states have policy language that prevents the use of assistants, and there were 12 states where the information related to this metric could not be identified. Among the 26 states that permit the use of SLPAs, four states (Florida, Maine, South Dakota, and Texas) have language that specifies a reduced fee schedule for work completed by assistants. Anecdotal reports suggest other states provide a reduced reimbursement rate as well, but this information could not be verified. Additionally, there are states that restrict an SLPAs scope of practice or have language requiring a fully licensed SLP to be on premise while an assistant is providing services. Colorado, for example, restricts SLPAs from rendering services under the home health benefit, and West Virginia will not allow SLPAs to conduct evaluations. Alabama requires direct supervision, requiring the

physical presence of the licensed speech pathologist in the same facility at all times when the assistant is performing assigned clinical responsibilities.

Twenty-five agencies studied allow clinical fellows to provide services to Medicaid beneficiaries, ten agencies restrict the use of clinical fellows, and sixteen agencies either have policy language that is not clearly defined or the data was unavailable. Clinical fellows are individuals have completed graduate-level course work as well supervised practicum experiences. According to the American Speech-Language-hearing Association (n.d.), a clinical fellow is an individual who is in a "transition period between being a student enrolled in a communication sciences and disorders program and being an independent provider of speech-language pathology clinical services. The CF involves a mentored professional experience after the completion of academic course work and clinical practicum" (n.p.). Figure 3 depicts qualified provider requirements by state for clinical fellows.

In states where there is a shortage of services providers and the use of clinical fellows and SLPAs is not permitted, policymakers may consider allowing the use of these provider types to increase access to care for beneficiaries. This allowance could reduce wait times for services, decrease travel distances for families, and increase access to bilingual service providers. This last point is especially important for children who speak a language other than English. A shortage of bilingual, licensed speech-language pathologists is reported across the country. At the end of 2016, ASHA's membership included 179,692 audiologists, speech-language pathologists, speech, language, and hearing scientists, and audiology and speech-language pathology support personnel. Of the 179,692 individuals represented by ASHA, 10,683 (5.9%) self-identified as a bilingual service provider (American Speech-Language-Hearing Association, 2017). Therefore, the results of "true" bilingual service providers may be even lower than anticipated. Improving

access to bilingual service providers could result in savings to state Medicaid agencies if the use of these providers as compared to monolingual providers resulted in the more accurate identification of language difference versus language disorder.



Referral Requirements

The study reviewed state Medicaid policies to identify states which require written referrals or verbal orders before the completion of an initial evaluation. Individual state-level data including relevant notes is available in Appendix E. Among state Medicaid agencies with clear policy language (34), thirty-one states require that a written referral or verbal order be on file prior to the completion of an initial evaluation. Three states (Alaska, California, and Ohio)

do not require a physician's referral to complete an initial evaluation. There are seventeen agencies where the policy language is not clearly defined or the data was unavailable. Referral requirements are not unique to state Medicaid programs. Many private payers also require that a speech-language pathologist have a physician referral on file as a condition of reimbursement. Figure 4, below, depicts referral requirements by state.

There are advantages and disadvantage related to physician referral requirements. In instances where a primary care physician is acting as a gatekeeper, physician referral requirements may be beneficial in reducing the duplication of services and increasing the coordination of care across service providers. Related to Medicaid speech therapy services, physician referral requirements could also be beneficial in limiting utilization to only those instances where there is a reasonable expectation that a beneficiary might qualify for services. In some areas of the country, there are anecdotal reports that pediatric speech therapy providers have targeted daycares in low-income neighborhoods and completed evaluations with a high percentage of children enrolled. One potential disadvantage for beneficiaries is that it could result in an access to care issue if a referral process is not initiated promptly. Related to this, written referral requirements increase administrative requirements for physicians and their staff members. Despite the potential limitations, state Medicaid agency requirements regarding physician referrals are reasonable and consistent with private payer policy.

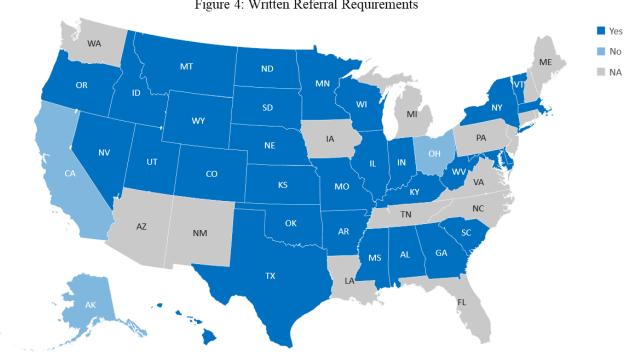
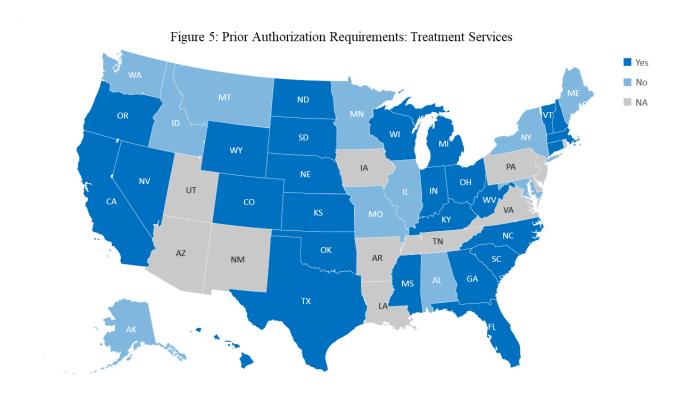


Figure 4: Written Referral Requirements

Prior Authorization Requirements

The study reviewed state Medicaid policies to identify states which require prior authorization before an initial evaluation and treatment services. Individual state-level data including relevant notes is available in Appendix E. Regarding prior authorization requirements for initial referrals, data was available for thirty-one state Medicaid agencies. Among the thirtyone Medicaid agencies where information was available, five require prior authorization before a provider may complete an initial evaluation whereas twenty-six do not require prior authorization for an initial evaluation. Prior authorization requirements for treatment services were more common. Among the thirty-eight agencies with verifiable data, twenty-seven required prior authorization for treatment services either at the initiation of treatment or after a designated benefit limit is exceeded. Eleven states do not have prior authorization requirements

for treatment services. Figure 5 depicts prior authorization requirements by state for treatment services.



Requiring prior authorization for an initial evaluation is not a common utilization management strategy utilized by state Medicaid agencies. Because most states have physician referral requirements, medical necessity for initial speech therapy evaluations has already been established. Requiring prior authorization would be a reduplication of time and effort that would likely result in few evaluations being denied.

Requiring authorization before the initiation of treatment services was more common among state Medicaid agencies. State Medicaid agencies used two different strategies related to prior authorization. Some, including Hawaii, Oklahoma, and Texas, require prior authorization starting with the initial authorization period. Others, including Georgia, Kentucky, and Massachusetts, require prior authorization after services exceed a specified benefit limit.

Although there has been a movement away from the use of utilization management strategies among private insurers, Medicaid plans continue to rely heavily on the use of this approach due, in part, because cost-sharing options are more limited (Draper, Hurley, and Short, 2004).

It is not clear if the practice results in a cost-savings to state Medicaid agencies. The study reviewed available Texas Medicaid fee-for-service and managed care claims data for fiscal years 2009 through the first quarter of fiscal year 2016 as well as a report prepared by the Texas Health & Human Services Commission's Office of Inspector General. In Texas, where prior authorization is required before the initiation of Medicaid speech therapy treatments regardless of whether the beneficiary's source of insurance, no overall cost savings was achieved between fiscal years 2013 and 2016. Claims expenditures related to speech therapy services approximated \$400 million in fiscal year 2013 as well as in fiscal year 2016. The number of unique beneficiaries receiving services as a percentage of Medicaid enrollment was also similar.

It is possible that prior authorization practices could result in a cost-savings if the prior authorization review process results in fewer treatment services being approved; however, any potential savings would need to be compared against offsetting costs. Offsetting costs could come in the form of increased operational costs related to the administration of a prior authorization program or as a result of increased medical costs due to the non-provision of

speech therapy services. To date, no study has evaluated the effectiveness of this particular utilization management strategy for services related to the provision of pediatric speech therapy.

As an alternative to the use of prior authorization, state agencies and Medicaid managed care organizations could consider relying more on the use of retrospective review programs. While both utilization management strategies are operationally expensive to administer and unpopular with providers, periodic retrospective review could yield more valuable data and help shape the future of payer policy. For example, insurers could waive prior authorization requirements but periodically conduct a claims analysis to identify providers with atypical utilization patterns. An insurer could subsequently audit those providers with higher than expected utilization patterns to determine if the services rendered were medically necessary and delivered within acceptable standards of practice. In instances where the documentation does not reflect a need for skilled service or where the services were provided in excess of what was medically necessary, insurers could then recoup payments. Retrospective review could also be used to identify providers who consistently demonstrate conservative utilization patterns and/or identify providers whose documentation meets or exceeds quality standards. Doing so would allow insurers to reshape their payment methodology by designating alternative payment models that incorporate preferred provider or narrow network concepts.

Telepractice (Telemedicine)

CMS models its Medicaid definition of telepractice on that of Medicare. Telepractice is viewed as a cost-effective alternative to the traditional in-person, service delivery model (Centers for Medicare & Medicaid Services, (n.d.). CMS (n.d.) notes that telepractice "seeks to improve a patient's health by permitting two-way, real time interactive communication between the patient, and the physician or practitioner at the distant site. This electronic communication means the use

of interactive telecommunications equipment that includes, at a minimum, audio and video equipment" (n.p.) CMS provides states significant flexibility concerning the provision of telepractice services. States have the flexibility to:

- 1. Determine whether or not to cover telepractice,
- 2. Determine what types of telepractice to cover,
- 3. Determine where in the state telepractice can be covered,
- 4. Determine how it is provided,
- 5. Determine what types of providers may be reimbursed, and
- 6. Determine reimbursement level for telepractice services.

Currently, twenty-one state Medicaid agencies have language related to telepractice.

Twelve Medicaid agencies permit the use of telepractice in healthcare settings and an additional seven agencies permit the use of telepractice in the schools. Two state Medicaid agencies have policy language that restricts the provision of telepractice services for speech therapy services.

Thirty agencies do not have laws or regulations related to the provision of telepractice services provided by speech-language pathologists. Figure 6 depicts telepractice provisions by state.

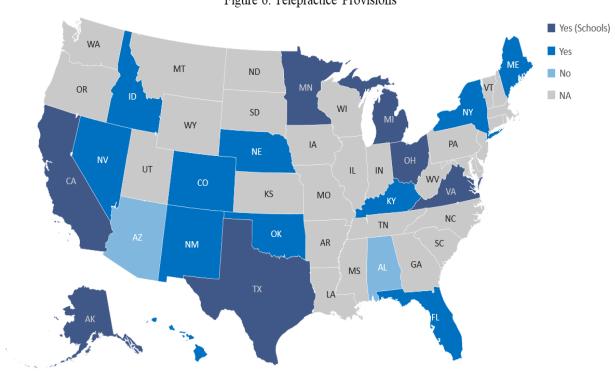


Figure 6: Telepractice Provisions

Telepractice may be seen as beneficial in reducing barriers to access to care, especially in areas where there are shortages of service providers or in rural communities. State Medicaid agencies could consider identifying areas where CMS' access to care standards are not being met and develop policies targeted to these communities. For example, a state Medicaid agency could allow the provision of telepractice in rural communities where there are few or no service providers available but maintain in-person service delivery requirements in urban areas where service providers are more readily available. This could increase compliance with recommended therapies and decrease travel times for families. Telepractice provisions could also be written such that they alleviate waiting periods for beneficiaries who are not receiving services promptly.

Discussion

Although Medicare and private insurance payment rates for the provision of individual speech and language therapy were similar, payment rates to providers for pediatric speech therapy services provided to Medicaid beneficiaries were considerably lower. The study's examination of Medicaid published payment rates with the comparison programs revealed that Medicaid payments for individual treatment services (CPT® 92507) were, on average, 30% less. The nature in which states set fee-for-service Medicaid reimbursement rates appears arbitrary providing evidence that the use of alternative payment models could be beneficial. There were no patterns of reimbursement detected by geographic region, and a number of regulatory factors considered did not appear to significantly affect reimbursement rates for the provision of individual treatment services.

All but two states had published payment rates for the provision of individual speech therapy that were below the rates paid in comparison programs, and thirteen states have published fee-for-service payment rates that are more than \$10 below the median published Medicaid rate for CPT® 92507 (individual speech therapy treatment). As these rates are considerably below the rates paid in comparison programs, it should be expected that state Medicaid agencies will have difficulty recruiting qualified providers willing to work with Medicaid beneficiaries. It should also be anticipated that providers will avoid establishing their practices in areas where there are high concentrations of Medicaid beneficiaries. Because of this, Medicaid beneficiaries should expect to travel greater distances to access services. Increased travel requirements and even the ability of transportation could create barriers to accessing care.

There are two states, Alaska and Texas, that pay considerably more than the published Medicare rate. In Alaska, the higher payments are most likely due to the complexities involved

in providing services to children located in rural Alaskan communities. In Texas, there has been considerable stakeholder pushback against state efforts to lower payment rates to providers such that they are consistent with rates paid in Medicare and other state Medicaid programs. Chapter 5 is dedicated to an in-depth analysis of acute care speech therapy services provided to beneficiaries in the Texas Medicaid program.

Currently, there are numerous legislative and regulatory proposals that aim to transform the Medicaid program. Embedded within these proposals are estimated budget cuts to state Medicaid agencies of between \$700 and \$880 million (Kaiser Family Foundation, 2017). Should any one of these proposals come to fruition, it is highly unlikely that state Medicaid agencies would have the financial resources needed to increase payment rates to providers such that they are consistent with rates paid in comparison programs. If anything, states would be forced to lower provider payment rates. Any reduction in payment rates could jeopardize access to care, especially in states where significant differences between Medicaid and comparison rates already exist.

Challenges to existing funding levels will force state Medicaid agencies to rethink traditional service delivery models as they relate to the provision of pediatric speech therapy services. Two changes that should be considered include revising EPSDT requirements and relying on the use of new, more progressive reimbursement methodologies.

A modification to EPSDT requirements could be accomplished through a change in the federal regulations or the use of state waivers; though, the use of state waivers is the more likely of the two options. Section 1115 Demonstration waivers are intended to give states flexibility in the design of their Medicaid programs. They are intended to increase access to services, promote

efficiencies, advance innovation, and increase alignment between Medicaid policies and private health plan products (Centers for Medicare & Medicaid Services, 2017).

Presently, states must provide all medically necessary treatment services which results in Medicaid recipients having access to a speech therapy benefit that is more generous than what is provided by most private insurers. Although there is no publically available data on the average number of visits provided by private health plans, anecdotal reports suggest private health plan beneficiaries are allowed between twenty and sixty visits annually. Among exchange plans, the range of visits is between 20 and 60, on average, and that visit limit is frequently a shred limit with occupational and physical therapy. Establishing benefit packages that are consistent with those used by private insurers and those available through the exchanges would more closely align Medicaid policy with private health plan policy as is a goal of the 1115 Demonstration waivers. In instances where children present with exceptional circumstances that necessitate additional speech therapy services, requests could be reviewed on a case-by-case basis. A similar policy is followed by most private insurers. Changing existing EPSDT requirements would increase the need to strengthen beneficiary and family engagement in the therapy process which could result in the more efficient delivery of services.

In addition to making revisions to the EPSDT benefit, there is also need to develop reimbursement methodologies that incorporate alternative service delivery and payment models such that state Medicaid agencies compensate providers for the quality and value of service provided rather than for the volume of services provided. Chapter 6 is dedicated to a discussion of alternative payment and service delivery models that could be used instead of the current fixed, fee-for-service payment model. The proposed models incorporate existing knowledge

about provider payment rates as well as provider perceptions of administrative and clinical quality.

Nationally, there is wide variance in state Medicaid agency policies related to the provision of pediatric speech therapy services. This reflects the flexibility each state is given to design their Medicaid program. Requiring a physician referral was the most commonly shared strategy and reflects the concept that the primary care physician is a gatekeeper of services. Another commonly shared strategy were requirements related to prior authorization processes before initiating treatment services. It would be beneficial for states to do a cost-effective analysis related to the use of this utilization management strategy to determine if the practice results in cost savings. There may be more cost-efficient mechanisms to control utilization.

There was less consistency across state Medicaid agencies concerning qualified provider requirements and telepractice provisions. These are both areas where states could consider revising policies to increase access to care concerning wait times for appointments and travel distances. In particular, allowing clinical fellows and SLPAs to practice under the direction of a qualified, speech-language pathologist would reduce wait times for therapy appointments and likely increase access to bilingual services providers. Allowing the use of telepractice may also be beneficial for meeting the needs of beneficiaries in rural communities.

Ultimately, any program changes, whether they be reimbursement-related or policyrelated, should be implemented such that comparable access for Medicaid and non-Medicaid
beneficiaries in similar geographic regions is achieved. Program changes should be clearly
communicated to and include feedback from provider- and family-oriented stakeholder groups.
Families accustomed to volume may be hesitant to transition to a system that rewards value

rather than quantity and significant education and caregiver support will be needed for families during any transition period.

Limitations

This research has some limitations. The rate analysis was based on published, fee-for-service payment rates and does not take into consideration rate reductions applied by managed care organizations that are reported in some states. Additionally, the commercial insurance rates used in the analysis were based on 2013 claims data and are reported for a limited set of CPT® codes. Despite limitations in this data source, no other market fee survey data by CPT® code is in the public domain. This was the best proxy currently available. Further, the research does not include a discussion of payment rate differentials applied by some states to settings like early childhood intervention programs and home health. These are both areas where there is further opportunity for research. The research related to the speech therapy policies is the most comprehensive analysis of Medicaid pediatric services completed thus far, but there are states where data was unavailable or the information was not clearly defined in the policies reviewed. This is an area where further research could provide a more complete picture of the Medicaid landscape.

CHAPTER V

THE TEXAS MEDICAID PROGRAM

Introduction

This chapter compares existing Texas Medicaid fee-for-service published payment rates for acute care speech therapy services with National Medicaid fee data, the 2017 Medicare fee schedule, and publically available private market fee data. This chapter also calculates the expected savings if the Texas Medicaid program were to adopt payment rates consistent with those used in comparison programs. There is a significant need for this research as there has been considerable on-going legislative and public debate about the relative generosity of payment rates for the provision of pediatric speech therapy services within the Texas Medicaid program (Walters, 2017). An analysis of the Texas Medicaid published payment rates with the comparison programs revealed that Texas Medicaid payments for individual treatment services, the primary code billed in the Texas Medicaid program, were consistently higher. Similar to the comparison programs, the Texas Medicaid fee-for-service program relies on a fixed fee schedule as its primary method of reimbursement for the provision of pediatric speech therapy services. Policy implications include the need to develop reimbursement methodologies that incorporate fee data that are more consistent with published payment rates used in comparison programs. There is also need to consider the use of value-based purchasing models instead of the fixed, feefor-service model such that providers are compensated for the value of care rather than volume of care provided. This research will inform recommendations for future rate changes and the use of value-based purchasing models.

Overview of the Texas Medicaid Program

The Texas Medicaid program insures more than 3 million children, annually (Texas Health & Human Services Commission, 2017). Care for children enrolled in the Texas Medicaid program is provided through one of four programs including STAR, STAR Kids, STAR Health, and traditional Medicaid. Beneficiaries enrolled in the STAR, STAR Kids, and STAR Health programs receive their care through health plans known as managed care plans. Currently, there are 20 Medicaid managed care plan (MCOs) operating in Texas, and greater than 86% of beneficiaries are enrolled in an MCO (Texas Health & Human Services Commission Office of Inspector General, 2017). Table 8 summarizes the various Texas Medicaid programs through which Medicaid-eligible children receive services.

Table 8: Description of Texas Medicaid Programs

Plan Name	Program Description
STAR	The STAR program providers coverage for children, newborns, pregnant women and some families and children.
STAR Kids	The STAR Kids program providers coverage for children and adults 20 or younger who have disabilities. Under STAR Kids, beneficiaries get basic medical and long-term services and supports through a health plan's provider network. Beneficiaries also get Medically Dependent Children Program (MDCP) waiver services through the health plan's provider network, if you are eligible.
STAR Health	The STAR Health program provides coverage to children who get Medicaid coverage through the Texas Department of Family and Protective Services. STAR Health also is for young adults who were previously in foster care and have a qualifying event for which they remain eligible for coverage.
Traditional Medicaid	Traditional Medicaid is for those who can't be in manage care. Traditional Medicaid is also called fee for service.

The Texas Health & Human Services Commission requires the 20 managed care plans operating in Texas to develop and adopt alternative payment structures between them and their contracted health care providers. The intent to encourage innovation, quality and efficiency rather than compensating providers for the volume of care provided (Texas Health & Human Services Commission, 2017). It is not clear the extent to which MCOs operating in Texas have adopted alternative payment and services delivery models related to the provision of pediatric speech therapy services. What is clear, however, is that claims expenditure related to speech therapy services are not declining despite changes to the fee-for-service fee schedule and an increased reliance on the use of utilization management strategies ((Texas Health & Human Services Commission, 2017).

Overview of Texas Medicaid Acute Care Therapy Program

Speech therapy, occupational therapy, and physical therapy are benefits of the Texas Medicaid program for children 0 to 20 years of age. Children are eligible to receive therapy services for both acute and chronic conditions provided medical necessity criteria are met. These services are provided separately from those that may be available through the public-school system. A physician script is required before completing an initial evaluation, and prior authorization must be obtained before to the initiation of therapy services (Texas Medicaid & Healthcare Partnership, 2017). A comprehensive outpatient rehabilitation facility/outpatient rehabilitation facility, independently enrolled therapist in the home, independently enrolled therapist in a non-home setting, or a home health agency may render services provided they are an enrolled Medicaid provider. Early Childhood Intervention (ECI) providers may also provide services to enrollees but are limited to rendering services to children birth to three years of age ((Texas Medicaid & Healthcare Partnership, 2017). Table 9 includes summary information

related to the type of therapy benefits available, applicable providers types, and current payment models.

Table 9: Summary of Texas Medicaid Benefits, Provider Types, and Payment Models

Available Benefit	Speech TherapyPhysical TherapyOccupational Therapy
Provider Types / Place of Service	 Independent Practitioner – Clinic Setting Independent Practitioner – Home Setting Comprehensive outpatient rehabilitation facility (CORF) / Outpatient rehabilitation facility (ORF) Home Health Agency Early Childhood Intervention (ECI)
Payment Models	Fee-for-serviceManaged Care

History of Spending on Acute Care Therapy Services SFY 2009-2014

According to a report prepared by the Texas Health and Human Services Commission's Strategic Decision Support unit (2015), claims expenditures for all pediatric acute care therapy services, inclusive of physical, occupational, and speech therapy, increased from \$412 million in fiscal year 2009 to \$699 million in fiscal year 2014. Costs to the Texas Medicaid program for pediatric acute care therapy services were highest in calendar year 2012, with total expenditures exceeding \$731 million. Additionally, data provided by the Texas Health and Human Services commission indicates that expenditures on pediatric speech therapy services exceeded total expenditures for occupational therapy and physical therapy services combined during this period. Total expenditures on acute care speech therapy services increased from \$233 million in 2009 to

greater than \$397 million in 2014. This represents a 70.4% increase in spending on speech therapy-related services for the five-year period. Expenditures for the five-year period were most significant in 2012, with expenditures for pediatric speech therapy services surpassing \$426 million.

Figure 7 shows MCO versus FFS payments rounded to the nearest million for all acute care therapy services for clients under the age of 21 from 2009 to 2014. Figure 8 shows MCO versus FFS payments from 2009 to 2014 for only those services related to speech therapy for clients under the age of 21.

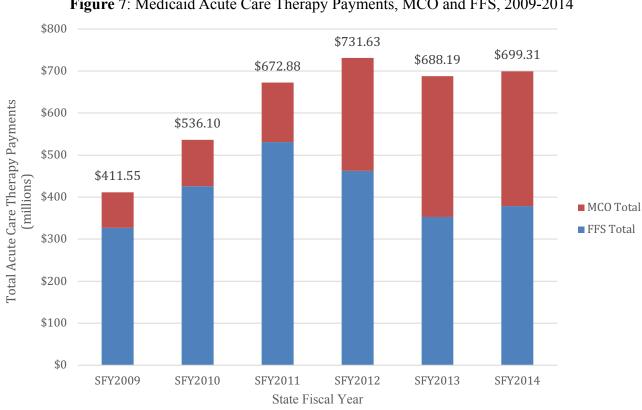


Figure 7: Medicaid Acute Care Therapy Payments, MCO and FFS, 2009-2014

Source: AHQP Claims Universe, TMHP; Enc Best Picture Universe, TMHP; DQD.PTOTST Database, HHSC.

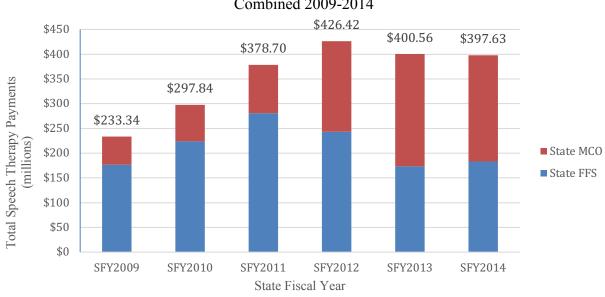


Figure 8: Total Speech Therapy Medicaid Payments, MCO and FFS Combined 2009-2014

Source: AHQP Claims Universe, TMHP; Enc Best Picture Universe, TMHP; DQD.PTOTST Database, HHSC

The increase in expenditures for the five-year period was driven, at least in part, by the rise in the number of pediatric clients accessing therapy services secondary to an overall increase in enrollment in the Texas Medicaid program. In fiscal year 2009, approximately 94,000 pediatric clients obtained acute care therapy services, and in fiscal year 2014, approximately 148,000 pediatric clients accessed acute care therapy services. (Texas Health and Human Services Commission Strategic Support Division, 2015). According to Texas Medicaid enrollment data made available by the Texas Health and Human Services Commission (2017), enrollment in the Texas Medicaid program increased from 2,241,713 to 2,864,540 for this same period. This represents a 21.74% increase in total enrollment in the children's Medicaid program over the 5-year period and a less than 1% increase in the number of children utilizing acute care therapy for the same period.

When compared to the number of children enrolled in the Texas Medicaid program, the percentage of children receiving therapy services increased by less than 1 percent when comparing 2009 and 2014 utilization rates. In fiscal year 2009, 4.19% of children enrolled in the Texas Medicaid program utilized acute care therapy services. In 2014, 5.18% of children enrolled in the Texas Medicaid program utilized acute care therapy services. Table 10 characterizes the percentage of Medicaid-enrolled pediatric beneficiaries accessing therapy services between fiscal years 2009 and 2014.

Table 10: Texas Medicaid Percentage of Enrolled Members Receiving Acute Care Therapy Service, SFY 2009-2014

SFY	Pediatric Clients Receiving Acute Care Therapy Service*	Pediatric Clients Enrolled in the Texas Medicaid Program (Fiscal Year End – August)	Percentage of Medicaid Enrolled Pediatric Clients Accessing Therapy Services
SFY2009	94,000	2,241,713	4.19
SFY2010	117,000	2,472,486	4.73
SFY2011	136,000	2,648,809	5.13
SFY2012	151,000	2,638,931	5.72
SFY2013	144,000	2,617,591	5.50
SFY2014	148,000	2,864,540	5.17
* Number of Pediatric Clients Receiving Acute Care Therapy Services Rounded to the Nearest 1,000			

[^] Number of Pediatric Clients Receiving Acute Care Therapy Services Rounded to the Nearest 1,000

Source: Review of Texas Medicaid Acute Care Therapy Programs and HHSC Medicaid Enrollment Data Files

History of Regulatory and Legislative Action Related to the Texas Medicaid Acute Care Therapy Program

There is an extensive history of regulatory and legislative action related to payment rates for acute care therapy services in the Texas Medicaid program. The Texas HHSC first attempted

to reduce payment rates for speech therapy services effective January 1, 2012, but delayed the implementation of those rate reductions as a result of feedback received at a public rate hearing in November 2011(Texas Medicaid & Healthcare Partnership, 2011). A second rate hearing was held in January 2012, and the Texas HHSC ultimately applied between a 2% and 7% reduction in reimbursement rates for the primary procedure code related to the delivery of individual speech therapy services depending on provider type (Texas Medicaid & Healthcare Partnership, 2012, January). The percentage reduction applied was less than the Texas HHSC had initially sought to achieve.

Not satisfied with the cost savings achieved as a result of the reimbursement rate reductions applied in March, 2012, legislative action was taken during the 83rd Legislature, Regular Session, 2013, the 84th Legislature, Regular Session, 2015 and again during the 85th Legislature, Regular Session, 2017. Legislative action directed the Texas Health and Human Services Commission (HHSC) to enact specific provisions to control for increasing costs within the acute care therapy program.

During the 83rd Legislature, Regular Session, lawmakers passed Senate Bill 1, Article II, Health and Human Services Commission, Rider 51, directing the HHSC to achieve "a reduction of \$200,000,000 in General Revenue Funds and \$284,730,000 in Federal Funds in fiscal year 2014 and \$200,000,000 in General Revenue Funds and \$278,460,000 in Federal Funds in fiscal year 2015, a biennial total of \$400,000,000 in General Revenue Funds and \$563,190,000 in Federal Funds" (p. II-102). Senate Bill 1, Rider 51 gave the HHSC flexibility to shift the reductions between fiscal years and to allocate the reductions between 25 initiatives. Those initiatives included strengthening the prior authorization process, maximizing co-payments in the Medicaid program, implementing alternative payment models, phasing down Medicaid payments

rates that were above Medicare rates, and developing a "more appropriate fee schedule for therapy services" (p. II-102). The total expected cost savings related to therapy services for the 2014-2015 biennium were estimated at \$88.5 million (\$36.8 million in general revenue funds and \$51.7 million in federal matching funds. (Texas Health & Human Services Commission Strategic Support Division, 2015).

Acting upon the legislative directive given, the HHSC introduced proposed rate reductions related to therapy services that were intended to achieve the targeted costs savings as outlined in Senate Bill 1, Rider 51. However, after reviewing written comments on the proposed rate reductions and receiving public testimony at a rate hearing held on July 10, 2013, the initially proposed rate reductions were modified before their implementation on September 1, 2013 (Texas Medicaid & Healthcare Partnership, 2013). Final action included making modifications to the existing Medicaid fee schedules for acute care therapy providers that were lower than those initially proposed. Specifically, the HHSC lowered provider payment rates for acute care therapy services delivered through the fee-for-service Medicaid program on September 1, 2013. Rate reductions implemented ranged between 1% and 4% on average for each designated CPT® code depending on provider type and place of service designations. (Texas Medicaid & Healthcare Partnership, 2013; Traylor, C. & Ghahremani, K, 2014). The rate reductions as implemented in September of 2013 were expected to achieve cost savings of \$18.1 million in general revenue and \$25.4 million in federal matching funds for the 2014-2015 biennium. (Texas Health and Human Services Commission's Strategic Support Division, 2015). Although this was short of the targeted goal outlined in Rider 51, there was an expectation that the HHSC would implement additional cost containment measures such that the total cost savings assumed in Rider 51 for acute care therapies would be achieved. HHSC was given the

flexibility to achieve the costs savings through a combination of additional rate reductions and policy changes as appropriate (Texas Health and Human Services Commission's Strategic Support Division, 2015).

Subsequently, the HHSC also implemented a series of policy changes that were designed to achieve additional cost savings within the program. Those policy changes were implemented on January 1, 2014, and included actions that established parameters for the delivery of therapy services one to three times weekly as well as monthly. The policies set limitations on when and how often therapy providers could complete reevaluations and limited service delivery times to one hour daily for physical, occupational and speech therapy sessions billed in 15-minute increments. Previously, therapy sessions were payable upwards of two hours daily depending on the type of therapy rendered as well as the provider type rendering the service. (Texas Medicaid & Healthcare Partnership, 2013; Texas Medicaid & Healthcare Partnership, 2014, January).

In response to concerns expressed by therapy providers and stakeholders about the changes to the existing policies, the HHSC implemented a grace period for compliance with the therapy-related prior authorization changes. They also held a series of stakeholder meetings in early 2014 to work through concerns related to the revised therapy policies and made additional modifications to those policies effective April 1, 2014, as a result of those meetings (Texas Medicaid & Healthcare Partnership, 2014, February; Texas Medicaid & Healthcare Partnership, 2014, March).

Despite the modifications made to provider payment rates for acute care therapy services and the existing CCP therapy policies, concerns about expenditures for acute care therapy services persisted throughout the biennium. As such, the HHSC commissioned a study to compare payment rates for acute care therapy services delivered through the children's Medicaid

program to payment rates for like services in other state Medicaid programs as well as by commercial insurers within and outside of Texas. The results of the analysis were presented to members of the 84th Legislature, Regular Session, 2015, and subsequently made available to stakeholder groups.

Key findings contained in the Review of Texas Medicaid Acute Care Therapy Programs (TMACTP) suggested that except for of one CPT® code, the 2013 Texas Medicaid published rates were higher than those reported for the four comparison states (Arizona, California, Florida, and Minnesota). Additionally, the report found that many of the Texas Medicaid paid-per-unit therapy rates were higher than the rates paid in the Truven 11-state Medicaid comparison as well as the rates paid in the commercial comparisons both in and outside of Texas. Using the information contained in the TMACTP, members of the 84th Legislature, Regular Session, 2015 passed legislation intended to achieve cost savings that were more substantial than what had previously been sought by the 83rd Legislature, Regular Session, 2013.

Passed by the 85th Legislature, Regular Session in 2015, Rider 50 of the General Appropriations Act proposed to reduce combined (state and federal match) expenditures on acute care therapy services by \$350 million (Texas General Appropriations Act, 2015). Two-thirds of the estimated savings were expected to be achieved through rate reductions and the remaining third through a series of policy initiatives. The law also instructed the HHSC to proceed in a manner that does not jeopardize access to care for Medicaid beneficiaries. In a 2015 letter to the HHSC co-written by Lt. Governor Patrick and Senator Jane Nelson, Chair of the Senate Finance Committee, the two justified the need for the reductions noting:

The Legislature included Rider 50 recognizing that Texas taxpayers are paying significantly higher rates for therapy services compared to Medicaid rates in other states

and commercial rates in Texas. In fact, one of the most commonly used therapy codes costs the state 204% of commercial rates for certain providers. As a result, both the House of Representatives (by a vote of 115-33) and Senate (by a vote of 30-1) included therapy rate reduction riders in the final budget that passed their respective chambers.

There has been a dramatic increase in the cost and utilization of acute care therapy services in the Texas Medicaid program. Costs have increased from roughly \$436 million a year to an estimated \$722 million from 2009 to 2014. Speech therapists also represent a disproportionately high number of therapy investigations within your Medicaid Provider Integrity Unit. Overall, therapy providers represent 12 percent of the investigations caseload and 14 percent of the legal sanctions caseload.

The two also encouraged HHSC to proceed gradually, reminding the HHSC that,

Rider 50 gives [them] the ability to pursue a savings of \$100 million dollars from Medicaid acute care therapy rates, while also making sure that eligible children all over this state can continue to receive these important services. Rider 50 was purposefully written so that [the HHSC] can do both. If there are vulnerable citizens in need of services we expect [the HHSC] to assess and address them as vigorously as pursuing cuts in waste, abuse and fraud.

Acting upon this direction, the HHSC proposed rate reductions in July 2015 that were scheduled for implementation on September 1, 2015. Prior to the rate changes being implemented, however, a lawsuit was filed on behalf of families and therapy providers in August 2015 that prevented the implementation of the proposed reductions. Legal action continued for several months until the Texas Supreme court issued a ruling in September 2016 that paved the

way for the HHSC to proceed with rate reductions (Walters, 2016). Following the Texas Supreme Court's ruling, the HHSC announced in November 2016 that it would move forward with rate reductions effective December 15, 2017 (Texas Medicaid & Healthcare Partnership, 2016, November).

The rate changes applied on December 15, 2017, included reductions of between 8% and 28% in reimbursement for the primary procedure code related to the delivery of individual speech therapy services (CPT® 92507). The reductions did not standardize the rates across all provider types. The severity of the reduction related to this procedure code varied depending on provider type and place of service designations, with reductions to comprehensive outpatient rehabilitation facilities / outpatient rehabilitation facilities and home health agencies being more severe than cuts to independent therapy providers. For example, independent speech therapy providers in the clinic setting experienced a reduction in payment rates of 8.26% and independent speech therapy providers in the home setting experienced a 15.15% reduction. Home health agencies experienced a 25.75% reduction, and CORF/ORFs experienced a 27.93% reduction in reimbursement (Texas Medicaid & Healthcare Partnership, 2016, November).

Following these rate reductions, the HHSC announced additional reimbursement changes in May 2017 that were intended to standardize reimbursement rates paid across all provider types (Texas Health and Human Services Commission Rate Analysis Department, 2017, May). This included moving all billing for services related to the provision of speech therapy services to encounter-based billing rather than incremental billing as was occurring in some instances. This change was intended to standardized billing procedures such that there were consistent with practices used by Medicare and private insurers. Although originally scheduled to take effect

July 1, 2017, implementation was delayed pending the outcome of legislative action taken during the 85th Legislature, Regular Session, 2017.

Citing concerns related to access to care, legislative action taken during the 85th

Legislature, Regular Session, 2017 resulted in the Texas legislature restoring 25% of the funding cut during the previous legislative session. At the same time, the 85th Texas Legislature also directed the HHSC to phase in payment rate reductions for work performed by speech-language pathology assistants (Senate Bill 1, Article II, Health and Human Services Commission, Rider 281; Walters, 2017). As a result, the HHSC implemented rate changes on September 1, 2017. Ultimately, these changes standardized payment rates across provider types and revised the billing methodology such that billing for services related to the provision of speech therapy services transitioned to encounter-based billing (Texas Medicaid & Healthcare Partnership, 2017, June). Reductions for work performed by speech-therapy assistants will be phased in starting with a 15% reduction on December 1, 2017.

Through the past two legislative sessions, stakeholder groups, including those representing Medicaid beneficiaries and provider groups, have expressed significant concerns about the impact these rate reductions will have or have already had on access to care. Multiple early childhood intervention programs have closed in the past twelve months citing reductions in payment rates for therapy services as a primary reason (Evans, 2017). This chapter assesses the relative generosity of payment rates for speech therapy services relative to the comparison programs considered.

Hypothesis

Published payments rates for pediatric speech therapy services in the Texas Medicaid program are higher than the published payment rates in the comparison programs for the most commonly billed procedure codes.

Data Sources

Data from multiple sources were used for this analysis. The data afford a comparison of Texas Medicaid published payment rates to national Medicaid, Texas commercial, national commercial, and Medicare allowable charges for the provision of speech therapy services. Data related to the Texas Medicaid program were obtained from the September 1, 2017, Texas Medicaid fee schedule for acute care therapy services. National median Medicaid data were obtained from information compiled in the previous chapter. The national Medicaid data used do not include published payment rates for New Jersey and Tennessee. New Jersey was excluded due to the inability to locate the published fee schedule through the state health agency website. Tennessee was eliminated because its Medicaid fee schedules are established by managed care organizations operating within the state. As such, they are not publically available and are considered proprietary. Medicare data were obtained from the 2017 Part B Medicare Physician Fee Schedule. The Medicare Physician Fee Schedule is publically available through cms.gov. National and Texas commercial data were obtained through a report published by the Texas Health and Human Services Commission's Strategic Support Division in 2015. During a review of the Texas Medicaid Acute Care Therapy Program, the HHSC's Strategic Support Division compared Texas Medicaid rates to fiscal year 2013 commercial insurance rates using claims data obtained through Truven Health Analytics MarketScan© Commercial Claims and Encounters Database

Methods

Eight commonly used evaluation and treatment codes for the provision of pediatric speech therapy were selected from the Current Procedural Terminology 2017 codebook. Procedure codes related to augmentative communication devices were not considered as part of this analysis because they are not included in the Texas Medicaid fee schedule. Produced by the American Medical Association, the CPT® manual identifies codes for medical, surgical, and diagnostic services performed by medical professionals including speech-language pathologists. It is updated annually. This information is typically used for medical records as well as for billing purposes. Table 11 includes a description of the CPT® codes used in this analysis.

Table 11: Description of CPT Codes Used in the Analysis

CPT® Code	Description
92507	Treatment of speech, language, voice, communication, and/or auditory processing disorder, individual
92508	Treatment of speech, language, voice, communication, and/or auditory processing disorder, group, two or more individuals
92521	Evaluation of speech fluency (eg, stuttering, cluttering)
92522	Evaluation of speech sound production (eg, articulation, phonological process, apraxia, dysarthria)
92523	Evaluation of speech sound production (eg, articulation, phonological process, apraxia, dysarthria) with evaluation of language comprehension and expression (eg, receptive and expressive language)
92524	Behavioral and qualitative analysis of voice and resonance
92526	Treatment of swallowing dysfunction and/or oral function for feeding
92610	Evaluation of oral & pharyngeal swallowing function

Texas Medicaid published fee-for-service payment rates for the provision of pediatric speech therapy services were compared with the national minimum, mean, median, and maximum published Medicaid rates. The average and median national Medicaid rates were calculated using the published payment rates for 47 states and the District of Columbia. For this analysis, published fee-for-service payment rates for Texas were not included in the calculation of the national mean and median since the study is undertaking a comparison of Texas against the payment rates in the remaining states.

To assess the relative generosity of payment rates, the ratios of Texas Medicaid published payment rates for pediatric speech therapy services to median national Medicaid published payment rates were calculated using existing Medicaid fee data. Median national Medicaid rates were used instead of the mean because the median is less susceptible to the influence of outliers. Similarly, the ratios of Texas Medicaid published payment rates for pediatric speech therapy services to published Medicare reimbursement rates were calculated using 2017 national data from the Part B Medicare Physician Fee Schedule. In addition, the ratios of Texas Medicaid reimbursement to publically available market fee data for CPT® codes 92507 and 92508 were calculated using data obtained through a report published by the Texas Health and Human Services Commission's Strategic Support Division in 2015.

To calculate the expected savings should the Texas Medicaid program adopt reimbursement rates consistent with those paid in comparison programs, the study multiplied the difference in payment rates between the Texas Medicaid program and the comparison programs by the combined total number of fee-for-service and managed care organization encounters provided in fiscal year 2016 related to CPT® 92507 (Treatment of speech, language, voice, communication, and/or auditory processing disorder, individual). CPT® 92507 was used for this

portion of the analysis as 95.1% of all paid pediatric speech therapy claims within the Texas Medicaid program related to this code (Office of Inspector General Texas Health and Human Services Commission, 2017).

Results

Comparison of Texas Medicaid to National Medicaid Fee Data

Published fee-for-service payment rates for the provision of pediatric speech therapy services within the Texas Medicaid program are among the highest in the nation for all procedure codes considered. Related to individual treatment services (CPT® codes 92507 and 92526), Texas' published fee-for-services rates are the second highest in the nation behind Alaska. Texas' published fee-for-services rates for evaluations are consistently among the top ten highest published fee-for-service rates. Table 12 summarizes the total number of combined fee-for-service and managed care organization encounters paid in the Texas Medicaid program during fiscal year 2016 for home health CORF/ORFs, and independent practitioners. It also includes published payment data for the Texas Medicaid fee-for-service program as well as the national Medicaid minimum, mean, median, and maximum published payment rate.

Table 12: Medicaid Reimbursement Rates for Selected Evaluation and Treatment Codes, Summary

Procedure by CPT®	FY 2016 Total Number of Encounters*	Texas Medicaid FFS Rate	National Medicaid Minimum	National Medicaid Mean	National Medicaid Median	National Medicaid Maximum
92507: Treatment of speech, language, voice, communication, and/or auditory processing disorder, individual	2,863,844	\$107.78	\$18.00	\$52.55	\$55.09	\$113.86
92508: Treatment of speech, language, voice, communication, and/or auditory processing disorder, group, two or more individuals	2,214	\$45.53	\$5.94	\$19.27	\$18.15	\$64.92
92521: Evaluation of speech fluency (e.g., stuttering, cluttering)	568	\$101.12	\$22.51	\$81.76	\$82.99	\$158.53
92522: Evaluation of speech sound production (e.g., articulation, phonological process, apraxia, dysarthria)	933	\$127.36	\$24.58	\$68.98	\$67.05	\$132.75
92523: Evaluation of speech sound production with evaluation of language comprehension and expression	42,628	\$169.81	\$40.00	\$139.00	\$140.52	\$276.31
92524: Behavioral and qualitative analysis of voice and resonance	73	\$86.82	\$25.62	\$70.03	\$69.37	\$129.35
92526: Treatment of swallowing dysfunction and/or oral function for feeding	66.514	\$107.78	\$21.47	\$59.59	\$61.95	\$112.98
92610: Evaluation of oral & pharyngeal swallowing function	1,823	\$205.12	\$23.74	\$67.93	\$63.03	\$205.12

^{*} Total number of encounters includes visit counts for home health agencies, CORF/ORFs, and independent therapists. It does not include the total number of visits provider by ECI agencies.

Ratio of Texas Medicaid Published FFS Rates to National Medicaid Fee Data

To assess the relative generosity of Texas Medicaid reimbursement rates, the ratios of Texas Medicaid published payment rates for pediatric speech therapy services to median national Medicaid published payment rates were calculated using existing Medicaid fee data. Overall, Texas Medicaid fee-for-service published payment rates were consistently higher than mean national Medicaid payment rates. Published payment rates for the Texas Medicaid program are between 1.21 and 3.25 times higher than mean national Medicaid rates. In particular, the Texas Medicaid fee-for-service published payment rate for individual treatment services (CPT® 92507) is nearly twice as high as the national Medicaid median published rate. Table 13 summarizes the ratio of Texas Medicaid fee data to median national Medicaid data.

Table 13: Ratio of Texas Medicaid Fee Data to Median National Medicaid Data

Procedure by CPT®	Texas Medicaid FFS Rate	National Medicaid Median	Ratio*
92507: Treatment of speech, language, voice, communication, and/or auditory processing disorder, individual	\$107.78	\$55.09	1.96
92508: Treatment of speech, language, voice, communication, and/or auditory processing disorder, group, two or more individuals	\$45.53	\$18.15	2.51
92521: Evaluation of speech fluency (e.g., stuttering, cluttering)	101.12	\$82.99	1.22
92522: Evaluation of speech sound production (e.g., articulation, phonological process, apraxia, dysarthria)	\$127.36	\$67.05	1.90
92523: Evaluation of speech sound production with evaluation of language comprehension and expression	\$169.81	\$140.52	1.21
92524: Behavioral and qualitative analysis of voice and resonance	\$86.82	\$69.37	1.25

Table 13: Ratio of Texas Medicaid Fee Data to Median National Medicaid Data, continued

Procedure by CPT®	Texas Medicaid FFS Rate	National Medicaid Median	Ratio*
92526: Treatment of swallowing dysfunction and/or oral function for feeding	\$107.78	\$61.95	1.74
92610: Evaluation of oral & pharyngeal swallowing function	\$205.12	\$63.03	3.25

^{*} Example: Texas published rate for CPT® 92507 is 1.96 times higher than the national Medicaid median

Ratio of Texas Medicaid Published FFS Rates to Part B Medicare Physician Fee Schedule

To assess the relative generosity of Texas Medicaid published fee-for-service rates, the study compared current Texas Medicaid fee data with Medicare data for the same procedure codes obtained from the 2017 Part B Medicare Physician Fee Schedule. Texas Medicaid published payment rates for treatment services are higher than Medicare's published payment rates. The ratios ranged from 1.24 for feeding and swallowing treatment and 1.35 for individual speech therapy to 1.95 for group treatment sessions. Results related to therapy evaluations were mixed. Texas Medicaid fee-for-service published payment rates are higher for CPT® codes 92522 and 92610 but between 10 and 15 percent lower for CPT® codes 92512 and 92523. The rates related to CPT® 92524 are nearly equivalent. Table 14 summarizes the ration of Texas Medicaid fees to Medicare fees.

Table 14: Ratio of Texas Medicaid Fees to Medicare Fees

Procedure by CPT® Code	Texas Medicaid FFS Rate	Medicare	Ratio*
92507: Treatment of speech, language, voice, communication, and/or auditory processing disorder, individual	\$107.78	\$80.03	1.35
92508: Treatment of speech, language, voice, communication, and/or auditory processing disorder, group, two or more individuals	\$45.53	\$23.33	1.95
92521: Evaluation of speech fluency (e.g., stuttering, cluttering)	\$101.12	\$112.69	0.90
92522: Evaluation of speech sound production (e.g., articulation, phonological process, apraxia, dysarthria)	\$127.36	\$93.31	1.36
92523: Evaluation of speech sound production with evaluation of language comprehension and expression	\$169.81	\$199.18	0.85
92524: Behavioral and qualitative analysis of voice and resonance	\$86.82	\$90.08	0.96
92526: Treatment of swallowing dysfunction and/or oral function for feeding	\$107.78	\$87.21	1.24
92610: Evaluation of oral & pharyngeal swallowing function	\$205.12	\$87.21	2.35

^{*} Example: Texas published rate for CPT® 92507 is 1.35 times higher than the Medicare published rate

Ratio of Medicaid Rates to Private Market Fees

To further assess the relative generosity of Texas Medicaid reimbursement rates, the study compared current Texas Medicaid fee data with available private market fees for CPT® codes 92507 and 92508. The private market fee data used in this portion of the analysis was obtained from a previously published study completed by the Texas Health and Human Services Commission's Strategic Support Division in 2015. During a review of the Texas Medicaid Acute Care Therapy Program, the HHSC's Strategic Support Division compared Texas Medicaid rates

to fiscal year 2013 commercial insurance rates using claims data obtained through Truven Health Analytics MarketScan© Commercial Claims and Encounters Database. It is not possible to complete the analysis for the remaining procedure codes evaluated in this chapter because there are no publically available private market fee data related to these codes.

As the two data sets are not entirely comparable, caution is required in interpreting the results. In spite of limitations, however, a number of reasonable conclusions can be drawn.

Overall, published reimbursement rates related to the provision of individual and group speech therapy sessions provided through the Texas Medicaid program are higher than those paid private payers, as shown in Tables 15 and 16. Nationally, private market rates are consistent with those paid by Medicare. The ratio of Texas Medicaid fees to Medicare published fees for CPT® 92507 is 1.35, and the ratio of Texas Medicaid fee to national private market fees is 1.33. The ratio increases for Texas market fees. The ratio of Texas Medicaid fees to Texas private market fees for CPT® 92507 is 1.58. Table 15 summarizes the ratio of Texas Medicaid fees to median national market fees, and Table 16 summarizes the ratio of Texas Medicaid fees to median Texas market fees.

Table 15: Ratio of Texas Medicaid Fees to Median National Market Fees

Procedure by CPT® Code	Medicaid	National Private Market	Ratio*
92507: Treatment of speech, language, voice, communication, and/or auditory processing disorder, individual	\$107.78	\$81.00	1.33
92508: Treatment of speech, language, voice, communication, and/or auditory processing disorder, group, two or more individuals	\$45.53	\$38.00	1.20

^{*} Example: Texas published rate for CPT® 92507 is 1.33 times higher than the national private market median

Table 16: Ratio of Texas Medicaid Fees to Median Texas Market Fees

Procedure by CPT®	Medicaid	Texas Private Market	Ratio*
92507: Treatment of speech, language, voice, communication, and/or auditory processing disorder, individual	\$107.78	\$68.24	1.58
92508: Treatment of speech, language, voice, communication, and/or auditory processing disorder, group, two or more individuals	\$45.53	\$22.28	2.04

^{*} Example: Texas published rate for CPT® 92507 is 1.58 times higher than the Texas private market median

Estimated Cost Savings

In February 2017, the Texas Health and Human Services Commission's Office of Inspector General released an informational report detailing expenditures on speech therapy services in the Texas Medicaid program for state fiscal years (SFY) 2013 through 2016. Since 2013, expenditures on acute care therapy services have approached \$400 million annually. Specific to SFY 2016, the most recent year for which data are available, claims expenditures for all acute care speech therapy services totaled \$400.3 million. This includes claims payments for home health agencies, CORF/ORF's, independent practitioners, and ECI providers. The report notes that 95.1% of claims payments (\$380.5 million) in fiscal year 2016 related to the provision of individual speech therapy (CPT® 92507). Based on a review of available historical claims data, this represents approximately three million encounters. This judgement is based on the known number of combined encounters provided by home health agencies, CORF/ORFs, and independent practitioners in FY2016 (2,863,844) and an estimate of encounters provided by ECI agencies for this same period (111,712). The estimate of encounters provided by ECI agencies

was derived from a report prepared by the Texas Health and Human Services Commission's Office of Inspector General in 2017. Although the estimate of ECI encounters includes all speech therapy-related CPT® codes, it is believed the overwhelming majority of these encounters may be attributed to CPT® 92507, individual speech therapy services. Table 17 characterizes the annual cost savings achievable if the Texas Medicaid program were to adopt rates more consistent with those paid in comparison programs.

Table 17: Estimated Annual Cost Savings

National Medicaid Median	Texas Commercial Median	Mean Top Quartile National Medicaid	Medicare
\$107.78	\$107.78	\$107.78	\$107.78
\$55.50	\$68.24	\$68.39	\$80.03
\$52.28	\$39.54	\$39.39	\$27.75
\$156.8 million	\$118.6 million	\$118.2 million	\$83.3 million
	\$107.78 \$55.50 \$52.28	Median Median \$107.78 \$107.78 \$55.50 \$68.24 \$52.28 \$39.54 \$156.8 million \$118.6 million	Median National Medicaid \$107.78 \$107.78 \$55.50 \$68.24 \$68.39 \$52.28 \$39.54 \$39.39 \$156.8 million \$118.6 million \$118.2 million

Phasing down Medicaid acute care speech therapy payments as was the intent of the 83rd and 84th Texas Legislatures would result in a cost-savings to Texas. Specifically, phasing down Medicaid payment rates for the provision of individual speech therapy services (CPT® 92507) that are paid in excess of the comparison programs considered could result in an annual savings of between \$83 and \$157 million. This represents a cost savings of between 20 and 39 percent, annually.

Managed Care Considerations

One concern expressed by therapy providers and stakeholder groups representing Texas Medicaid beneficiaries is the extent to which MCOs pay below the published Medicaid fee-for-service fee schedule. The concern is that payment reductions applied by MCOs compromise access to care because fewer therapy agencies are willing to provide services at the reduced reimbursement rate. Through a series of public rate hearings hosted by the HHSC, providers reported that there is a wide variance in the amount of these reductions. Anecdotal reports from providers indicate some MCOs pay in accordance with the published Texas Medicaid fee-for-service fee schedule, some MCOs apply reductions in the amount of 20%, and others apply a more significant reduction of as much as 50%. Although less common, there are also reported instances in which providers receive an amount above the published Texas Medicaid fee schedule.

To account for the impact managed care rate reductions could have on provider reimbursement rates, a sensitivity analysis was conducted to determine the extent to which payment rates to therapy providers continue to trend above those reported in the comparison programs. Specifically, the researcher applied a discount rate of 20% for the primary procedure code billed (CPT® 92507) and subsequently compared the adjusted payment rate to those in the

comparison programs considered. It is believed that this is most reflective of the average state-wide discount rate based on anecdotal provider reports. Procedure code 92507 was selected as the comparison code because, per the Texas Health and Human Services Commission (2017), 95.1% of paid claims in SFY 2016 related to this code.

The results of the sensitivity analysis suggest that when MCOs apply an average discount rate of 20%, provider payment rates related to the provision of individual speech therapy remain above those paid in the comparison programs. Under this model, Texas Medicaid payment rates for individual speech therapy services were anywhere from 8% to 55% higher depending on the comparison program considered.

Caution is required in interpreting the results of the sensitivity analysis. This portion of the analysis assumed that managed care organizations do not apply rate reductions to speech therapy payments in other areas of the country. If managed care organizations apply rate reductions to speech therapy payments in other parts of the country as is suspected those reductions likely neutralize the results of this sensitivity analysis. Table 18 characterizes the estimated annual cost savings with a 20% discount rate applied to the existing Texas Medicaid rate for CPT® 92507.

Table 18: Estimated Annual Cost Savings with a 20% Discount Rate Applied to Existing Texas Medicaid Rate for CPT® 92507

	National Medicaid Median	Texas Commercial Median	Median Top Quartile National Medicaid	Medicare
Existing Texas Medicaid Rate for CPT 92507	\$86.22	\$86.22	\$86.22	\$86.22
Calculated Median or Published Rate in Comparison Program	\$55.50	\$68.24	\$68.39	\$80.03
Ratio**	1.55	1.26	1.26	1.08
Difference Between Texas Medicaid and Comparison Program	\$30.72	\$17.98	\$17.83	\$6.19
Estimated Annual Cost- Savings Achieved by Resetting Rate	\$92.2 million	\$53.9 million	\$53.5 million	\$18.6 million

^{*} Estimate was based on 3 million encounters annually

Discussion

Texas Medicaid's published fee-for-service payment rates for the provision of acute care speech therapy services are substantially higher than those of other state Medicaid programs, private insurance, and Medicaid. These results confirm the study's hypothesis and provide substantial evidence that Texas Medicaid's payment policies for the provision of acute care speech therapy services are inconsistent with other Medicaid programs. Policymakers, in collaboration with the MCOs, should consider further cost containment action to better align Medicaid payments with other state Medicaid programs and commercial insurance. Doing so could result in annual cost savings for acute care speech therapy services of between twenty and

^{**} Example: Texas published rate is 1.55 times higher than the national Medicaid median

forty percent. Any action regarding cost containment should consideration stakeholder concerns about access to care and include initiatives to adopt value-based purchasing models as this is a priority goal of the HHSC (Health and Human Services Commission, 2017, June).

Given the significant concern stakeholder groups representing providers and beneficiaries have previously expressed about prior rate reductions and their perceived impact on access to care, further efforts to realign payment rates should be undertaken with caution. Before applying further reductions to the published payment rates, it is recommended that the HHSC evaluate the extent to which prior rate reductions have negatively impacted access to care, if at all. A reduction in access to care could be measured in any number of ways.

One way would be to identify if there has been a decrease in the number of Medicaid beneficiaries receiving services and, if so if there are variances by age or setting. For example, if Medicaid beneficiaries receiving services through early childhood intervention programs have been disproportionately affected due to a loss of services, it may be necessary to preserve payment rates for this population. Similarly, if Medicaid beneficiaries in rural communities have been disproportionately affected, it may be necessary to permit the use of telepractice to preserve access to services.

A second way to measure access to care would be to evaluate wait times for appointments. If prior rate reductions have resulted in providers discontinuing services for Medicaid beneficiaries or limiting the number of Medicaid beneficiaries accepted, one would expect to see an increase in wait times for appointments. Again, special consideration related to future rate reductions may need to be given if it is determined that Medicaid beneficiaries are not receiving services within a reasonable period.

A third way to measure access to care would be to evaluate the distance and time Medicaid beneficiaries spend traveling to and from appointments. If prior rate reductions have resulted in reported increases in the distance and time traveled to access speech therapy appointments that exceed accepted standards, this may also suggest the need to consider the use of telepractice. Telepractice as a means of providing therapy could be limited to communities with an inadequate number of service providers to meet the needs of beneficiaries. Telepractice should be seen as a reasonable strategy that is beneficial in reducing barriers to accessing care as well as lessen the need to pay providers rates that are higher than those found in comparison programs.

In addition to considering how further cost containment measures could impact access to care, policymakers should consider alternatives to the use of a fixed, fee-for-service payment model. This could be accomplished through the use of alternative payment models. Alternative payment models represent a type of value-based purchasing that link healthcare payments to measures of quality and clinical outcomes. The HHSC (2017, June) has demonstrated a commitment to transforming Medicaid payments to reward providers for better quality and outcomes and has established a framework for accomplishing this goal moving forward. The HHSC's guiding principles include:

- 1. Continuous stakeholder engagement,
- 2. Harmonizing efforts across payer types (Medicaid, private insurance, and Medicare),
- 3. Administrative simplification,
- 4. Date-driven decision making,
- 5. Movement through the value-based purchasing model continuum, and
- 6. Reward success.

The next chapter is dedicated to a discussion alternative payment models. The chapter includes the framework for the use of various alternative payment models that could be used to compensate pediatric speech therapy providers instead of Texas Medicaid's existing fixed, feefor-service payment methodology.

Limitations

This research has some limitations. The private market fee data are based on claims expenditures for fiscal year 2013, and it limited to payment information related to CPT® codes 92507 and 92508. Despite limitations in this data source, no other market fee survey data by CPT® code is in the public domain. As such, this was the best proxy currently available. Managed care payment rates are proprietary; therefore, the sensitivity analysis was conducted based on provider reports of the average payment reduction applied in Texas. Additionally, the sensitivity analysis did not incorporate potential reductions applied by managed care organizations in other states. Further, this study does not consider how future payment reductions for work performed by SLP assistants could impact overall payment rates to providers. There is a need for further research in this area regarding the extent to which assistants provide services to Texas Medicaid beneficiaries.

CHAPTER VI

SURVEY RESULTS: PROVIDER PERCEPTIONS OF ALTERNATIVE PAYMENT MODELS AND MEASURES OF CLINICAL AND ADMINISTRATIVE QUALITY

Introduction

This chapters includes a discussion of the results of a nationally representative survey that was developed to assess speech-language pathologists' awareness of alternative payment models. Relevant background information about alternative payment models related to the provision of pediatric speech therapy services that are known to be in existence is also provided. Additionally, the chapter includes a discussion of clinical and administrative quality measures speech-language pathologists, administrators, and practice owners deem important. Overall, individuals surveyed had limited knowledge of alternative payment models and placed a greater emphasis on measures of clinical quality than they did administrative quality. This data is important as it will further shape the design of alternative payment models that could be adopted by Medicaid and commercial insurers.

Background

Limited information is available about the extent to which state Medicaid agencies use alternative payment models to reimbursement for services provided by pediatric speech-language pathologists. In April 2017, the Centers for Medicare and Medicaid Services (CMS) issued a request for information seeking input into the design of alternative payment models focused of children covered through the Medicaid and CHIP programs. Specifically, the request for information sought feedback on strategies that could improve the quality of care beneficiaries receive and reduce the cost of care. CMS was particularly interested in approaches that

encouraged collaboration with health-related social service providers including early childhood programs, child welfare services, and home and community-based providers.

In addition to efforts undertaken by CMS to transform service delivery models, a small number of alternative practice or payment models related to the provision of pediatric speech therapy services are known to exist. WellCare utilizes an alternative payment model in Georgia. WellCare, an entity contracted as a Medicaid managed care organization in Georgia, subcontracts with the Therapy Network of Georgia (TNGA), to administer their therapy services program. Operating on behalf of WellCare, TNGA utilizes a case rate payment methodology to reimburse pediatric speech therapy providers for services rendered to Medicaid beneficiaries for all programs except the Babies Can't Wait program. Characteristics of TNGA's case rate payment model include:

- 1. The assignment of care levels based on patient characteristics,
- 2. A provision that therapists are not restricted by a set number of visits/patients,
- 3. A provision that providers receive full payment immediately after the first claim is submitted and before the completion and billing of any remaining visits, and
- 4. A provision that there are no recoupments of the payment if the beneficiary does not complete the recommended course of treatment.

TNGA (2015) notes that a benefit of this model is that it reduces administrative activities and that the model does not require service providers to continually monitor payments as in a fee-for-service model.

A second value-based initiative related to the provision of pediatric speech therapy services has been undertaken by Superior Healthplan, a Medicaid managed care organization operating in Texas. Superior Healthplan requires prior authorization for initial evaluations,

reevaluations, and treatment services for speech therapy-related services. In March 2017, however, Superior Healthplan introduced a program that waives prior authorization requirements for initial evaluations and reevaluations for those providers who have achieved "value-based status" (Superior Healthplan, 2017). This initiative is part of a pilot program that was implemented in the San Antonio and Lower Rio Grande Valley Regions of Texas. Specific information about eligibility criteria is not available; however, providers anecdotally report being invited to participate via an application process.

A third alternative practice model that is in use is the patient-centered medical home model. This model is in use in the Texas Medicaid program. The patient-centered medical home is a "medical relationship between a primary care physician and a child or adult patient in which the physician provides comprehensive primary care to the patient, and facilitates partnerships between the physician, the patient, acute care and other care providers, and, when appropriate, the patient's family" (Texas Health and Human Services Commission, 2013, December). As it applies to pediatric speech therapy providers, several managed care organizations operating in Texas require that a primary care physician or other mid-level practitioner submits requests for prior authorization for therapy services on behalf of the speech-language pathologist servicing the Medicaid beneficiary. Cook Children's Health Plan, for example, has a medical policy in place that stipulates "all requests for services must come through the primary care physician/attending specialist. This policy ensures that the primary care physician/attending specialist is kept in the loop as 'captain of the ship' and responsible for the total care of his/her patient" (Cook Children's Health Plan, 2015, n.p.). While this model encourages improved coordination of care between the speech-language pathologist and medical home, payments to therapy providers are not tied to patient outcomes.

A 2017 survey conducted by the American Speech-Language-Hearing Association suggests providers have limited experience with the use of alternative payment models. Although not limited to pediatric speech-language pathologists, 22.9 percent of providers surveyed reported their facility/practice was not part of an alternative payment model. Another 54.4 percent of providers surveyed indicated they did not know if their facility/practice was associated with an alternative payment model. Among those reporting experience with alternative payment models, bundled or episodic payments was the most commonly used model. Speech-language pathologists working with adults more widely reported experience using alternative payment models than speech-language pathologists working with children (American Speech-Language-Hearing Association, 2017).

Building upon available information about the use of alternative payment models for pediatric speech therapy services, it is hypothesized that speech-language pathologists have limited knowledge of alternative payment models and their possible impact on their reimbursement rates and practice patterns. It is also hypothesized that speech-language pathologists place greater importance on measures of clinical quality than they do measures of administrative quality.

Hypotheses

Hypothesis 1: Speech-language pathologists have limited knowledge of alternative payment models and their possible impact on their reimbursement rates and practice patterns.

Hypothesis 2: Speech-language pathologists place greater importance on measures of clinical quality than they do measures of administrative quality.

Methods

A national electronic survey was developed and distributed to accomplish two objectives. First, to identify the extent to which pediatric speech-language pathologists are familiar with and have experience using alternative payment models, and second, to determine measures of administrative and clinical quality that are of vital importance to providers. The survey included 16 questions that identified a provider's familiarity with alternative payment models including the extent to which they are used in their current work setting. Appendix G includes a copy of the survey questions. For those providers with experience using alternative payment models, the survey asked questions about how alternative payment models have affected the provider's practice patterns and whether the use of alternative payment models has affected their organization's financial stability. Additionally, the survey asked providers to rank measures of administrative and clinical quality as being of low, moderate, or of significant importance.

The survey was submitted to and approved by Texas A&M's Institutional Review Board. A copy of the Institutional Review Board approval is included in Appendix H. Informed consent was provided to participants. An introductory page accompanied the electronic survey notifying potential participants that their participation was voluntary. The introductory page included a description of the study, a discussion of the potential risks and benefits, and instructions for completing the survey. There were minimal risks anticipated as a result of participation in the survey, and the survey was anonymous. No personally identifiable information was collected.

The questions on the survey were externally reviewed by speech-language pathologists and audiologists with extensive experience in reimbursement, coding and payer policy. Based on feedback from these individuals, modifications were made to the survey, and additional questions were added. The survey was also beta tested with a small group of speech-language

pathologists to determine the amount of time that was needed to complete the survey.

Depending on a provider's experience with alternative payment models, it was estimated that the survey would take between five and fifteen minutes to complete.

Inclusion and exclusion criteria were developed and shared with prospective respondents. Speech-language-pathologists were eligible to participate if they were associated with a pediatric therapy practice/facility that submits claims for services rendered to insurers. Speech therapy providers were not eligible to participate if they were associated with an adult-only practice. Both males and females were eligible to complete the survey, and no individual was excluded based on ethnicity, race, or socioeconomic status.

Demographic information regarding the national population of speech-language pathologists was available through the American Speech-Language-Hearing Association (2017). In 2016, the American Speech-Language-Hearing Association (ASHA) represented just over 162,000 certified speech-language pathologists. The majority of speech-language pathologists are Caucasian women. Females represented 96.3 percent of ASHA's certified speech-language pathologists (SLPs). Racial minorities represented 7.9% of ASHA total membership inclusive of certified members, nonmember certificate holders, international affiliates, and associates.

Most speech-language pathologists (72.1%) report they are employed on a full-time basis. Fewer than 40 percent of speech-language pathologists (39.5%) report that they are employed in health care settings. Among all survey respondents, 16.3% of SLPs work in nonresidential health care facilities such as private practices and home health, 12.5% of SLPs work in hospitals, and 10.7% of SLPs work in residential health care facilities such as skilled nursing facilities.

Available information related to work roles reflects that 74.7% of SLPs self-identify as clinical service providers. An additional 6.7% of SLPs self-identify as administrators.

Information is not available about the distribution of SLPs working in health care with children versus adults.

The survey's target population included pediatric speech-language pathologists working in a variety of practice settings who bill insurers or who work for organizations that bill insurers for services rendered. Snowball sampling, a nonprobability sampling technique, was used to recruit participants. The survey was distributed by email to American Speech-Language Hearing Association's State Advocates for Reimbursement. ASHA has a State Advocate for Reimbursement assigned to each state, some of whom were believed to have knowledge of payer policy in their respective states. The survey was also distributed via email to 10 pediatric speech-language pathologists with whom the researcher was familiar. These individuals were asked to complete the survey and recruit further subjects from among their acquaintances. In total, 125 survey responses were received. Among those, fourteen surveys were removed from the analysis due to incomplete survey responses. As described in greater detail below, it is believed that the survey the results are representative of the larger population of pediatric speech-language pathologists despite the limited sample size.

The researcher analyzed the 111 remaining surveys to determine the following:

Identify the extent to which pediatric speech-language pathologists are familiar with
alternative payment models. To determine if variances in responses existed by respondent
demographic characteristics, cross tabulations were completed and the joint frequency
distributions were analyzed using the chi square statistic to determine if an association

- existed between practice size or employee job role and an individual's familiarity with alternative payment models.
- 2. Identify the percentage of pediatric speech-language pathologists who reported experience using alternative payment models.
- 3. Identify measures of clinical and administrative quality providers deem of low, moderate, and significant importance. To do this, the mean for each clinical and administrative quality measure was calculated. The aggregate mean was also calculated for each category of quality measures. Following this, cross tabulations were completed for each clinical and administrative quality measure considered and the joint frequency distributions were analyzed using the chi square statistic.

The survey did not yield sufficient data to examine provider preferences towards specific alternative payment models nor their willingness to accept payment arrangements that incorporate alternative payment models due to the limited number of pediatric speech-language pathologists who reported having experience using non-traditional payment models. All individuals surveyed were provided the opportunity to answer the demographic questions included. Skip logic was embedded into the survey such that providers who lacked experience using alternative payment models were only offered the opportunity to provide additional responses to the questions about measures of clinical and administrative quality they deemed important.

Survey Results

Demographic Information

Among survey respondents, 59.5% indicated their primary work setting was in private practice, 13.5% were employed by home health agencies, 5.4% worked in comprehensive

outpatient rehabilitation facilities, 4.5% worked in hospitals, and 17.1% indicated they worked in other practice settings. Individuals who self-identified as primarily working in other practice settings were most commonly employed by early childhood intervention programs or through the public schools. While not representative of the national sample of all speech-language pathologists working in health care settings, the results are in line with the researcher's expectations. Because the survey targeted pediatric speech-language pathologists, only it was expected that the majority of respondents would self-identify as working in nonresidential health care facilities as compared residential health care facilities or hospitals. For example, residential health care facilities typically employ speech-language pathologists working with adults as compared to children. Table 19 characterizes the distribution of survey responses by job role and practice setting.

Table 19: Employee Job Role by Practice Setting

	Hospital	Outpatient Rehab Facility	Home Health Agency	Private Practice	Other	Total
Owner	0	2	2	30	1	35
Administrator	2	2	2	3	3	12
Contracting Specialist	1	0	0	0	1	2
Speech-Language Pathologist	2	2	8	29	13	54
Other	0	0	3	4	1	8
Total	5	6	15	66	19	111

Survey respondents were asked to describe their primary role within their professional work setting. Speech-language pathologists who primarily engaged in clinical practice represented 48.7% of survey respondents, and speech-language pathologists who identified as practice owners represented 31.5% of respondents. It was assumed that speech-language pathologists who identify as private practice owners also engage in clinical practice activities, especially those in solo practices. This brought the total percentage of speech-language pathologists engaged in some form of clinical practice to 80.2% of survey respondents.

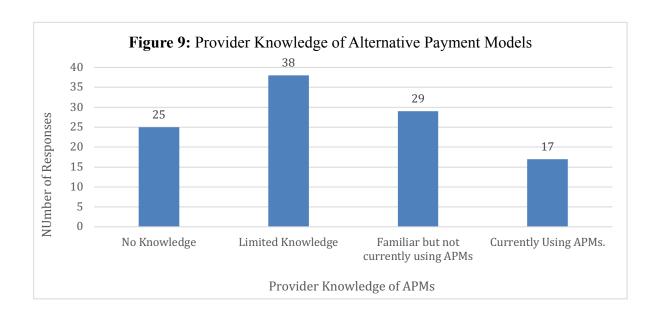
Administrators represented 10.8% of respondents, contracting specialists represented 1.8% of respondents, and 7.2% of respondents self-identified as performing a primary job role not included among the choices provided as part of the survey. Other primary job functions listed by survey respondents included clinical director and clinical educator, and five individuals indicated they served in two primary job roles. Those included owner and speech-language pathologist and speech-language pathologist and administrator.

These results are reasonably representative of the national sample. Data from the American Speech-Language Hearing Association reflects that 74.7% of speech-language pathologists are clinical service providers and 6.7% of speech-language pathologists are administrators.

Survey respondents were also asked to characterize the size of their practice. Among survey respondents, 20.7% were solo practitioners and 18.9% owned or worked for organizations that employed between two and four providers. Additionally, 24.3% owned or worked for agencies that employed between five and nine providers, 20.7% owned or worked for organizations that employed between 10 and 24 providers, and 15.3% owned or worked for entities that employed 25 or more employees.

Knowledge of Alternative Payment Models

Individuals were asked to characterize their knowledge of alternative payment models. Overall, most providers completing this question of the survey (n = 109) had minimal knowledge of or no experience using alternative payment models. Among respondents, 22.9% indicated they were not at all familiar with alternative payment models and 34.9% reported they had heard of alternative payment models but did not know much about them. Additionally, 26.6% indicated they were familiar with alternative payment models but did not have experience using them and 15.6% of respondents indicated they had experience using alternative payment models. Figure 9 depicts provider familiarity with alternative payment models.



Survey responses were analyzed in greater detail to determine if there is an association between an individual's primary employment function and their familiarity with alternative payment models. To do this, a cross tabulation was completed and the joint frequency

distribution was analyzed using the chi square statistic. Based on the results of the analysis, there is a statistically significant association between job function and an individual's familiarity with alternative payment models at the 0.05 significance level (p-value = 0.05). Practice owners and administrators were more knowledgeable about alternative payment models than individuals who self-identified as speech-language pathologists primarily engaged in clinical practice. Table 20 characterizes the association between provider familiarity with alternative payment models by employee job function.

Table 20: Provider Familiarity with Alternative Payment Models by Job Function

	I'm not at all familiar	I've heard of alternative payment models but don't know much about them	I'm familiar with alternative payment models but don't have experience using them	I'm currently using alternative payment models in my professional work setting	Total
Owner	6	9	12	7	34
	17.65%	26.47%	35.29%	20.59%	100%
Administrator	0	3	4	5	12
	0.00%	25.00%	33.33%	41.67%	100%
Contracting	0 0.00%	2	0	0	2
Specialist		100.0%	0.00%	0.00%	100%
Speech- Language Pathologist	18 33.33%	21 38.89%	11 20.37%	4 7.41%	54 100%
Other	1	3	2	1	17
	14.29%	42.86%	28.57%	14.29%	15.60%
Total	25	38	29	17	109
	22.94%	34.86%	26.61%	15.60%	100.00%
P-value = 0.05	!				1

Survey responses were also analyzed to determine whether practice size had an impact on provider familiarity with or use of alternative payment models. Again, a cross tabulation was completed and the joint frequency distribution was analyzed using the chi square statistic. Based on the results of the analysis, there is not a statistically significant association between practice size and an individual's familiarity with alternative payment models at the 0.05 significance level (p-value = 0.52). Table 21 characterizes the association between provider familiarity with alternative payment models by practice size.

 Table 21: Provider Familiarity with Alternative Payment Models by Practice Size

	I'm not at all familiar	I've heard of alternative payment models but don't know much about them	I'm familiar with alternative payment models but don't have experience using them	I'm currently using alternative payment models in my professional work setting	Total
Solo	6	11	3	3	23
practitioner	24.00%	28.95%	10.34%	17.65%	21.10%
2 to 4 providers	4	10	5	2	21
	16.00%	26.32%	17.24%	11.76%	19.27%
5 to 9	6	6	9	4	25
providers	24.00%	15.79%	31.03%	23.53%	22.94%
10 to 24 providers	4	8	8	3	23
	16.00%	21.05%	27.59%	17.65%	21.10%
25 or more providers	5	3	4	5	17
	20.00%	7.89%	13.79%	29.41%	15.60%
Total	25	38	29	17	109
	100.00%	100.00%	100.00%	100.00%	100.00%
P-value = 0.52	2	ı	1	1	

These findings confirm hypothesis one. Pediatric speech-language pathologists' knowledge and use of alternative payment models is limited, though administrators and practice owners were more familiar with the models than speech-language pathologists engaged in clinical practice. Overall, fewer than 16% of respondents had experience using alternative payment models. Survey findings are representative of the national sample as the results are similar to those reported by the American Speech-Language-Hearing Association (ASHA). When conducting their 2017 health care survey, ASHA found that fewer than 20% of speech-language pathologists were part of an alternative payment model.

Provider Perceptions of Quality

Overall, providers ranked the measures of clinical quality higher than they did the measures of administrative quality. The mean across all items considered related to aspects of clinical quality was 4.38. The mean across all items considered related to aspects of administrative quality was 4.14. Among the measures of clinical quality considered, 83.3% were rated as being very important or absolutely essential. Among the measures of administrative quality studied, 64.3% were rated as being very important or absolutely essential. These findings confirm hypothesis two. Providers place greater emphasis on measures of clinical quality as compared to measures of administrative quality.

Provider Perceptions of Clinical Quality

Survey respondents ranked ten of the twelve clinical quality measures as being very important or absolutely essential based on a mean of 4.0 or greater. Among these, the three highest ranked measures of clinical quality included involving the patient or caregiver in the development of the plan of care, using clinically appropriate evaluation tools to determine a patient's eligibility for services, and completing an assessment and providing intervention in the

patient's primary language. The two lowest ranked measures of clinical quality were using the same evaluation tools at the time of the initial assessment and reevaluation to make comparisons and documenting caregiver compliance to and feedback about the home program activities assigned. Table 22 characterizes survey respondents' attitudes towards the measures of clinical quality surveyed.

Table 22: Provider Perceptions of Clinical Quality

	Mean	Not Important	Of Little Importance	Of Average Importance	Very Important	Absolutely Essential
Using of clinically appropriate evaluation tools to determine eligibility for services	4.64	1.0%	0.0%	2.0%	26%	71%
Using the same evaluation tools at the time of the initial assessment and reevaluation in order to make comparisons or providing an explanation why a different tool must be utilized	3.81	2.0%	3.0%	28.0%	46.0%	21.0%
Completing assessments and providing intervention in the patient's primary language	4.65	0.0%	0.0%	3.0%	28.0%	69.0%
Involving the patient and/or caregiver in the development and implementation of the plan of care	4.70	0.0%	0.0%	4.0%	22.0%	74.0%

Table 22: Provider Perceptions of Clinical Quality, continued

	Mean	Not Important	Of Little Importance	Of Average Importance	Very Important	Absolutely Essential
Writing long- and short-term treatment goals that emphasize functional outcomes	4.58	1.0%	1.0%	3.0%	29.0%	66.0%
Documenting clinical interventions and outcomes as a result of skilled intervention	4.57	0.0%	0.0%	3.09%	37.11%	59.79%
Referring to related professionals and community-based services as appropriate	4.40	0.0%	0.0%	10.1%	40.4%	49.49%
Coordinating care with the patient's referring physician and other healthcare professionals	4.09	0.0%	1.01%	21.21%	45.45%	32.32%
Developing home program/carryover activities for implementation in the patient's natural environment	4.45	0.0%	1.0%	6.0%	40.0%	53.0%
Documenting caregiver compliance to and feedback about the home program activities assigned	3.97	0.0%	5.0%	18.0%	52.0%	25.0%

Table 22: Provider Perceptions of Clinical Quality, continued

	Mean	Not Important	Of Little Importance	Of Average Importance	Very Important	Absolutely Essential
Establishing frequency and duration recommendations that are unique to the patient	4.33	1.0%	1.0%	7.0%	45.0%	46.0%
Using highest qualified provider to deliver services	4.42	0.0%	0.0%	9.0%	39.0%	52.0%

^{*} Total may not equal 100% due to rounding

Survey responses were analyzed in to greater detail to determine if there is an association between an individual's primary employment function and their perception of clinical quality. To do this, cross tabulations were completed for each clinical quality measure considered and the joint frequency distributions were analyzed using the chi square statistic. Based on the results of the analysis, there is a statistically significant association between job function and the following measures of clinical quality at the 0.05 significance level. Table 23 includes a list of the clinical quality measures where there was a statistically significant association between job function and an individual's perception of clinical quality.

Table 23: Association Between Job Function and Measure of Clinical Quality

Clinical Quality Measure	P-Value
Using Clinically appropriate evaluation tools to determine eligibility for services	0.00
Using the same evaluation tool at the time of the initial assessment and reevaluation in order to make comparisons or providing an explanation why a different tool must be utilized	0.00
Writing long- and short-term treatment goals that emphasize functional outcomes.	0.03

Figures 10, Figure 11, and Figure 12 reflect the distribution of responses by employee job function where there was a statistically significant association between an employee's job role and their perception of the measures of clinical quality considered.

Figure 10: Using Clinically Appropriate Evaluation Tools to Determine Eligibility for Services Owner Administrator Speech-Language Pathologist Contracting Specialist Other Total 0% 10% 20% 30% 40% 60% 70% 80% 90% Speech-Contracting Other Total Language Administrator Owner Specialist Pathologist ■ Not Important At All 1 0 1 0 0 0 ■ Of Little Importance 0 0 0 0 0 ■ Of Average Importance 2 1 0 1 0 0 ■ Very Important 2 7 26 1 0 16 ■ Absolutely Essential 6 32 71 1 8 24 ■ Not Important At All ■ Of Little Importance ■ Of Average Importance ■ Very Important ■ Absolutely Essential

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Figure 11: Using the Same Evaluation Tools at the Time of the Initial Assessment and Reevaluation

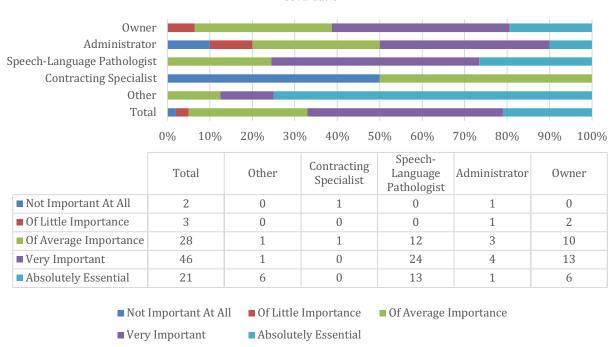
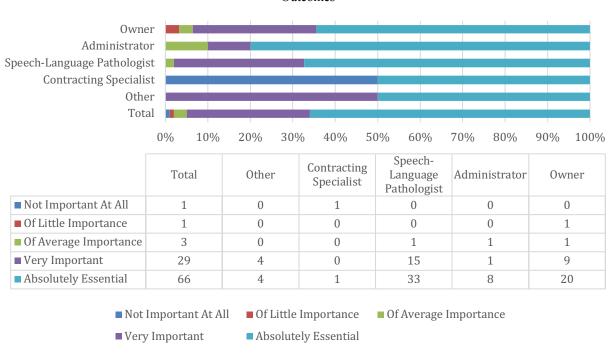


Figure 12: Writing Long- and Short-Term Treatment Goals that Emphasize Functional Outcomes



Provider Perceptions of Administrative Quality

Survey respondents ranked nine of the fourteen administrative quality measures as being very important or absolutely essential based on a mean of 4.0 or higher. Among these, the three highest ranked measures of administrative quality were adherence to the profession's code of ethics, maintaining licensure and certification requirements, and maintaining patient records that are accurate and complete. Adherence to the profession's code of ethics was the highest ranked measure of quality across both categories considered with 100% of respondents ranking the measure as being very important or absolutely essential. The two lowest rated measures of clinical quality were maintaining evening and weekend appointments to meet the scheduling needs of patients and the ability to accept direct deposit. Table 24 characterizes survey respondents' attitudes towards the measures of administrative quality surveyed.

Table 24: Provider Perceptions of Administrative Quality

	Mean	Not Important	Of Little Importance	Of Average Importance	Very Important	Absolutely Essential
Ability to accept direct deposit	3.30	10.1%	14.1%	29.3%	30.3%	16.2%
Ability to implement electronic medical records	3.74	6.1%	7.1%	21.2%	37.4%	28.2%
Maintaining patient records that are accurate and complete	4.81	0.0%	0.0%	1.0%	17.2%	81.8%
Maintaining policy and procedure manuals that are accurate and current	4.08	1.0%	1.0%	23.2%	38.4%	36.4%

Table 24: Provider Perceptions of Administrative Quality, continued

	Mean	Not Important	Of Little Importance	Of Average Importance	Very Important	Absolutely Essential
Maintaining licensure and certification requirements	4.86	0.0%	0.0%	1.0%	12.1%	86.9%
Maintaining continuing education requirements specific to your area of specialization	4.76	0.0%	0.0%	1.0%	22.2%	76.8%
Maintaining all applicable professional liability and business insurance policies	4.68	1.0%	1.0%	3.0%	18.2%	76.8%
Maintaining a system for internal audits of patient records and payments	4.07	2.0%	4.0%	15.2%	41.4%	37.4%
Maintaining evening and weekend appointments to meet the scheduling needs of patients	3.06	11.1%	22.2%	29.3%	23.2%	14.1%
Maintaining a patient survey mechanism to obtain feedback from clients	3.41	2.0%	15.2%	33.3%	37.4%	12.1%
Processing refunds for identified overpayments according to applicable rules and regulations.	3.93	7.1%	4.1%	20.4%	23.5%	44.9%
Documenting patient attendance	4.11	0.0%	3.0%	17.2%	45.5%	34.3%

Table 24: Provider Perceptions of Administrative Quality, continued

	Mean	Not Important	Of Little Importance	Of Average Importance	Very Important	Absolutely Essential
and rationale for missed appointments						
Documenting all contacts/communic ation with the patient and/or their caregiver	4.13	0.0%	3.0%	19.4%	38.8%	38.8%
Adhering to the profession's code of ethics	4.93	0.0%	0.0%	0.0%	7.1%	92.9%

^{*} Total may not equal 100% due to rounding

Survey responses were analyzed in to greater detail to determine if there is an association between an individual's primary employment function and their perception of administrative quality. To do this, cross tabulations were completed for each administrative quality measure considered and the joint frequency distributions were analyzed using the chi square statistic. Based on the results of the analysis, there is a statistically significant association between job function and four of the measures of administrative quality considered at the 0.05 significance level as reflected in Table 25.

Table 25: Association Between Job Function and Measure of Administrative Quality

Administrative Quality Measure	P-Value
Maintaining policy and procedure manuals that are complete and accurate	0.00
Maintaining all applicable professional liability and business insurance policies	0.00
Maintaining a system for internal audits of patient records and payments	0.03
Maintaining a patient survey mechanism to obtain feedback from clients	0.00

Figures 13 reflects the distribution of responses by employee job function where there was a statistically significant association between an employee's job role and their perception of the measures of administrative quality considered.

Figure 13: Maintaining Policy and Procedure Manuals That Are Accurate and Complete

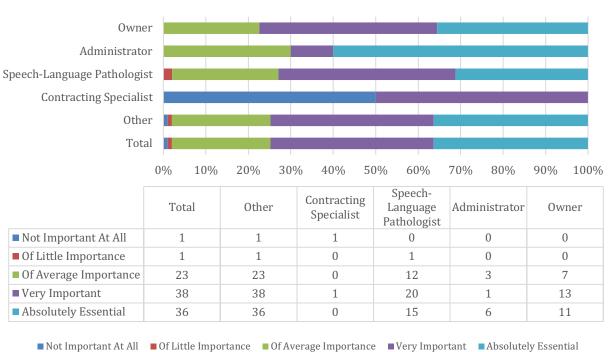


Figure 14 and Figure 15 also reflect the distribution of responses by employee job function where there was a statistically significant association between an employee's job role and their perception of the measures of administrative quality considered.

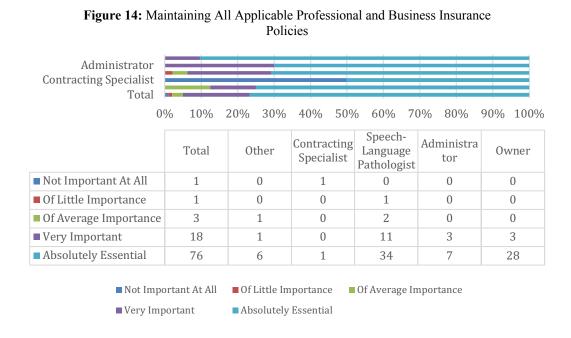
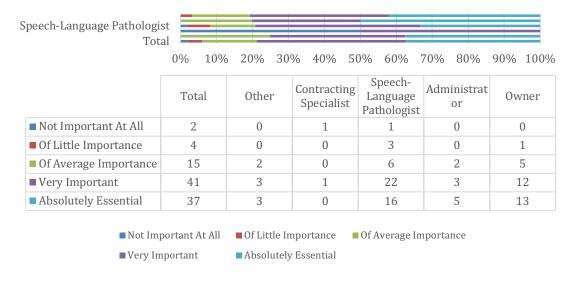


Figure 15: Maintaining A System for Internal Audits of Patient Records and Payments



Figures 16 reflects the distribution of responses by employee job function where there was a statistically significant association between an employee's job role and their perception of the measures of administrative quality considered.

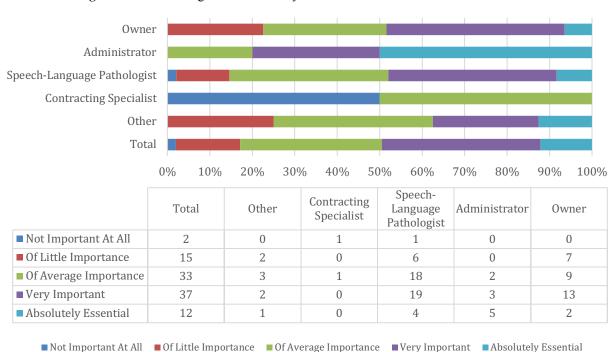


Figure 16: Maintaining A Patient Survey Mechanism to Obtain Feedback from Clients

Discussion

Overall, provider knowledge of alternative payment models is limited with 57.8 percent of survey respondents reporting no or limited knowledge of alternative payment models.

Additionally, just 15.6 percent of respondents reported they had experience using alternative payment models. Practice owners and administrators are more knowledgeable about alternative payment models than contracting specialists or speech-language pathologists primarily engaged in clinical practice. There is no statistically significant association between practice size and an individual's knowledge of alternative payment models.

Survey respondents place greater emphasis on measures of clinical quality (mean = 4.38) than they do measures of administrative quality (mean = 4.14). Among the measures of clinical quality considered, 83.3 percent were rated as being very important or absolutely essential. Among the measures of administrative quality studied, 64.3 percent were rated as being very important or absolutely essential. There is a statistically significant association between an individual's job function and their perception of clinical and administrative quality measures for a limited number of measures surveyed.

This information is valuable in shaping the design of alternative payment models that incorporate measures of clinical and administrative quality by which speech-language pathologists are practice owners are judged. Because speech-language pathologists, practice owners, and administrators have limited knowledge of alternative payment models, it would be beneficial for insurers to consider offering provider education trainings on the use of alternative payment models prior to their implementation. It would also be beneficial to consider provider preferences about measures of clinical and administrative quality during the design phase such that providers value the measures of quality against which they are ultimately judged. Taking these actions would increase the likelihood of acceptance among speech-language pathologist who are likely to fear new contracting arrangements. With this in mind, the information about provider preferences of administrative and clinical quality discussed in this chapter will be included into the design of the top performing provider model proposed in the next chapter.

Limitations

This research has some limitations. The survey sample size is small compared to the number of survey respondents initially targeted; however, the results regarding provider awareness of alternative payment models are consistent with other nationally representative

surveys. Additionally, while the list of clinical and administrative quality measures considered was developed after considerable input from industry experts, there may be others measures that are equal importance that were not considered as part of this survey. This represents an opportunity for further research which could prove especially beneficial after the implementation of alternative payment models that incorporate measures of clinical and administrative quality. Conducting an additional survey to measure provider preferences of clinical and administrative quality post-implementation would provide an occasion for insurers to refine their payment models.

CHAPTER VII

RECOMMENDATIONS AND CONCLUSION

Introduction

This chapter summarizes the scope of this research and pertinent research findings. It also includes recommendations related to implementation of alternative payment models.

Specifically, this chapter includes the framework for various alternative payment models that could be used to pay claims for acute care speech therapy services provided through the Texas Medicaid program. Proposed models include the use of episodic payments and top performing provider designations. Models considered but not recommended include the use of pay-for-performance programs and published performance data. This research will inform recommendations for future cost-containment initiatives and the use of value-based purchasing models within the Texas Medicaid program. The proposed models could be modified to meet the needs of other state Medicaid agencies. Additionally, this chapter identifies contributions to the existing literature, points out limitation of the current work, and outlines opportunities for future research.

Scope of the Research

The research addressed multiple aims. First, the research examined trends in payment and policy related to the provision of pediatric speech therapy services in state Medicaid programs. Second, the research included an analysis of speech therapy services provided through the Texas Medicaid program as there had been significant legislative and legal activity centered around payment rates to therapy providers. The research also identified the measures of administrative and clinical quality that speech therapy providers deem most important in their everyday practice. Understanding provider perceptions of administrative and clinical quality was essential

to developing the framework for the alternative payment models proposed, the final aim of this research.

Research Findings and Contributions

The research is the first to characterize payment and policy trends related to the provision of pediatric speech therapy services in state Medicaid programs. The researcher's analysis of Medicaid published payment rates with the comparison programs revealed that the median Medicaid payment for individual treatment services (CPT® 92507) was 30% less on average. Regarding existing state Medicaid agency policies, there was wide variance in the provision of pediatric speech therapy services. This reflects the flexibility each state is given to design their Medicaid program. Requiring a physician referral was the most commonly shared strategy and reflects the concept that the primary care physician is a gatekeeper of services. Another commonly shared strategy were requirements related to prior authorization processes before initiating treatment services. There was less consistency across state Medicaid agencies concerning qualified provider requirements and telepractice provisions. It is recommended that Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) requirements related to the provision of all medically necessary services be revised such that the available Medicaid benefit is consistent with private insurance and exchange plan coverage. It is also recommended that state Medicaid agencies consider the use of new, more progressive reimbursement methodologies.

Specific to the Texas Medicaid program, published fee-for-service payment rates for the provision of acute care speech therapy services were substantially higher than those of other state Medicaid programs, private insurance, and Medicare. The results provide strong evidence that policymakers, in collaboration with the managed care organizations, should consider further cost

containment action to better align Medicaid payments with other state Medicaid programs and commercial insurance. In consideration of this, it is recommended that policymakers consider the use of alternative payment models instead of the fixed, fee-for-service payment model. The use of alternative payment models would be consistent with efforts to pay for value and quality rather than quantity.

Based on the results of a small, nationally representative survey, provider knowledge of alternative payment models is limited with 57.8 percent of survey respondents reporting no or limited knowledge of alternative payment models. Additionally, just 15.6 percent of respondents reported they had experience using alternative payment models. Practice owners and administrators are more knowledgeable about alternative payment models than contracting specialists or speech-language pathologists primarily engaged in clinical practice. There is no statistically significant association between practice size and an individual's knowledge of alternative payment models. Additionally, survey respondents place greater emphasis on measures of clinical quality than they do measures of administrative quality.

Recommendations: Alternative Payment Models

Because pediatric speech-language pathologists have limited experience with the use of alternative payment models there is little information related to provider preferences about the various alternative payment models that are currently in existence. The remainder of this chapter is dedicated to proposing alternative payment and service delivery models that could be used to reimburse pediatric speech therapy providers within the Texas Medicaid program. The models proposed incorporate the relevant financial data compiled in previous chapters and provider preferences about measures of clinical and administrative quality. Three alternative payment models considered including:

- 1. Maintaining the current fee-for-service payment model and adjusting the existing fee schedule
- 2. Use of episodic payments
- 3. Use of quality and utilization data to designate top performers within a network

Two additional payment models were considered but are not recommended. These include pay-for-performance programs and publishing provider quality data. Although the models proposed include financial data relevant to the Texas Medicaid program, they could be modified as needed to meet the needs of other state Medicaid programs and Medicaid managed care organizations.

Model 1: Maintain the Current Fee-for-Service Payment Model and Adjusting the Existing Fee Schedule

This model proposes to maintain the existing fee-for-service payment model but reset the fee schedule such that reimbursement rates to providers are commensurate with those paid by Medicare. This proposal is consistent with the 83rd Texas Legislature's recommendation to phase down Medicaid payment rates that are paid in excess of Medicare. Based on the currently published fee schedules for the Texas Medicaid program and Part B Medicare and available utilization data, there is a potential annual cost saving of \$83.3 million related to the provision of individual speech therapy treatments. This amount represents a cost savings of 21.9% annually. Presently, the difference in published payment rates for CPT® 92507 is \$27.75 per encounter, and the Texas Medicaid program reimburses providers for approximately three million paid encounters annually related to this CPT® code.

Within the context of this proposal, matching the Medicare fee schedule is proposed for multiple reasons. First, the Medicare fee schedule was selected because it is consistent with available data related to national commercial insurance rates. The 2017 Part B Medicare published payment rate for CPT® 92507 is \$80.03, and the median national private market rate is \$81.00. Second, electing the Medicare rate provides some flexibility should a Medicaid managed care organization (MCO) opt to pay a percentage of the Texas Medicaid fee schedule as is common. For example, if an MCO decided to pay 80% of the existing Texas Medicaid fee schedule, providers would receive a reimbursement of \$64.02 per encounter for CPT® 92507. Although this is below the Texas commercial median paid rate (\$68.24) for the same procedure, it is not believed that the difference in payment rates between the two programs would be significant enough to cause a large number of providers to discontinue services to Medicaid beneficiaries. Anecdotally, Texas-based speech therapy providers have reported contracting at payment rates below this threshold with commercial insurers in the past. Many of these same insurers are closed to new providers because they report having an adequate number of providers to meet the needs of their enrollees.

The Medicare fee schedule was also identified instead of the median rate paid among the ten highest paying Medicaid states or the Texas commercial insurance median paid rate because of concerns that access to care could be negatively affected. If either of these rates were used to establish the Texas Medicaid fee schedule, and an MCO subsequently decided to pay a percentage of the Texas Medicaid fee schedule, the paid rate would fall below the threshold at which the HHSC has previously said that small businesses and micro-businesses would experience an economic impact (Texas Register, 2017). It should be anticipated that speech-

therapy providers would discontinue or limit services to Medicaid beneficiaries in this instance which could result in patients not receiving medically necessary services.

Additional action related to this model concerns payment rates for work performed by speech-language pathology assistants. (SLPAs). Beginning in December 2017, the Texas Health and Human Services Commission (HHSC) began implementing a phased-in 30 percent rate reduction for work performed by SLPAs. The HHSC was legislatively directed to apply this reduction as a result of the 2018-19 General Appropriations Act Senate Bill 1, 85th Legislature, Regular Session 2017 [Article II, HHSC, Rider 218]. The planned reduction included a 15 percent payment reduction effective December 1, 2017. There is an additional 15 percent rate reduction that will be applied effective September 1, 2018. (Texas Health and Human Services Commission Rate Analysis Department, 2017, July).

Because this payment model proposes to reset payment rates to speech therapy providers consistent with those paid by Medicare, discontinuing the application of rate reductions for work performed by speech-language pathology assistants (SLPAs) is radvised. Although this is a strategy used by other state Medicaid agencies as well, including a payment reduction for work performed by SLPAs in addition to resetting the price point for speech therapy services commensurate with rates paid by Medicare would also likely have an adverse effect on small businesses and micro-businesses. Instead of applying a rate reduction for work performed by SLPAs, it is recommended that the HHSC amend their therapy policy related to use of SLPAs such that it matches recommendations made by the American Speech-Language-Hearing Association (ASHA). Currently, Texas licensure rules and regulations allow qualified speech-language pathologists to supervise up to four SLPAs whereas ASHA recommends that a qualified speech-language pathologist supervise no more than two full-time equivalent SLPAs

(American Speech-Language-Hearing Association, 2013; Texas Department of Licensing and Regulation). Limiting the number of SLPAs per qualified SLP to no more than two full-time equivalent SLPAs should result in a higher number of Medicaid beneficiaries receiving direct treatment services from a fully licensed SLP as compared to an SLPA. If this recommendation were to be implemented, it would be beneficial to measure if there is a difference in the duration of treatment for beneficiaries matched on similar patient characteristics when direct treatment services are performed by an SLP as compared to an SLPA. If differences in the duration of treatment are detected, that information could be used to shape future payer policy.

There are advantages and disadvantages related to the implementation of this model. An advantage is that this payment structure is known by both insurers and providers. Further, the payment rates recommended within the context of this model are consistent with the payment rates identified in the comparison programs considered in chapter four. As such, it would not take an overhaul of an insurer's claims engines nor a provider's EMR system making implementation easier. A disadvantage is that it maintains the existing fee-for-service payment model. In this sense, the model encourages volume over value and does not emphasize quality or outcomes. As such, the model is inconsistent with the HHSC's efforts to adopt value-based purchasing models. In consideration of this, the study proposes two additional alternative payment models.

Model 2: Episodic Payment

An episodic payment involves an insurer making a single payment for all services delivered during a defined period of care. Using an episodic payment model, an insurer's payment represents a single price for the entire episode regardless of the type or volume or services provided. Typically, patients are assigned a tier level based on individual patient

characteristics and the condition which necessitates the intervention. The goals of this type of payment model include reducing the duplication of services, promoting increased coordination of care among healthcare providers across multiple settings, and compensating providers for the efficient use of resources (Mechanic and Altman, 2009; Mechanic, 2011). Payment may be made to a single provider, or the payment may be bundled and provided for all services and devices provided by multiple providers.

The proposed model includes two options related to the provision of speech therapy services. Option 1 proposes an episodic payment model that includes four tiers whereas Option 2 proposes an episodic payment with five tiers. In both models, providers would receive a fixed payment based on the tier to which their patient is assigned. In Option 1, a patient would be assigned a tier based on various factors including patient characteristics, the condition which necessitates the intervention, and the presence of any comorbidities. In Option 2, the patient would be assigned a tier based on various factors including patient characteristics, the condition which necessitates the intervention, the severity of the impairment identified, and the presence of any comorbidities. The second option provides increased opportunity for stratification by tier based on the severity of a beneficiary's condition. This option may be particularly beneficial for insurers who cover a high percentage of children with special health care needs.

With this approach, speech-language pathologists would obtain an order from a primary care physician or other qualified medical professional before completing an initial evaluation.

After the completion of the initial evaluation, the assignment of a tier would occur during a prior authorization review process. To assign a patient to a tier, it is recommended that the requesting therapy provider submit a script from the primary care physician or other qualified medical professional that supports the need for the service, relevant medical documentation to

substantiate the presence of comorbidities including applicable ICD-10 codes, and a signed plan of care.

The initial episodes last no longer than 60 days to determine the family's adherence to the treatment plan and the client's capacity to make progress or maintain skill sets. If continued treatment is necessary, a provider should submit a progress report noting a family's compliance with the recommended treatment plan, progress towards the identified goals, and a rationale why continued services are needed. If adherence to the treatment plan is determined to be within acceptable standards, subsequent episodes could be authorized for up to a maximum of 180 days depending on the patient's condition and anticipated need for treatment services. At the end of 180 days, it is recommended that providers complete a comprehensive speech and language evaluation before requesting additional episodes.

Using this approach, providers would receive payments in 60-day increments. Thus, a provider could receive a maximum of 3 payments over a 180-day episode. The insurer would pay the rendering provider the initial payment upon receipt of the first claim following the prior authorization review process. The insurer would pay the rendering provider the second payment upon receipt of the first claim following day 60 of the 180-day episode. The third payment would be paid upon receipt of the first claim following day 120 of the 180-day episode. It is recommended that providers submit claims for the duration of the episode approved.

Providing payments in 60-day increments limits an insurer's risk related to episodes where the patient does not complete the recommended course of treatment. Requiring that providers submit claims for the duration of an episode accomplishes two goals. First, the claims submission process could be used as a mechanism to trigger payments after 60 and 120 days when necessary. The claims submission process also yields valuable data for an insurer. First, an

insurer could use the data to identify instances where a provider may be intentionally limiting the volume of services to maximize their revenue stream. In this situation, this could signal a need to initiate a provider audit. The insurer could also use the data to measure outcomes. For example, insurers could compare providers based on the length of time it takes to discharge patients with similar characteristics assigned to the same tier. Where differences are detected, an insurer may find it beneficial to promote those providers who obtain better outcomes and who are conservative in their utilization patterns.

Table 26 provides the framework for a 4-tier episode. The table provides the criteria for inclusion in a tier, the payment structure recommended, and the rationale for the tier assignment.

Table 26: Episodic Payment Model Option 1

Tier	Criteria	Payment Structure	Rationale
Tier 1	Evaluation only – no therapy services provided	Pay the evaluation at the existing Medicare rate. (The rate varies by type of evaluation.)	
Tier 2	Speech – Language Impairment only, no comorbidities	Median number of visits * existing median among 10 highest paying Medicaid states (\$71.41)	Children who fall into this tier typically have less complex needs & have therapy sessions that often last closer to 30 minutes. Less coordination of care is required.
Tier 3	Speech-Language Impairment with comorbidities	Median number of visits * existing Medicare rate (\$80.03)	Children who fall into this tier have more complex needs and therapy sessions may last longer. A greater degree of coordination of care is also required among related professionals.
Tier 4	Exceptional Circumstances Category	Median number of visits * 110% of Medicare rate (\$88.03)	Assignment to this tier recognizes there may be instances when children have a need for a level of service that exceeds what is typically expected. Assignment to this level should be made on a caseby-case basis only and reviewed by a medical director.

^{*} Payment rates are based on existing fee data for CPT® 92507

Table 27 provides the framework for a 5-tier episode. The table provides the criteria for inclusion in a tier, the payment structure recommended, and the rationale for the tier assignment.

 Table 27: Episodic Payment Model Option 2

Tier	Criteria	Payment Structure	Rationale
Tier 1	Evaluation only – no therapy services provided	Pay the evaluation at the existing Medicare rate. (The rate varies by type of evaluation.)	
Tier 2	Mild to moderate speech – language impairments only, no comorbidities	Median number of visits * existing median national Medicaid rate (\$55.09)	Children who fall into this tier typically have less complex needs & have therapy sessions that often last closer to 30 minutes. Less coordination of care is required.
Tier 3	Severe speech- language impairment or mild speech- language impairment with comorbidities	Median number of visits * existing median among 10 highest paying Medicaid states (\$71.41)	Children who fall into this category may have a long-term, on-going need for therapy services. They require coordination of care that is more intense that kids who fall into level 2.
Tier 4	Speech-Language Impairment with moderate to severe comorbidities	Median number of visits * existing Medicare rate (\$80.03)	Children who fall into this category have more complex needs and therapy sessions may last longer. A greater degree of coordination of care is also required among related professionals.
Tier 5	Exceptional Circumstances Category	Median number of visits * 110% of Medicare rate (\$88.03)	Assignment to this tier recognizes there may be instances when children have a need for a level of service that exceeds what is typically expected. Assignment to this level should be made on a caseby-case basis only and reviewed by a medical director.

^{*} Payment rates are based on existing fee data for CPT® 92507

The use of an episodic payment model has numerous advantages. First, the use of this model would result in a cost-savings to the Texas Medicaid program as a result of lower claims expenditures. Payments to providers would also be more commensurate with those paid in comparison programs as reported in Chapter 4 and established by level. As designed, payments are smaller for patients assigned to lower tiers than to higher tiers. The differentiation in payments across tiers reflects the additional time and effort speech-language pathologists spend with patients with more complex needs. Another advantage is that the use of differentiated payments should reduce provider tendencies to avoid sicker patients. The model also reduces variations in payments to providers in that similar patients have similar claims expenditures. An additional advantage is that providers also gain the flexibility to decide the duration and frequency of treatment. For example, if a provider wanted to provide more sessions at the beginning of an episode then taper the frequency as treatment progressed they could do so. This model also achieves the goal of administrative simplification. Based on need, providers could receive authorization for an episode for up to 180 days which would lessen the amount of time spent on prior authorization activities as compared to current practice patterns. Both the provider and insurer should spend less time engaged in tasks related to payments. Providers would spend less time tracking down payments and insurers would benefit from processing fewer payments. These are all advantages that are in concert with those reported by Miller (2009) in his discussion of the benefits of the use of episodic payments.

This model is not without its challenges, primarily as it relates to implementation. The survey results reported in Chapter 6 indicate that most speech-language pathologists have limited knowledge of or no experience using alternative payment models. Because, this model is largely unknown, providers may fear contracting arrangements. As a result, a significant amount of

outreach and provider education would be needed regarding the use of this model. A second disadvantage is that it would take an overhaul of an insurer's claims engine and require an insurer to provide internal education for employees involved in the prior authorization process. A third potential disadvantage is that it could result in providers significantly reducing or restricting the quantity of services provided to maximize payments. To prevent this, insurers would need to develop an audit mechanism to identify instances where this might occur. The costs to the insurer to conduct audits would also need to be considered.

If adopted, there would be opportunities to create advanced bundles across disciplines using this type of structure, especially for conditions like autism. An insurer could provide a single payment for all therapy-related services for a defined episode. This practice would challenge therapy agencies to reduce the duplication of services, promoting increased coordination of care among speech, occupational, physical therapists and related professionals.

This model has significant promise in transforming how pediatric speech pathology services are delivered to children. Historically, speech–language pathologists have provided continuous care over long periods of time. Anecdotal reports from both providers and insurers suggest that it is common for treatment services to extend from one to three years and even longer, especially for children with special health care needs. Using episodic payments could potentially challenge speech therapy providers to think about how to deliver care in intermittent bursts. Conceptually, a child would be brought on and off of services at critical junctures in their development when skilled intervention is needed to meet a specific milestone. During breaks in intervention, a child's needs would be met within an integrative service delivery system that includes community providers such as head start centers, the public schools, after-school programs, and other social services programs. Efforts to increase collaboration across service

delivery settings to provide care efficiently would align with on-going efforts to transform service delivery models.

Model 3: Use of Quality and Utilization Data to Designate Top Performers Within a Network

In this model, insurers would measure speech therapy providers' ability to meet or exceed defined quality measures and compare utilization patterns by patient case mix to rank practices based on quality and economic efficiency standards. Subsequently, providers who meet the quality and economic efficiency standards would be identified as "top performers" within the larger network of speech therapy providers. Practices that receive a top performer designation would be granted reduced or waived prior authorization requirements and promotion among an insurer's physician network as such. It would also benefit the insurer to promote top performers as high-quality providers with their enrollees such that their members find it beneficial to choose these providers. Combined, these incentives should result in increased referrals for speech therapy providers who are considered top performers, providing the insurer with an opportunity to negotiate the price point at which the speech therapy services are provided.

Granting reduced or waived prior authorization requirements to therapy practices designated as top performers should be viewed favorably by physician practices that are currently responsible for obtaining prior authorization on behalf of therapy practices. This allowance would reduce the time physician practices spend completing administrative tasks related to prior authorizations for therapy services. Because waiving prior authorization requirements reduces the amount of time physician practices are engaged in administrative functions, the volume of therapy referrals should, in time, shift to the group of speech-language pathology practices designated top performers.

As the volume of therapy referrals shifts to those practices designated as top performers, insurers would realize cost savings. Insurers achieve cost savings in two ways. First, insurers achieve cost savings in the form of reduced spending on speech therapy services as top performers are selected, in part, because of their conservative utilization patterns. Insurers could also achieve cost savings be renegotiating contracts at lower prices with practices designated as top performers. Anecdotal reports from insurers and available claims data suggests that there is substantial variation in utilization patterns among providers across Texas. Insurers have also reported wide variations in the quality of the provider documentation reviewed during the prior authorization process and when audits are conducted. These two factors make this a viable strategy.

This model has the effect of creating a narrow provider network without terminating a substantial number of provider contracts which could trigger the need for a 1915 (b)(4) waiver from CMS. 1915 (b)(4) waivers are selective contracting waivers that are required when state Medicaid agencies,

limit a beneficiary's choice of providers (except in emergency situations and with respect to family planning services) to providers that fully meet reimbursement, quality, and utilization standards which are established under the state plan and are consistent with access, quality, and efficient and economical furnishing of care (Waivers of State Plan Requirements, 2007).

In lieu of a narrow network, identifying providers and practices as top performers within an existing network, as proposed in this model, maintains a broad network of providers and protects consumer choice. The use of this model would be most useful in communities where

there are a significant number of speech pathology practices and would be less effective in rural communities where fewer providers exist. It is also anticipated that this model would be most effective with families who are just establishing speech therapy services rather than with existing families. This is because existing clients may be reluctant to change providers to a top performer because of the established relationship they have with their current provider.

Drawing from the results of the provider survey related to alternative payment models and provider perceptions of clinical and administrative quality reported in Chapter 6, it is recommended that insurers utilizing this model measure provider quality against a combination of the process measures identified in Table 28. Table 28 includes the process measures the majority of survey respondents deemed very important or absolutely essential (mean = 4.0 or greater). Although the survey results are based on a limited sample size, it is believed that this list is reflective of provider preferences given the feedback that was sought from industry experts about the measures during the survey development phase. Relying on measures of quality providers deem important should increase their willingness to participate in a payment model that relies on the use of comparisons across providers.

Table 28: Recommended Quality Measures for Inclusion in a Top Performer Model

Clinical Quality Measures	Mean	Administrative Quality Measures	Mean
Involving the patient and/or caregiver in the development and implementation of the plan of care	4.70	Adhering to the profession's code of ethics	4.93
Completing assessments and providing intervention in the patient's primary language	4.65	Maintaining licensure and certification requirements	4.86
Using of clinically appropriate evaluation tools to determine eligibility for services	4.64	Maintaining patient records that are accurate and complete	4.81
Writing long- and short-term treatment goals that emphasize functional outcomes	4.58	Maintaining continuing education requirements specific to your area of specialization	4.76
Documenting clinical interventions and outcomes as a result of skilled intervention	4.57	Maintaining all applicable professional liability and business insurance policies	4.68
Developing home program/carryover activities for implementation in the patient's natural environment	4.45	Documenting all contacts/communication with the patient and/or their caregiver	4.13
Using highest qualified provider to deliver services	4.42	Documenting patient attendance and rationale for missed appointments	4.11
Referring to related professionals and community-based services as appropriate	4.40	Maintaining policy and procedure manuals that are accurate and current	4.08
Establishing frequency and duration recommendations that are unique to the patient	4.33	Maintaining a system for internal audits of patient records and payments	4.07
Coordinating care with the patient's referring physician and other healthcare professionals	4.09		

This model also requires that insurers consider provider utilization patterns concerning patient case mix when identifying providers as top performers. It is necessary to consider patient case mix when comparing provider utilization patterns to avoid inadvertent provider discrimination when identifying top performers. To differentiate utilization patterns, insurers should make comparisons among providers who treat similar patients. To do this, insurers will need to consider a number of factors based on patient characteristics including patient age and diagnosis. For example, a practice that predominantly works with children with speech-language impairment only may not have the same utilization patterns as a practice that predominantly works with children with special health care needs or a practice with a specialty area such as pediatric feeding and swallowing. Comparing similar providers would allow an insurer to make determinations about overall patterns of utilization. When designating providers as top performers, an insurer would want to build their list such that includes a range of service providers including generalists, specialists, and children with special health care needs.

Depending on the size of the existing provider network and the number of insured members, it is recommended that an insurer consider designating a percentage of their speech pathology practices as top performers based on the distribution of quality across providers. It is also recommended that the insurer review provider performance and provider participation annually. This provides an opportunity for providers who do not receive the designation as a top performer initially to earn it during subsequent review periods. It also provides an insurer with an opportunity to remove the top performer designation from speech pathology practices that initially achieved the ranking but no longer meet the qualification standards. Annual review also provides the insurer with an opportunity to identify those providers who performance is outside of minimum acceptable standards and initiate a comprehensive provider audit.

There are advantages and disadvantages related to the use of this model. Designating a small subset of speech pathology practices as top performers reduces administrative requirements for providers, physician offices, and insurers. As such, all three should achieve some form of cost savings. A reduction in paperwork requirements for physicians resulting in increased savings would likely be viewed favorably by insurers as Mora, et al, (2011) found that nursing staff, including medical assistant, spent an average of 13.1 hours per week working to obtain prior authorizations from insurers. The insurer also realizes additional cost savings over time in the form of reduced utilization as volume shifts to high performing providers. A potential disadvantage relates to the identification of top performing providers as the data collection and analysis required to determine who is a top performer could provide challenging. For example, it would be necessary for an insurer to take into consideration variations in patient case-mix across providers. If an insurer considers all providers against one another without respect to patient demographics, the insurer could inadvertently discriminate against those providers who work with more complex patients resulting in a decrease in access to specialty providers. Further, the insurer would likely face opposition from those providers not designated as top performers. Overall, this model promotes improved quality and achieves economic efficiency. As such, a top performers program would align with the HHSC's efforts to adopt value-based purchasing models.

Rationale for Alternative Payment Models Presented

The three alternative payment models presented were proposed in consideration of a number of factors including their potential to achieve cost savings in the Texas Medicaid program, their ease of implementation, the Texas Health and Human Services Commission's desire to implement value-based purchasing models, and their advantages and disadvantages

with respect to implementation. Although Model 1, which maintains the current fee-for-service payment model while adjusting the existing fee schedule, would be the easiest to implement and result in a substantial cost savings, Models 2 and 3 are preferred because they are in concert with the Texas Health and Human Services Commission's goal of implementing risk-based payments. The use of episodic payments and the reliance on quality and utilization data to designate top performers within a network results in providers sharing risk with the insurer related to the provision of care and the associated costs. This should decrease provider tendencies to prescribe more speech therapy services than are medically necessary and reduce the variation in utilization patterns that presently exists across Texas.

Additional Models Considered

Two additional models were considered but are not recommended at this time. The use of a pay-for-performance model related to the provision of pediatric speech therapy services is not recommended due to inconclusive data about the effectiveness of pay-for-performance programs and the design challenges associated with this model (Eijkennar, 2011; Mechanic & Altman, 2009; Rosenthal, 2005; Ryan & Blustein, 2011). Pay-for-performance programs are regarded as being difficult to administer and may not result in improvements in quality. The use of published provider data, a consumer-driven approach, was also considered but is not recommended. The use of a consumer-driven approach relies on healthcare consumers to review available provider data and select their healthcare provider based on a defined set of quality measures (Marshall, M., Shekelle, P., Leatherman, S., & Brook, R.). While the model may be valuable in Medicare and with private insurers, this may not be a realistic approach within state Medicaid programs as it relates to the provision of pediatric speech therapy services. This is due to concerns about access to technology, level of education, and reading ability among Medicaid beneficiaries.

Special Considerations

The use of alternative payment models for the provision of pediatric speech therapy services is promising and could result in significant cost savings to the Texas Medicaid program. The extent of the cost savings achieved would vary based on the model implemented but would be expected to equal or exceed the cost savings attainable if rates were simply adjusted to match those paid in comparison programs. Consistent with the HHSC's (2017, June) recommendation related to the use of value-based purchasing models, it is recommended that any change in the reimbursement methodology include continuous stakeholder engagement. It is also recommended that insurers implement data-driven solutions and look to optimize opportunities to encourage administrative simplification both for themselves and for providers. Perhaps most important, it is essential that insurers reward provider success. Rewarding provider success either through efforts that reduce administrative burden or increase patient volume should keep providers engaged in the process and increase their willingness to participate in alternative payment models that promote improved quality and economic efficiency.

The models proposed are based on available financial data and provider perceptions or clinical and administrative quality and are related to the Texas Medicaid program. There is a significant need for future research as it relates to functional outcomes and the provision of pediatric speech therapy services. Currently, there is insufficient data available to include outcomes-driven data into any proposed alternative payment model. As such, the researcher relied exclusively on process measures.

Limitations

This research is not without its limitations. The national analysis of published, fee-forservice payment rates does not take into consideration rate reductions applied by managed care organizations that are reported in some states. Further, the research does not include a discussion of payment rate differentials applied by some states to settings like early childhood intervention programs and home health. The research related to the speech therapy policies, nationally, is the most comprehensive analysis of Medicaid pediatric services completed thus far; however, there are states where data was unavailable or the information was not clearly defined in the policies reviewed by the researcher. Related to the comparison of Texas Medicaid rates to Medicare and available commercial insurance data, the private market fee data is based on claims expenditures for fiscal year 2013, and it limited to payment information related to CPT® codes 92507 and 92508. The alternative payment models proposed relate to the Texas Medicaid program and are based on utilization data and measures of clinical and administrative quality that are processed focused initiatives. They could be modified to meet the needs of other state Medicaid agencies. It was not possible to incorporate functional outcome measures into the models proposed due to the scarcity of available outcomes data that currently exists.

Opportunities for Further Research

While this research has provided a picture of the national Medicaid landscape and provided the framework for the development of alternative payment models that could be adopted by state Medicaid agencies and Medicaid managed care organizations, opportunities exist for future research.

There is a need for further research on the effects of Medicaid payment rates on the
number of speech-language pathologists practicing by state. Related to this, there is also a
need to identify a more comprehensive picture of managed care reimbursement policies
and the extent to which they advance or limit provider participation in state Medicaid
programs.

- 2. There is also a need to determine the extent to which payment variances exist by setting and whether there are differences in outcomes across settings that would warrant varied payment rates. Further, there is a need to determine if utilization rates vary depending on whether an intervention is provided by a fully qualified speech-language pathologist or by a speech-language pathology assistant. The answers to these questions could refine Medicaid payment policies.
- 3. Further research is needed to identify pediatric outcome measurements related to the provision of speech therapy services. This information could be used to advance and strengthen the alternative payment models proposed. Related to this, there is also a need to develop more advanced integrative care models that encourage collaboration across service delivery settings.
- 4. Additionally, there is a need to identify the extent to which current Early and Periodic Screening, Diagnostic, and Treatment benefits vary from those made available by private insurers and exchange plans. This information is needed if state Medicaid agencies are to implement policies changes such that the available benefit matches that of comparison programs. Currently, there is no publically available research related to habilitative benefits and the relative generosity of private health plans.

Conclusion

The current fixed, fee-for-service reimbursement model used by state Medicaid agencies is not sustainable on a long-term basis. Due to numerous national legislative and regulatory proposals that aim to transform the Medicaid program, it is highly unlikely that state Medicaid agencies will have the financial resources needed to increase provider payment rates such that they are commensurate with Medicare and private insurance. As such, challenges to existing

funding levels will force state Medicaid agencies to rethink traditional service delivery models as they relate to the provision of pediatric speech therapy services. This research provides the framework for multiple alternative payment models that insurers could use to enhance quality and improve economic efficiencies.

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APPENDIX A

State	Fee Schedule Document Title	Effective Date (Month & Year)	Relevant Information
Alabama	Alabama Medicaid Fee Schedule Physician	June 2017	
Alaska	Speech Therapy / Language Pathologist Services	July 2016	Pending a 10.3% rate cute that is not reflected in the rates reported. There are no payment disparities based on work setting.
Arizona	Arizona Health Care Cost Containment System Physician Fee Schedule	October 2016	Early Childhood Intervention Providers have an alternate fee schedule. Reimbursement rates vary by county for ECI services. Reported rates do not take into account managed care organization rate reductions
Arkansas	Arkansas Medicaid Occupational, Physical and Speech Therapy Services Fee Schedule	October 2016	
California	Basic Rate Medicine	August 2017	
Colorado	Health First Colorado Fee Schedule	January 2017	Payment disparities by work setting exist. Home health agencies are reimbursed higher than ECI providers. Rates used in this analysis
Connecticut	Independent Audiology and Speech and Language Pathology	July 2013	Outpatient clinics associated with a hospital are reimbursed higher that private practices.
Delaware	Division of Medicaid & Medical Assistance Fee Schedule	January 2016	
District of Columbia	Medical Fee Schedule	August 2017	

State	Fee Schedule Document Title	Effective Date (Month & Year)	Relevant Information
Florida	Speech-Language Pathology Services Fee Schedule	January 2016	
Georgia	Speech-Language Pathology Services: Procedure codes to bill when providing Speech- Language Pathology Therapy Services	July 2017	
Hawaii	Medicaid Fee Schedule without mods	January 2013	
Idaho	Therapy Codes Independent Providers – Idaho Medicaid	July 2017	
Illinois	Healthcare and Family Services Therapy Provider Fee Schedule	March 2017	
Indiana	Indiana Health Coverage Programs Fee Schedule	August 2017	
Iowa	Fee Schedule #69 – Independent Speech Pathologist	January 2014	
Kansas		September 2017	Therapy codes must be billed as one unit equals one visit unless the description of the code specifies the unit.
Kentucky	Speech Therapy Rates	July 2017	facility and non-facility published rates were the same

State	Fee Schedule Document Title	Effective Date (Month & Year)	Relevant Information
Louisiana	Professional Services Fee Schedule	January 2017	
Maine	Department of Health & Human Services Section 109, Speech and Hearing Services Rates/Fee Schedule	January 2016	There was a difference in published rate for agencies versus independent SLPs. The agency rate used in the analysis as this was the higher of the two rates reported.
Maryland	Professional Services Fee Schedule January 2017	January 2017	Services for individuals ages 0 to 20 are billed through the fee-for-service program. Facility and non-facility fee schedules exist. Non-facility rates used in this analysis.
Massachusetts	101 CMR 339.00: RESTORATIVE SERVICES	April 2017	
Michigan	MDHHS Therapy Database January 2017	January 2017	
Minnesota	Minnesota Health Care Programs Fee Schedule	January 2017	
Mississippi	Mississippi Division of Medicaid Outpatient Hospital Schedules	July 2016	
Missouri	Other Medical Fee Schedule	August 2017	Individual therapy evaluation and treatment services provided in a child's natural environment have a higher MO HealthNet maximum allowable amount when billed with the place of service 12 (home) or 99 (other). Records must document services were provided in the natural environment.

State	Fee Schedule Document Title	Effective Date (Month & Year)	Relevant Information
Montana	Montana Medicaid - Fee Schedule Speech	July 2016	Therapy office and facility fee schedules exist. The therapy office fee schedule used in analysis. The facility fee is lower for CPT 92610
Nebraska	Nebraska Medicaid Practitioner Fee Schedule for Speech Pathology and Audiology Services	July 2017	Facility and Non-facility fee schedules exist. The non-facility fee schedule used in the analysis
Nevada	Provider Type 34 Therapy Reimbursement Rates	November 2016	
New Hampshire	MED - NHMEDICAID Department of Health and Human Services 2017 NH Fee Schedule – Covered Procedures Report	January 2017	The rate reported is with no modifier.
New Jersey	Not Found	Not Found	Not Found
New Mexico	New Mexico Medicaid Fee for Service CPT Code Fee Schedule	August 2017	
New York	New York State Medicaid Program Rehabilitation Services Procedure Codes & Fee Schedule	January 2017	

State	Fee Schedule Document Title	Effective Date (Month & Year)	Relevant Information
North Carolina	Physician Fee Schedule	January 2017	Facility and non-facility fee schedules exist. The non-facility fee schedule was used in the analysis. Per NC Medicaid staff, there is a difference in payment rates for independent clinicians and home health agencies but there are also differences in the expected length of the treatment session. Independent clinicians bill using CPT codes and sessions are expected to last 30 minutes. Home health bills using a revenue code and sessions are expected to last between 45 and 60 minutes.
North Dakota	ND Medicaid Professional Services Fee Schedule	July 2017	
Ohio	Medicine, Surgery, Radiology and Imaging, and Additional Procedures	August 2017	Therapy office and facility fee schedules exist. The therapy office fee schedule used in analysis. The facility fee is lower for CPT 92610.
Oklahoma	Title XIX Fee Schedule	July 2017	Facility and non-facility fee schedules exist. The non-facility fee schedule used in the analysis. The facility fee is lower for CPT 92610.
Oregon	Medical - Dental Fee Schedule	January 2017	Facility and non-facility fee schedules exist. The non-facility fee schedule used in the analysis. The facility fee is lower for CPT 92610.
Pennsylvania	Outpatient Fee Schedule	August 2017	There is no difference in reimbursement rates for differing places of service.
Rhode Island	Medicaid Fee Schedule	July 2017	
South Carolina	Speech Therapy Fee Schedule	August 2017	

State	Fee Schedule Document Title	Effective Date (Month & Year)	Relevant Information
South Dakota	Medicaid Physician Fee Schedule	July 2017	CPT® 92507 is billed in 15 minute increments. Rate calculated and used in this analysis assumes 4 units). The Medicaid policy manual and fee schedule do not state if CPT® 92508 is billed in 15 minute increments. The rate reported for 92508 is for 1 unit.
Tennessee	Unavailable	N/A	TennCare services are offered through managed care entities. Medical, behavioral and long-term care services are covered by "at risk" Managed Care Organizations (MCOs) in each region of the state, and each participating MCO creates their own contracts with providers, maintains their own fee schedules, processes their own claims, and has their own in-network specialists and providers.
Texas	Texas Medicaid Fee Schedule Therapies	September 2017	Services provided by an SLP must be billed with a U5 modifier. Services provided by an assistant must be bill with a UB modifier. Services provided by an assistant will be reimbursed at 85% of the Medicaid fee schedule effective December 1, 2017 and at 70% of the Medicaid fee schedule effective September 1, 2017. Payment variations in the FFS program were eliminated across settings effective September 1, 2017. Reported rates do not take into account managed care organization rate reductions.
Utah	Utah Medicaid Fee Schedule	August 2017	
Vermont	2016 Fee Schedule	January 2017	Facility and non-facility fee schedules exist. The non-facility fee schedule used in the analysis. The facility fee is lower for CPT 92610.
Virginia	Historical COT Codes – Medical Procedures Billed by Physicians or Other Practitioners	July 2017	

State	Fee Schedule Document Title	Effective Date (Month & Year)	Relevant Information
Washington	Health Care Authority Outpatient Rehabilitation Occupational Therapy, Physical Therapy, and Speech Therapy	July 2017	
West Virginia	2017 National Physician Fee Schedule Relative Value File January Release	January 2017	Facility and non-facility fee schedules exist. The non-facility fee schedule used in the analysis. The facility fee is lower for CPT 92610.
Wisconsin	Physical Therapy, Occupational Therapy, and Speech and Language Pathology Maximum Allowable Fee Schedule	August 2017	Fee schedules for speech pathology / therapy and rehabilitation agencies. Published fees for rehabilitation agencies were used in the analysis.
Wyoming	Wyoming Medicaid Fee Schedule	August 2017	

Medicaid Reimbursement Rates by State for Evaluation and Treatment Codes Related to Speech and Language Intervention

APPENDIX B

State	92507	92508	92521	92522	92523	92524
4th Quartile						
Alaska	\$113.86	\$33.95	\$158.53	\$132.75	\$276.31	\$129.35
Texas	\$107.78	\$45.53	\$101.12	\$127.36	\$169.81	\$86.82
Delaware	\$79.95	\$23.32	\$112.29	\$93.61	\$196.25	\$90.35
New Hampshire	\$71.85	\$21.11	\$69.98	\$56.74	\$117.97	\$59.03
Florida	\$71.44	\$13.88	\$51.05	\$51.05	\$51.05	\$51.05
DC	\$71.38	\$21.02	\$100.90	\$83.32	\$178.72	\$80.21
Idaho	\$68.39	\$19.83	\$95.92	\$79.54	\$169.51	\$76.93
Mississippi	\$67.38	NA	\$94.17	\$78.68	\$164.39	\$76.45
North Carolina	\$66.89	\$23.40	\$91.67	\$74.55	\$254.64	\$77.33
Virginia	\$66.68	\$19.44	\$93.89	\$77.75	\$165.96	\$75.06
Nevada	\$66.16	\$64.92	\$100.70	\$81.63	\$169.77	\$85.28
Oklahoma	\$65.91	\$19.03	\$92.51	\$76.79	\$163.16	\$74.32
3rd Quartile						
Maryland	\$63.99	\$30.47	\$91.35	\$74.00	\$153.97	\$77.40
Vermont	\$63.67	\$18.61	\$89.28	\$74.41	\$156.13	\$71.82
Georgia	\$62.53	NA	\$97.14	\$78.86	\$163.81	\$82.12
Colorado	\$60.38	\$10.07	\$91.87	\$74.58	\$154.96	\$77.73
Massachusetts	\$60.20	\$25.78	\$65.01	\$52.66	\$109.54	\$54.63

Medicaid Reimbursement Rates by State for Evaluation and Treatment Codes Related to Speech and Language Intervention

State	92507	92508	92521	92522	92523	92524
North Dakota	\$59.58	\$19.54	\$83.62	\$69.27	\$147.87	NA
Utah	\$59.01	\$17.07	\$82.99	\$68.85	\$146.36	NA
New Mexico	\$58.77	\$27.85	\$102.30	\$86.16	\$178.69	\$82.65
Indiana	\$57.88	\$16.96	\$83.26	\$67.05	\$138.98	\$69.37
Montana	\$56.88	\$16.80	\$79.90	\$66.65	\$139.56	\$64.62
Minnesota	\$56.46	\$16.35	\$79.20	\$65.66	\$140.52	\$63.10
Oregon	\$55.91	\$16.29	\$78.62	\$65.11	\$139.03	\$62.88
2nd Quartile						
West Virginia	\$55.09	\$15.67	\$77.29	\$64.23	\$136.03	\$62.40
Wyoming	\$54.18	\$20.80	\$99.64	\$80.96	\$168.22	\$84.74
South Dakota	\$53.80	\$8.81	\$81.14	\$65.82	\$137.05	\$67.95
Illinois	\$51.96	NA	\$103.92	\$103.92	\$103.92	\$103.92
Maine	\$51.38	\$19.80	\$76.52	\$62.33	\$64.52	\$69.35
Louisiana	\$48.31	\$23.07	\$93.24	\$75.97	\$157.42	\$79.12
Kentucky	\$48.30	\$13.95	\$67.77	\$56.25	\$119.56	\$54.45
Michigan	\$48.01	\$13.99	\$67.60	\$55.98	\$119.49	\$54.04
Wisconsin	\$47.91	\$28.29	\$30.27	\$24.58	\$51.06	\$25.62
Kansas	\$47.49	NA	\$22.51	\$52.62	\$42.82	\$88.80
Washington	\$47.09	\$13.90	\$66.38	\$54.97	\$117.61	\$52.89
Iowa	\$41.53	\$27.36	\$103.72	\$84.54	\$175.08	\$87.20

APPENDIX B, continued

Medicaid Reimbursement Rates by State for Evaluation and Treatment Codes Related to Speech and Language Intervention

State	92507	92508	92521	92522	92523	92524
1st Quartile						
New York	\$39.91	NA	\$71.33	\$57.80	\$120.25	\$60.56
Ohio	\$37.03	\$18.15	\$77.67	\$63.20	\$131.09	\$66.00
Nebraska	\$36.90	NA	\$105.65	\$90.37	\$183.47	\$87.37
Arizona	\$35.29	\$10.45	\$96.93	\$80.82	\$169.44	\$78.33
Connecticut	\$33.49	\$15.88	\$35.00	\$35.00	\$40.00	\$35.00
Missouri	\$29.98	\$17.61	\$70.21	\$57.07	\$118.46	\$59.53
California	\$29.72	\$20.64	\$74.98	\$64.11	\$130.58	\$62.08
South Carolina	\$24.81	\$11.60	\$70.80	\$57.67	\$119.49	\$59.05
Arkansas	\$21.76	\$5.94	\$49.44	\$49.44	\$49.44	\$49.44
Pennsylvania	\$21.70	\$10.00	\$88.31	\$71.87	\$149.06	\$74.97
Hawaii	\$21.05	\$11.15	NA	NA	NA	NA
Rhode Island	\$18.00	\$7.20	\$65.84	\$53.46	\$111.04	\$55.73
Alabama	NA	NA	\$60.54	\$49.33	\$140.62	\$50.96

^{*} As the provision of individual treatment services (CPT® 92507) is the predominate code used by pediatric speech therapy providers, states were grouped by quartile according to the published fee schedule related to this code. NA: Fee data not available for this procedure code.

Medicaid Reimbursement Rates by State for Evaluation and Treatment Codes Related to Swallowing Disorders and Augmentative Communication Devices

APPENDIX C

State	92526	92610	92607	92608	92609
4th Quartile					
Alaska	\$112.98	\$121.37	\$178.77	\$73.58	\$154.68
Texas	\$107.78	\$205.12	NA	NA	NA
Delaware	\$86.80	\$86.49	\$127.78	\$53.53	\$112.03
New Hampshire	\$78.19	\$77.95	67.34	13.23	36.47
Florida	NA	NA	NA	NA	\$42.11
DC	\$78.13	NA	NA	NA	NA
Idaho	\$74.34	\$74.08	\$109.91	\$45.49	\$94.91
Mississippi	\$73.13	\$62.57	NA	NA	NA
North Carolina	\$62.42	\$60.34	\$117.41	\$22.45	\$62.39
Virginia	\$72.66	\$72.66	\$107.95	NA	\$93.30
Nevada	\$67.39	\$37.23	\$95.08	\$19.08	\$51.69
Oklahoma	\$71.53	\$71.39	\$105.76	\$43.69	\$91.03
3rd Quartile					
Maryland	\$80.85	\$81.43	\$121.74	\$41.53	\$86.26
Vermont	\$69.14	\$68.76	\$101.66	\$42.59	\$89.30
Georgia	\$44.66	\$117.54	\$109.28	NA	\$54.75
Colorado	\$24.61	\$28.63	\$95.56	\$43.05	\$78.71
Massachusetts	\$23.01	\$52.66	\$52.66	\$26.33	\$13.17

Medicaid Reimbursement Rates by State for Evaluation and Treatment Codes Related to Swallowing Disorders and Augmentative Communication Devices

State	92526	92610	92607	92608	92609
North Dakota	\$86.50	\$86.14	NA	NA	36.95
Utah	\$64.12	\$64.10	\$95.00	\$39.31	\$81.78
New Mexico	\$74.95	\$78.62	\$107.52	\$20.55	\$55.81
Indiana	\$62.92	\$61.60	NA	\$38.29	\$80.35
Montana	\$61.95	\$61.52	\$91.06	\$37.99	\$79.46
Minnesota	\$61.57	\$61.32	\$91.46	\$38.06	\$79.46
Oregon	\$60.90	\$60.82	\$90.35	\$37.52	\$78.13
2nd Quartile					
West Virginia	\$59.53	\$59.79	NA	NA	NA
Wyoming	\$79.24	\$63.03	\$165.87	\$32.43	\$88.30
South Dakota	\$69.89	\$105.21	\$142.77	\$28.99	\$77.44
Illinois	NA	\$103.92	\$51.96	\$51.96	NA
Maine	\$69.35	\$47.88	\$67.29	\$19.20	\$73.85
Louisiana	\$61.24	\$58.91	NA	NA	NA
Kentucky	\$52.43	\$52.29	\$77.48	\$32.00	\$66.71
Michigan	\$52.32	\$52.32	NA	NA	NA
Wisconsin	\$48.82	\$72.23	\$63.60	\$31.79	\$47.64
Kansas	\$63.08	\$96.87	NA	NA	NA
Washington	\$51.44	\$51.44	\$76.54	\$31.94	\$66.38

Medicaid Reimbursement Rates by State for Evaluation and Treatment Codes Related to Swallowing Disorders and Augmentative Communication Devices

State	92526	92610	92607	92608	92609
Iowa	\$46.75	\$106.01	\$89.36	\$12.58	\$48.35
1st Quartile		•	·		·
New York	NA	NA	NA	NA	NA
Ohio	\$39.94	\$55.73	\$70.46	\$14.09	\$38.25
Nebraska	\$45.10	\$71.75	\$68.06	\$14.76	\$34.03
Arizona	\$75.30	\$74.64	\$110.60	\$46.17	\$96.74
Connecticut	NA	NA	NA	NA	NA
Missouri	\$54.19	NA	NA	NA	\$12.50
California	\$33.82	\$48.78	\$95.96	\$18.80	\$51.95
South Carolina	\$42.52	NA	NA	NA	\$51.69
Arkansas	NA	NA	\$111.38	\$22.13	NA
Pennsylvania	\$47.74	\$38.90	NA	NA	NA
Hawaii	\$22.46	\$88.36	\$88.11	\$17.26	\$47.70
Rhode Island	\$21.47	\$23.74	\$61.30	\$12.18	\$33.23
Alabama	\$33.00	\$26.00	NA	NA	NA

^{*} As the provision of individual treatment services (CPT® 92507) is the predominate code used by pediatric speech therapy providers, states were grouped by quartile according to the published fee schedule related to this code. NA: Fee data not available for this procedure code.

APPENDIX D

STATE-LEVEL MEDICAID POLICY PROVISIONS, SUMMARY

Appendix D summarizes state-level data related to the use of speech-language pathology assistants and clinical fellows. It identifies states that have established benefit limits for Medicaid recipients 20 years of age and young. Appendix D also identifies states that have referral and prior authorization requirements for initial evaluations and treatment services. Additionally, Appendix D establishes which states allow the use of telepractice by speech-language pathologists.

A "Yes" response was assigned to qualified provider requirements if a state permits the use of clinical fellows of SLPAs. A response of "Yes" was assigned to referral requirements if a written or verbal order is required before the completion of an initial evaluation. A "Yes" response was assigned when prior authorization is required before the completion of an initial evaluation and/or prior to providing treatment services. A response of "No" was assigned in instances where the policy language did not establish benefit limits, prevented the use of clinical fellows and SLPAs, did not require prior authorization, or disallowed the use of telepractice. A response of "NA" was used in instances where the data was not available or in instances where the policy language was not clearly defined.

State	Qualified Provider Assistants	Qualified Provider Clinical Interns	Benefit Limit	Written Referral or Prior Authorization Evaluation	Prior Authorization Treatment	Tele- practice
Alabama	Yes	NA	NA	Yes	No	No
Alaska	Yes	No	Yes	No	No	Yes (Schools)
Arizona	Yes	Yes	NA	NA	NA	No
Arkansas	Yes	Yes	NA	Yes	NA	NA
California	NA	Yes	Yes	No	Yes	Yes (Schools)
Colorado	Yes	Yes	Yes	Yes	Yes	Yes
Connecticut	No	No	NA	No	Yes	NA
Delaware	Yes	NA	NA	Yes	NA	NA
District of Columbia	NA	NA	NA	NA	NA	Yes
Florida	Yes	Yes	Yes	No	Yes	Yes
Georgia	No	Yes	Yes	Yes	Yes	NA
Hawaii	NA	NA	Yes	Yes	Yes	Yes
Idaho	No	Yes	Yes	Yes	No	Yes
Illinois	Yes	Yes	Yes	Yes	No	NA
Indiana	Yes	Yes	Yes	Yes	Yes	NA
Iowa	Yes	Yes	Yes	NA	NA	NA

State	Qualified Provider Assistants	Qualified Provider Clinical Interns	Benefit Limit	Written Referral or Prior Authorization Evaluation	Prior Authorization Treatment	Tele- practice
Kansas	No	No	Yes	Yes	Yes	NA
Kentucky	NA	Yes	NA	Yes	Yes	Yes
Louisiana	NA	NA	NA	NA	NA	NA
Maine	Yes	NA	No	No	No	Yes
Maryland	NA	NA	Yes	Yes	No	NA
Massachusetts	No	No	Yes	Yes	Yes	NA
Michigan	Yes	Yes	Yes	No	Yes	Yes (Schools)
Minnesota	No	Yes	NA	Yes	No	Yes (Schools)
Mississippi	No	NA	No	Yes	Yes	NA
Missouri	No	NA	Yes	Yes	No	NA
Montana	Yes	No	Yes	Yes	No	NA
Nebraska	Yes	No	Yes	Yes	Yes	Yes
Nevada	Yes	No	Yes	Yes	Yes	Yes
New Hampshire	Yes	NA	Yes	No	Yes	NA
New Jersey	NA	NA	NA	NA	NA	NA
New Mexico	NA	NA	NA	NA	NA	Yes

State	Qualified Provider Assistants	Qualified Provider Clinical Interns	Benefit Limit	Written Referral or Prior Authorization Evaluation	Prior Authorization Treatment	Tele- practice
New York	No	NA	No	Yes	No	Yes
North Carolina	Yes	Yes	Yes	No	Yes	NA
North Dakota	No	No	Yes	Yes	Yes	NA
Ohio	Yes	Yes	Yes	No	Yes	Yes (Schools)
Oklahoma	No	Yes	NA	Yes	Yes	Yes
Oregon	Yes	Yes	Yes	Yes	Yes	NA
Pennsylvania	NA	NA	NA	NA	NA	NA
Rhode Island	NA	NA	NA	NA	NA	NA
South Carolina	Yes	Yes	Yes	Yes	Yes	NA
South Dakota	Yes	Yes	NA	Yes	Yes	NA
Tennessee	NA	NA	NA	NA	NA	NA
Texas	Yes	Yes	No	Yes	Yes	Yes (Schools)
Utah	Yes	Yes	Yes	Yes	NA	NA
Vermont	No	Yes	No	Yes	Yes	NA
Virginia	Yes	Yes	NA	NA	NA	Yes (Schools)
Washington	No	No	Yes	No	No	NA

State	Qualified Provider Assistants	Qualified Provider Clinical Interns	Benefit Limit	Written Referral or Prior Authorization Evaluation	Prior Authorization Treatment	Tele- practice
West Virginia	Yes	NA	No	Yes	Yes	NA
Wisconsin	Yes	No	Yes	Yes	Yes	NA
Wyoming	NA	NA	NA	Yes	Yes	NA

APPENDIX E

STATE-SPECIFIC POLICIES RELATED TO BENEFIT LIMITS, REFERRALS, AND PRIOR AUTHORIZATION REQUIREMENTS

A response of "Yes" response was assigned for qualified provider requirements if a state permits the use of clinical fellows or SLPAs. A response of "Yes" was assigned to referral requirements if a written or verbal order is required prior to the completion of an initial evaluation. A "Yes" response was assigned when prior authorization is required prior to the completion of an initial evaluation and/or prior to providing treatment services. A response of "No" was assigned in instances where the policy language did not establish benefit limits, prevented the use of clinical fellows and SLPAs, did not require prior authorization, or disallowed the use of telepractice. A response of "NA" was used in instances where the data was not available or in instances where the policy language was not clearly defined.

State	Benefit Limit	Written Referral or Prior Authorization: Initial Evaluation	Prior Authorization: Treatment	Relevant Notes
Alabama	NA	Yes	No	Speech Therapy is covered only when service is rendered to a recipient as a result of an identified condition(s) noted during the EPSDT Screening exam. A written referral is required. Services must be ordered by a physician or a non-physician practitioner. Generally, therapy procedure codes do not require prior authorization. CPT® 92609 does require prior authorization.
Alaska	Yes	No	No	Reimbursement for speech, language, voice, communication, and/or auditory processing disorder group therapy is limited to one unit per date of service. Except for an initial evaluation, a physician, advanced nurse practitioner or physician assistant must order or prescribe all speech-language pathology services. Authorization is not required for an initial evaluation. The ordering practitioner must review and sign the treatment plan no more than 14 days after development.
Arizona	NA	NA	NA	
Arkansas	NA	Yes	NA	The Arkansas Medicaid program reimburses speech therapy services for Medicaid-eligible individuals under the age of 21 through the EPSDT Program. There is no benefit limit specified for children under the age of 21. The primary care physician (PCP) or attending physician is responsible for referring the beneficiary for these interventions. A written prescription for speech-language pathology services signed and dated by the PCP or attending physician is required. Eligibility for services is based on the results of standardized test scores. Arkansas Medicaid provides a list of acceptable tests providers may use.

State	Benefit Limit	Written Referral or Prior Authorization: Initial Evaluation	Prior Authorization: Treatment	Relevant Notes
California	Yes	No	Yes	Speech therapy services rendered in an outpatient setting are limited to a maximum of two services per month. Speech pathologists are reimbursed for services only if the services are performed in response to the written referral of licensed practitioners, acting within the scope of their practice. Initial evaluations do not require referral. Treatment services require prior authorization.
Colorado	Yes	Yes	Yes	Speech Therapy is limited to five (5) units of service per date of service. Some specific daily limits per procedure code apply. 92507 is limited to 1 unit daily. While a maximum of five units of service is allowed per date of service, providers are required to consult the American Medical Association's (AMA) Current Procedural Terminology (CPT) manual for each coded service. Some codes represent a treatment session without regard to its length of time (one unit maximum) while other codes may be billed incrementally as "timed" units. Additionally, Habilitative therapies are not an Inpatient or Home Health benefit. All outpatient speech therapy services must have a written order/prescription/referral. Independent speech therapy services must have a written order/prescription/referral. Independent speech therapy must submit, and have approved, prior authorization requests for medically necessary services prior to rendering the services. Prior authorization requests are approved for up to a 12-month period, depending on medical necessity.
Connecticut	NA	No	Yes	Prior authorization is not required for an initial evaluation. Prior authorization is required for greater than one evaluation per calendar year per provider and two visits per calendar week per provider for PT/ST.
Delaware	NA	Yes	NA	All therapy services must be medically necessary and ordered by a physician or other licensed practitioner of the healing arts within the scope of his or her practice under State law.

State	Benefit Limit	Written Referral or Prior Authorization: Initial Evaluation	Prior Authorization: Treatment	Relevant Notes
District of Columbia	NA	NA	NA	
Florida	Yes	No	Yes	For recipients under the age of 21 years, one initial speech-language pathology evaluation is allowed per year, per recipient. One re-evaluation is allowed every five months, per recipient. Up to 14 therapy treatment units per week (Sunday-Saturday), per recipient (maximum of four units per day) is allowed. As required by federal law, Florida Medicaid provides services to eligible recipients under the age of 21 years, if such services are medically necessary to correct or ameliorate a defect, a condition, or a physical or mental illness. Included are diagnostic services, treatment, equipment, supplies, and other measures described in section 1905(a) of the SSA, codified in Title 42 of the United States Code 1396d(a). As such, services for recipients under the age of 21 years exceeding the coverage described within this policy or the associated fee schedule may be approved, if medically necessary. Providers must obtain authorization from the quality improvement organization at least every 180 days, or upon a change in the recipient's condition requiring an alteration in services.
Georgia	Yes	Yes	Yes	Georgia Medicaid allows 8 visits per calendar month; 1 session per day. A referral for services is required for diagnostic, screening, preventive, or corrective services provided by or under direction of a speech pathologist. Prior authorization is required for services which exceed the service limit established in the policy and must be approved prior to services being rendered.

State	Benefit Limit	Written Referral or Prior Authorization: Initial Evaluation	Prior Authorization: Treatment	Relevant Notes
Hawaii	Yes	Yes	Yes	Hawaii Medicaid does not cover maintenance and long-term speech pathology services aimed at maintaining rather than improving function and group speech therapy. A referral to initiate services is required. Per policy, A physician may prescribe services for patients with speech disorders who are expected to improve in a reasonable period of time with therapy. Prior authorization is required for evaluation and treatment services.
Idaho	Yes	Yes	No	Therapy services for speech and physical therapy combined are limited to \$1,960 annually. Additional services may be covered when medically necessary. For reimbursement by Medicaid, the SLP must have an order from a physician or a midlevel practitioner. Services must be part of a plan of care based on that order. Prior authorization is not required but claims are subject to post-payment review. Per medical policy, feeding therapy is a service necessary for the treatment of feeding disorders including problems gathering food and getting ready to suck, chew, or swallow. A child who cannot pick up food and get it to his/her mouth, or one who cannot completely close their lips to keep food from falling out of their mouth, may have a feeding disorder. Feeding services are covered when a physician or midlevel practitioner has diagnosed a child with a feeding disorder that has caused a clinically significant deviation from normal childhood development. Children who are below 5% on the standard growth chart and who are unable to meet their daily nutritional requirements may meet these criteria.

State	Benefit Limit	Written Referral or Prior Authorization: Initial Evaluation	Prior Authorization: Treatment	Relevant Notes
Illinois	Yes	Yes	No	CPT® 92507 is paid in 15 minute increments up to 4 units daily. A written order to initiate services is required. Prior authorization for treatment is not required. A practitioner's order must be on file and services must be provided in accordance with a definite plan of care established by the therapist or clinical fellow, for the purpose of attaining maximum reduction of a physical disability and/or restoration of the individual to an acceptable functional level.
Indiana	Yes	Yes	Yes	Therapy is limited to one hour per day and must include a minimum of 45 minutes of direct care with the patient. Only one hour per day, per type of therapy may be approved. For members under 21 years of age, Indiana Medicaid covers therapy for rehabilitative services when determined to be medically necessary. Habilitative therapy services for recipients under 21 years of age are covered on a case-by-case basis and are subject to prior authorization. Educational services, including, but not limited to, the remediation of learning disabilities, are not considered habilitative therapy and are not covered. member. A written order signed and dated by the patient's practitioner is required for the provision of therapy services. The practitioner's order must indicate the specifications for the therapy services. The order must be unique to the patient. A generic or template version of an order will not be accepted.
Iowa	Yes	NA	NA	Total Medicaid payment for combined services provided by an independently practicing speech-language pathologist and physical therapist shall not exceed the therapy cap as disclosed by the Centers of Medicare and Medicaid Services (CMS).

State	Benefit Limit	Written Referral or Prior Authorization: Initial Evaluation	Prior Authorization: Treatment	Relevant Notes
Kansas	Yes	Yes	Yes	There are no limitations for medically necessary services for EPSDT participants. Developmental physical, occupational, and speech/language therapy services are covered for children under 21 years of age. Individuals may receive developmental therapy services to treat Autism Spectrum Disorders (ASDs), birth defects, and other developmental delays in any appropriate community setting and from any qualified provider with prior authorization and medical necessity documentation. Habilitative therapy is only covered for participants zero to under 21 years of age. Therapy must be medically necessary. Therapy is covered for any birth defect and/or developmental delay (habilitative diagnoses) only when approved and provided by an early childhood intervention, Head Start, or local education agency program. Therapy treatments performed in the local education agency setting may be habilitative or rehabilitative for disabilities due to birth defects or physical trauma/illness. The purpose of this therapy is to maintain maximum possible functioning for children. All therapy services must be prescribed by a physician. Evaluations require prior authorization.
Kentucky	NA	Yes	Yes	A signed order is required to initiate services and must specify the type of therapy being requested. The order must also specify whether it is for an evaluation or an evaluation and treatment. Frequency and duration is not required on the order but, if indicated, the requested units must match the order. The initial 20 visits do not require Prior Authorization. The number of visit is determined by date of service regardless of the number of codes to be billed during the visit.

State	Benefit Limit	Written Referral or Prior Authorization: Initial Evaluation	Prior Authorization: Treatment	Relevant Notes
Louisiana	NA	NA	NA	
Maine	No	No	No	Prior authorization is not required for pediatric speech therapy services. Prior authorization is required for adult services. Co-payments apply for speech therapy services provided to adults.
Maryland	Yes	Yes	No	Services are reimbursed up to the maximum of 1 unit per procedure, per day. A referral for services is required. Prior authorization is not required under the fee-for-service system; however, it is expected that a quarterly care plan be shared with the recipient's primary care provider.
Massachusetts	Yes	Yes	Yes	Massachusetts Medicaid pays for no more than 1 individual treatment and 1 group therapy session per member. per day. The agency does not pay for a treatment session on the same date of service as a comprehensive evaluation, since the evaluation fee includes payment both for a written report and for any treatment provided at the time of the evaluation. A referral is required for an initial evaluation but prior authorization is not required for an initial evaluation. Prior authorization as a prerequisite for payment for treatment services exceeding 35 visits (individual and group therapy) in a 12-month period.

State	Benefit Limit	Written Referral or Prior Authorization: Initial Evaluation	Prior Authorization: Treatment	Relevant Notes
Michigan	Yes	No	Yes	Speech therapy services provided in an outpatient hospital setting will be limited to 36 visits in a consecutive 12-month period without prior authorization. Evaluations and reevaluations will be limited to two per year without prior authorization with the exception of evaluations related to oral pharyngeal swallowing which cannot be provided more than four times in a 12-month period. Prior authorization for treatment services is required and may be requested for up to two calendar months per request. Medicaid will not cover speech therapy when another public agency (e.g., local or intermediate school district special education program) can assume the responsibility of services for the beneficiary.
Minnesota	NA	Yes	No	Speech-language pathology services require written referral by a physician or other licensed practitioner of the healing arts. There are no requirements for prior authorization for outpatient rehabilitative and therapeutic services, including speech-language pathology professional services. Rehabilitation and therapy services are subject to post-payment review, which could result in a provider being required to request authorization for certain services.
Mississippi	No	Yes	Yes	Per policy, the prescribing provider has a significant role in determining the utilization of services provided by therapy providers. The prescribing provider must complete a Certificate of Medical Necessity for Initial Referral/Orders form and submit it to the therapist prior to a therapy evaluation. Prior authorization for treatment services is required. Medicaid will not cover therapy services when documentation supports that the
				beneficiary has not reached therapy goals and is unable to participate and/or benefit from skilled intervention, refuses to participate, or is otherwise noncompliant with the therapy regimen.

State	Benefit Limit	Written Referral or Prior Authorization: Initial Evaluation	Prior Authorization: Treatment	Relevant Notes
Missouri	Yes	Yes	No	Four hours of evaluation per discipline for a child (per provider) are covered within a 12- month period.
ı				When billing one hour and thirty minutes (6 units) or more of therapy per day or more than five hours (21 or more units) of therapy per week, the provider must have documentation that justifies the need for intensive therapy services.
				Speech/language evaluations and therapy treatment services require a referral by a Medicaid enrolled primary care provider. A new written referral for speech therapy services must be obtained from the provider each year if services are to continue. Evaluations for speech therapy do not require prior authorization. Prior authorization is not required for speech therapy treatment services.
Montana	Yes	Yes	No	Maintenance therapy is not a covered benefit. Otherwise, therapy services for children are not restricted to a specific number of hours or units as long as the therapy services are restorative in nature.
				A written referral or verbal order is required prior to the initiation of services. The therapy provider is responsible for obtaining the order/referral before providing services. The Department considers an order/referral valid for no more than 180 days from the time the therapist receives the order/referral. Therapy services do not require prior authorization.
Nebraska	Yes	Yes	Yes	Maintenance therapy is not a covered benefit. Otherwise, there are no benefit limits listed for pediatric services. There are benefit limits listed for the provision of adult services.
				A referral is required to initiate services. Treatment services must be prior authorized.

State	Benefit Limit	Written Referral or Prior Authorization: Initial Evaluation	Prior Authorization: Treatment	Relevant Notes
Nevada	Yes	Yes	Yes	Per policy, any combination of CPT® codes 92507, 92508, 92526, 97532 and 97533 are limited to 4 modalities and/or therapeutic procedures in one day.
				An order is required to initiate speech therapy services. Prior authorization is not required for evaluations. Prior authorization is required for treatment services.
New Hampshire	Yes	No	Yes	Per policy, service limits for physical therapy, occupational therapy and services for speech, hearing and language disorders, shall apply to all such services, regardless of whether these services are provided by a hospital outpatient department or another provider, such as a home health agency, or by the individual therapists. Physical therapy, occupational therapy, and services for speech, hearing and language disorders shall be limited to 80 fifteen-minute units per member, per state fiscal year. The 80 units described above may be used for physical therapy, occupational therapy, services for speech, hearing and language disorders, or any combination of these services. Services require prior authorization in instances where the services requested would exceed the service limits established.
New Jersey	NA	NA	NA	
New Mexico	NA	NA	NA	
New York	No	Yes	No	There is no benefit limit for children under the age of 21. There is a benefit limit for adults. An order is required to initiate services. Prior authorization is not required for beneficiaries that are exempt from the benefit limit or for rehabilitation therapy provided in exempt settings or for rehabilitation services provided by a certified home health agency.

State	Benefit Limit	Written Referral or Prior Authorization: Initial Evaluation	Prior Authorization: Treatment	Relevant Notes
North Carolina	Yes	No	Yes	Per policy, speech therapy services are limited to the need for services based upon the severity of the deficit. The range of visits for a mild impairment is 6 – 26 2. Beneficiaries with a moderate impairment may receive up to 46 3. Beneficiaries with a severe impairment may receive up to 52 visits. Related to EPSDT, service limitations on scope, amount, duration, frequency, location of service, and other specific criteria described in clinical coverage policies may be exceeded or may not apply as long as the provider's documentation shows that the requested service is medically necessary "to correct or ameliorate a defect, physical or mental illness, or a condition" that is, provider documentation shows how the service, product, or procedure meets all EPSDT criteria, including to correct or improve or maintain the beneficiary's health in the best condition possible, compensate for a health problem, prevent it from worsening, or prevent the development of additional health problems. Prior authorization for an evaluation is not required. Prior authorization for treatment services is required.
North Dakota	Yes	Yes	Yes	Speech therapy services are limited to one evaluation and 30 visits per calendar. Prior authorization is required for services exceeding this limit. A referral is not required for benefits provided within the limit but is required for services exceeding the limit. Per policy, the counts for speech therapy will be accrued on an encounter basis. Per policy, services that are similar to services provided by a school district as part of an IEP may be provided to the recipient separate from the educational setting for other reasons of medical necessity. These services may be provided concurrently with IEP-related services.
Ohio	Yes	No	Yes	The limit for speech therapy services is thirty dates of service. If additional services are necessary, those services must be prior authorized.

State	Benefit Limit	Written Referral or Prior Authorization: Initial Evaluation	Prior Authorization: Treatment	Relevant Notes
Oklahoma	NA	Yes	Yes	A referral is required to initiate an evaluation. Initial evaluations and treatment services require prior authorization.
Oregon	Yes	Yes	Yes	Per policy, treatment services may not exceed one hour per day each for a group or individual therapy session. Beneficiaries may receive group or individual therapy, not both. Treatment services require prior authorization. A written order is required to initiate services. Evaluations do not require prior authorization, but there are visit limits related to the number of evaluations that can be completed each year.
Pennsylvania	NA	NA	NA	
Rhode Island	NA	NA	NA	
South Carolina	Yes	Yes	Yes	Per policy, a maximum combined total of 105 hours (420 units) will be permitted for speech, occupational, and physical therapies per state fiscal year for each beneficiary. A referral is required to initiate services. Prior authorization is required for services that exceed the combined benefit limit.
South Dakota	NA	Yes	Yes	A referral is required to initiate services. Prior authorization is required for augmentative communication devices. Per policy, when the services are part of a child's Individualized Education Program (IEP) with a school district or the child has been determined to be prolonged assistance by the South Dakota Department of Education, the services become the responsibility of the School District in which the child is enrolled, and coverage falls under school district ARSD.
Tennessee	NA	NA	NA	

State	Benefit Limit	Written Referral or Prior Authorization: Initial Evaluation	Prior Authorization: Treatment	Relevant Notes
Texas	No	Yes	Yes	There is no benefit limit provided medical necessity criteria is established. There are parameters outlining the provision of low, medium, and high frequency treatment. A written referral or verbal order is required before completing an initial evaluation. Prior authorization is not required to complete an evaluation. Treatment services require prior authorization.
Utah	Yes	Yes	NA	Per policy, services for children under age 2 are not covered unless a specific medical diagnosis exists and the documentation supports the need and efficacy of early intervention for speech therapy. There must be a medical reason requiring such early intervention. The criteria for eligibility apply as outlined in the policy for children ages 2 – 5 years if testing is possible. Per policy, services for children ages 2 years through 5 years are covered if the child's speech or language deficit is at or greater than one and one-half standard deviations below the mean as measured by an age appropriate standardized test for articulation, phonology, fluency or language OR if using percentile score is at or below the 7th percentile. The services will be limited to one group or individual session per week for six months or less as designated in the plan of care, unless the medical need for more services is documented. One and one-half standard deviations below the mean equals a standard score of 78. Services for children ages 6 years through 20 years are available through the educational system, but additional Medicaid services may be approved if the child's speech or language deficit is at, or greater than two standard deviations below the mean as measured by an age appropriate standardized test for articulation, phonology, fluency or
				language OR if using percentile score is at or below the 2nd percentile. The services will be limited to one group or individual session per week for six months or less as designated in the plan of care unless the medical need for more services is documented. Two standard deviations below the mean equals a standard score of 70.

State	Benefit Limit	Written Referral or Prior Authorization: Initial Evaluation	Prior Authorization: Treatment	Relevant Notes
Utah (continued)	Yes	Yes	NA	Feeding and food aversion therapy is limited to up to 10 visits, unless the medical need for more services is supported by documentation that the child's weight is below the 10th percentile for their age appropriate weight. The total medical care of each speech-language and/or audiology patient is under the direction of a physician. The provider reviews the plan of care and the results of treatment as often as the patient's condition requires. If in their professional judgment, no progress is shown, the provider is responsible for discontinuing treatment and notifying the physician of treatment discontinuance.
Vermont	No	Yes	Yes	Per policy, medically necessary treatment is covered until a beneficiary's 21st birthday. A referral is required to initiate services. Prior authorization is not required for an initial evaluation. For treatment other than through a home health agency, as of July 1, 2012 the initial eight visits from the start of the beneficiary's condition are allowed, per therapy discipline, before prior authorization is required. Providers must request prior authorization in advance of the 8th visit if additional therapy visits are medically necessary.
Virginia	NA	NA	NA	

State	Benefit Limit	Written Referral or Prior Authorization: Initial Evaluation	Prior Authorization: Treatment	Relevant Notes
Washington	Yes	No	No	For eligible clients age 20 years and younger, the agency covers unlimited outpatient rehabilitation, with the exception of clients age 19 through 20 receiving Medical Care Services. Medical Care Services clients ages 19 and 20 have a limited outpatient rehabilitation benefit.
				Prior authorization is not required for an evaluation but evaluations are limited to 1 per year. Prior authorization for treatment services is not required for kids in the fee-for-service program.
West Virginia	No	Yes	Yes	There is no benefit limit. All covered speech therapy services are provided to beneficiaries up to 21 years of age. A referral is required prior to initiating services. Prior authorization for treatment services is required.
				Per policy, parents have the freedom to choose services from Medicaid providers outside the school system. However, West Virginia cannot cover this duplication of services, that is, pay claims for the same services provided in the school system and also outside the school system by private practitioners for the same Medicaid member. Therefore, the parent/guardian must notify the school district to not seek Medicaid reimbursement for the relevant services. When school is not in session, continuation of speech therapy services, if necessary, is to be coordinated with a speech therapist in private practice. The written IEP established by the school system must include the continuation of the treatment plan by the private practitioner.
				The Birth-to-Three Program must coordinate the treatment plan of care between the providing therapists and program providers to avoid the duplication of speech therapy.

State	Benefit Limit	Written Referral or Prior Authorization: Initial Evaluation	Prior Authorization: Treatment	Relevant Notes
Wisconsin	Yes	Yes	Yes	Per policy, up to 35 dates of service are allowed for speech therapy the first time a beneficiary requires the services in his or her lifetime. After this initial period, any additional visits needed require prior authorization and are limited to 20 dates of service per six months. A referral is required to initiate services.
Wyoming	NA	Yes	Yes	There is no benefit limit specified for beneficiaries under the age of 21. There are limits specified for beneficiaries 21 years of age and older. A physician referral is required to initiate services. Prior authorization is not required for an initial evaluation. Treatments services require prior authorizations for visits in excess of 20 per year. In cases where the client receives both speech and occupational therapy, treatments should not be duplicated and separate treatment plans and goals should be provided.

APPENDIX F

State	Qualified Provider Requirements - Assistants	Qualified Provider Requirements – Clinical Interns	Relevant Notes
Alabama	Yes	NA	The physical presence of the licensed speech pathologist in the same facility is required at all times when the assistant is performing assigned clinical responsibilities. The licensed speech pathologist must document direct observation of at least 10% of all clinical services provided by the assistant. Speech therapists may supervise no more than the equivalent of two full-time assistants concurrently.
Alaska	Yes	No	Alaska Medicaid does not reimburse for services provided by speech-language pathology aides, interns, and other non-licensed/non-registered individuals. The policy notes that assistants may provide services.
Arizona	Yes	Yes	The SLP assistant must be identified as the treating provider and bill for services under his or her individual NPI number (a group ID number may be utilized to direct payment). A speech-language pathologist who has a temporary license from ADHS and is completing a clinical fellowship year must be under the direct supervision of an ASHA certified speech-language pathologist. AHCCCS registration will be terminated at the end of two years if the fellowship is not completed at that time

State	Qualified Provider Requirements - Assistants	Qualified Provider Requirements – Clinical Interns	Relevant Notes
Arkansas	Yes	Yes	A speech-language pathology assistant must have at least a bachelor's degree in speech-language pathology. A speech-language pathology assistant must be under the "supervision" (as defined by ABESPA) of a qualified speech-language pathologist. When therapy services are provided by a licensed therapy assistant or speech-language pathology assistant who is supervised by a licensed therapist or speech-language pathologist, the supervising therapist or speech-language pathologist, the supervising therapist or speech-language pathologist must observe a therapy session with a child and review the treatment plan and progress notes at a minimum of every 30 calendar days. The qualified therapist or speech-language pathologist may not be responsible for the supervision of more than 5 individuals.
California	NA	Yes	Licensed speech pathologists may be reimbursed for services performed by unlicensed speech pathologists working under their direct supervision to fulfill Required Professional Experience (RPE) for licensure.
Colorado	Yes	Yes	Speech-language pathology assistants are support personnel who, following academic and/or on-the-job training, perform tasks prescribed, directed, and supervised by certified speech-language pathologists. Speech-language pathologists must follow the ASHA guidelines on the training, use, and supervision of assistants. Assistants cannot render services under the Home Health benefit of the Medical Assistance Program. Speech-language pathology assistants and clinical fellows must practice under the general supervision of a Colorado registered speech-language pathologist.
Connecticut	No	No	

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State	Qualified Provider Requirements - Assistants	Qualified Provider Requirements – Clinical Interns	Relevant Notes
Delaware	Yes	NA	Services provided by a speech-language pathology assistant are included in the reimbursement to the qualified speech language pathologist.
District of Columbia	NA	NA	
Florida	Yes	Yes	
Georgia	No	Yes	Clinical Fellows attempting to fulfill the necessary hours for licensure according to the guidelines in the State Practice Act will be allowed to render services in the CIS program under the direct supervision of a Georgia licensed, enrolled speech language pathologist. A Clinical Fellow's work must be documented in member charts and in the supervisor's monitoring and evaluation records.
Hawaii	NA	NA	
Idaho	No	Yes	A person holding a conditional license to practice speech-language pathology is eligible to provide services, if the speech-language pathologist supervising the professional experience keeps a copy of the conditionally-licensed speech-language pathologist's plan of supervised professional experience on file.
Illinois	Yes	Yes	
Indiana	Yes	Yes	

State	Qualified Provider Requirements - Assistants	Qualified Provider Requirements – Clinical Interns	Relevant Notes
Iowa	Yes	Yes	An assistant or clinical fellow may provide services under the supervision of a qualified speech-language pathologist. This means that the qualified speech-language pathologist provides authoritative procedural guidance for the rendering of the services with initial direction and periodic inspection of the actual act and is on the premises if the person performing the service does not meet the assistant-level qualifications.
Kansas	No	No	
Kentucky	NA	Yes	Services provided by clinical fellows are reimbursed at a lower rate than services provided by speech language-pathologists.
Louisiana	NA	NA	
Maine	Yes	NA	A speech-language pathology assistant must be supervised by a licensed speech-language pathologist. There is a reduced fee schedule for work performed by SLP assistants.
Maryland	NA	NA	
Massachusetts	No	No	
Michigan	Yes	Yes	A speech-language pathology assistant may not complete evaluations. All documentation completed by a clinical fellow must be reviewed and signed by the appropriately licensed supervising speech-language pathologist.

State	Qualified Provider Requirements - Assistants	Qualified Provider Requirements – Clinical Interns	Relevant Notes
Minnesota	No	Yes	
Mississippi	No	NA	
Missouri	No	NA	
Montana	Yes	No	
Nebraska	Yes	No	
Nevada	Yes	No	
New Hampshire	Yes	NA	If services are provided by a speech pathology assistant, the individual responsible for the oversight of the assistant shall see the member first to conduct the initial assessment and develop a plan of care, see the member periodically thereafter, specify the type of care to be provided by the speech-language assistant, review the need for continued services, assume professional responsibility for services provided and ensure that services provided are within the scope of the prescribed services.
New Jersey	NA	NA	
New Mexico	NA	NA	

State	Qualified Provider Requirements - Assistants	Qualified Provider Requirements – Clinical Interns	Relevant Notes
New York	No	NA	
North Carolina	Yes	Yes	Treatment services can be performed by a speech language pathology assistant who works under the supervision of an enrolled licensed practitioner. Speech language pathologists in their clinical fellowship year may work under the supervision of the licensed therapist. The supervising therapist is the biller of the service.
North Dakota	No	No	
Ohio	Yes	Yes	A speech-language pathology aide who is licensed to provide the particular service and who provides the service to only one person at a time under the supervision of an eligible provider may provide services.
Oklahoma	No	Yes	
Oregon	Yes	Yes	
Pennsylvania	NA	NA	
Rhode Island	NA	NA	
South Carolina	Yes	Yes	

State	Qualified Provider Requirements - Assistants	Qualified Provider Requirements – Clinical Interns	Relevant Notes
South Dakota	Yes	Yes	Services provided by an assistant are required to be billed by the supervising therapist using the HM modifier. South Dakota Medicaid recommends the supervising therapist review and sign documentation for submitted claims.
Tennessee	NA	NA	
Texas	Yes	Yes	Services provided by an assistant will be reimbursed at 85% of the Medicaid fee schedule effective December 1, 2017 and at 70% of the Medicaid fee schedule effective September 1, 2017.
Utah	Yes	Yes	Speech-language pathology students in their final clinical fellowship year may provide Medicaid services under general supervision, but the Medicaid billing must be done by a speech-language pathologist.
Vermont	No	Yes	Co-signature is required for clinical fellowship year speech-language pathologists.

State	Qualified Provider Requirements - Assistants	Qualified Provider Requirements – Clinical Interns	Relevant Notes
Virginia	Yes	Yes	Virginia Medicaid will reimburse for the provision of speech-language services when provided by a speech-language assistant who has either a Bachelors level or a Masters level without licensure by the Board of Audiology and Speech Language Pathology. The unlicensed assistant (and the fact that they do not meet qualification requirements to bill Medicaid) shall be disclosed to the individual, their family, caregiver, or legally authorized representative prior to treatment, and documented and made a part of the individual's record. In order to bill Medicaid, speech-language pathology assistants must be under the direct supervision of a licensed CCC-SLP or SLP that meets state licensure requirements. Direct on-site supervision by a qualified therapist includes initial direction and periodic observation of the actual performance of the therapeutic activity. The plan of care/treatment plan must be developed and signed by the licensed therapist. When services are provided by a licensed or certified therapy assistant, the licensed therapist (i.e.: SLP) must conduct an on-site supervisory visit at least every 30 days while therapy is being conducted, observe, and document accordingly.
Washington	No	No	
West Virginia	Yes	NA	Speech pathology assistants are eligible to provide treatment but may not conduct evaluations. Services are reimbursed at the same rate.

State	Qualified Provider Requirements - Assistants	Qualified Provider Requirements – Clinical Interns	Relevant Notes
Wisconsin	Yes	No	SLP provider assistants are required to be under the direct, immediate, on-premises supervision of an ASHA certified and Medicaid-enrolled supervisor who is responsible and liable for the performance of the services delivered. Evaluations may not be reimbursed by Wisconsin Medicaid when provided by SLP provider assistants. All other SLP services may be reimbursed by Wisconsin Medicaid when provider assistants.
Wyoming	NA	NA	

APPENDIX G

SURVEY QUESTIONS

Impact of Alternative Payment Models on Pediatric Speech Therapy Business Practices

Survey	Questions:
Dui vey	Questions.

- What is your primary professional work setting?
 a. Hospital
 - b. Comprehensive outpatient rehabilitation facility
 - c. Home health agency
 - d. Private practice
 - e. Other:
- 2. What best describes your primary role within your professional work setting?
 - a. Owner
 - b. Administrator
 - c. Contracting specialist
 - d. Speech Language Pathologist
 - e. Other: ____
- 3. How many speech-language pathologists are employed where you work?
 - a. Solo practitioner
 - b. 2 to 4 providers
 - c. 5 to 9 providers
 - d. 10 to 24 providers
 - e. 25 or more providers
- 4. How would you characterize your knowledge of alternative payment models?
 - a. I'm not at all familiar
 - b. I've heard of alternative payment models but don't know much about them
 - c. I'm familiar with alternative payment models but don't have experience using them
 - d. I'm currently using alternative payment models in my professional work setting

NOTE: If your organization is using alternative payment models, please continue to question 5. If your organization is not using alternative payment models, please skip to question 15.

- 5. If you're currently using alternative payment models, which of the following are currently in use within your practice? (Check all that apply)
 - a. Accountable care organizations
 - b. Bundled (episodic) payments
 - c. Centers for excellence designations
 - d. Pay-for-quality programs
 - e. Patient-Centered Medical Home
 - f. Preferred provider designation
 - g. Published performance data

h. Other:	
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- 6. Please indicate which insurers are utilizing alternative payment models in your area. (Check all that apply)
 - a. 3rd party commercial insurers (ex. United Healthcare, Aetna, Humana)
 - b. Medicaid fee-for-service programs
 - c. Medicaid managed care organizations

d.	Other:	

- 7. What impact, if any, has the introduction of alternative payment models had on your practice patterns? (Check all that apply)
 - a. Alternative payment models have had no impact on my practice patterns.
 - b. I have expanded my use of technology as a result of alternative payment models.
 - c. I have improved coordination of care with related service providers as a result of alternative payment models.
 - d. I have experienced an increase in documentation and reporting requirements as a result of one of more alternative payment models.
 - e. Other (please list):
- 8. What impact, if any, has the introduction of alternative payment models had on your company's financial health? (Check all that apply)
 - a. They have had no impact on my company's financial health.
 - b. The financial health of my company has improved as a result of alternative payment models.
 - c. I have diversified my contracts with insurers to offset declining reimbursements.
 - d. I have stopped accepting new patients insured with one or more insurers due to low reimbursement rates.
 - e. I have discontinued services to patients insured with one or more insurers due to low reimbursement rates.
 - f. Other (please list):

- 9. In what ways has the use of alternative payment models resulted in improved quality and coordination of care within your practice? (Check all that apply)
 - a. Alternative payment models have not resulted in improved quality and coordination of care
 - b. I have better care coordination with related service providers
 - c. I achieve better outcomes in fewer treatment sessions
 - d. My patients and families report higher levels of satisfaction
 - e. I now offer evening and weekend appointments to meet the needs of my patients
 - f. Other (please list):
- 10. What challenges, if any, have you encountered as a result of the use of alternative payment models? (Check all that apply)
 - a. I have not experienced challenges as a result of alternative payment models
 - b. I have had challenges as a result of declining revenue
 - c. I have had challenges as a result of declining referrals
 - d. Other (please list)
- 11. Are there specific types of alternative payment models that have worked better for your practice? (Check all that apply)
 - a. Accountable care organizations
 - b. Bundled (episodic) payments
 - c. Centers for excellence designations
 - d. Pay-for-quality programs
 - e. Patient-centered medical home
 - f. Preferred provider designation
 - g. Published performance data

h.	Other:	

- 12. Are there specific types of alternative payment models that have worked worse? (Check all that apply)
 - a. Accountable care organizations
 - b. Bundled (episodic) payments
 - c. Centers for excellence designations
 - d. Pay-for-quality programs
 - e. Patient-centered medical home
 - f. Preferred provider designation
 - g. Published performance data
 - h. Other:

- 13. What is the likelihood that you'll continue to accept payment arrangements that incorporate the use of alternative payment models?
 - a. Extremely likely
 - b. Likely
 - c. Neutral
 - d. Unlikely
 - e. Extremely likely
- 14. If you've participated in alternative payment models, please indicate the ways in which it has affected your use of technology. (Check all that apply)
 - a. I have purchased new software
 - b. I have enrolled in electronic payments
 - c. I have implemented an electronic health records system
 - d. I have used technology to track data related to my practice patterns
 - e. Other (please list)
- 15. Please use the following scale to rate how important the following measures of clinical quality are to you and your practice?
 - 0 = Not Important at All
 - 1 = Of Little Importance
 - 2 = Of Average Importance
 - 3 = Very Important
 - 4 = Absolutely Essential
 - a. Using of clinically appropriate evaluation tools to determine eligibility for services
 - b. Using the same evaluation tools at the time of the initial assessment and reevaluation in order to make comparisons or providing an explanation why a different tool must be utilized
 - c. Completing assessments and providing intervention in the patient's primary language
 - d. Involving the patient and/or caregiver in the development and implementation of the plan of care
 - e. Writing long- and short-term treatment goals that emphasize functional outcomes
 - f. Documenting clinical interventions and outcomes as a result of skilled intervention
 - g. Referring to related professionals and community-based services as appropriate
 - h. Coordinating care with the patient's referring physician and other healthcare professionals
 - i. Developing home program/carryover activities for implementation in the patient's natural environment
 - j. Documenting caregiver compliance to and feedback about the home program activities assigned
 - k. Establishing frequency and duration recommendations that are unique to the patient
 - 1. Using highest qualified provider to deliver services
 - m. Other (please list)

- 16. Please use the following scale to rate how important the following measures of administrative quality are to you and your practice?
 - 0 = Not Important at All
 - 1 = Of Little Importance
 - 2 = Of Average Importance
 - 3 = Very Important
 - 4 = Absolutely Essential
 - a. Ability to accept direct deposit
 - b. Ability to implement electronic medical records
 - c. Maintaining patient records that are accurate and complete
 - d. Maintaining policy and procedure manuals that are accurate and current
 - e. Maintaining licensure and certification requirements
 - f. Maintaining continuing education requirements specific to your area of specialization
 - g. Maintaining all applicable professional liability and business insurance policies
 - h. Maintaining a system for internal audits of patient records and payments
 - i. Maintaining evening and weekend appointments to meet the scheduling needs of patients
 - j. Maintaining a patient survey mechanism to obtain feedback from clients
 - k. Processing refunds for identified overpayments according to applicable rules and regulations.
 - 1. Documenting patient attendance and rationale for missed appointments
 - m. Documenting all contacts/communication with the patient and/or their caregiver
 - n. Adhering to the profession's code of ethics
 - o. Other (please list)

APPENDIX H

IRB EXEMPTION DETERMINATION



DIVISION OF RESEARCH

Type of Review:	Initial Review Submission Form
Title:	Impact of Alternative Payment Models on Pediatric
	Speech, Occupational, and Physical Therapy Business
	Practices
Investigator:	Michael A Morrisey, PhD
IRB ID:	IRB2017-0333M
Reference Number:	053107
Funding:	None
Documents Reviewed:	Informed Consent v1.2 Recruitment Materials v2 Survey
	Questions March 2017
Risk Level of Study:	Not Greater than Minimal Risk under 45 CFR 46 / 21 CFR
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EXEMPTION DETERMINATION

June 09, 2017

Dear Michael A Morrisey, PhD:

The HRPP determined on 06/09/2017that this research meets the criteria for Exemption in accordance with 45 CFR 46.101(b) under Category 2: Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior unless, the information is obtained in an identifiable manner and any disclosure of the subjects responses outside of research could reasonably place the subject at risk.

Your exemption is good for five (5) years from the Approval Start Date. At that time, you must contact the IRB with your intent to close the study or submit a continuing review form through iRIS.

If you have any questions, please contact the IRB Administrative Office at 1-979-458-4067, toll free at 1-855-795-8636. Sincerely, IRB Administration

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