

# MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES: RATE STUDY FOR SELECT STATE PLAN AND 1915(C) WAIVER SERVICES

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The State of Missouri Department of Health and Senior Services (DHSS) contracted with Mercer Government Human Services Consulting (Mercer), part of Mercer Health & Benefits LLC, to perform a rate study on select State Plan and 1915(c) waiver services. This document presents a summary of the data sources reviewed, the issues considered, the analysis performed and the results of the study.

## BACKGROUND

The two DHSS divisions involved in this rate study included the Division of Community and Public Health (DCPH) and the Division of Senior and Disability Services (DSDS). Each of these divisions performs various functions, one of which is to oversee the delivery of community-based services for various Missouri populations and programs.

Within DCPH, the Bureau of Special Health Care Needs (SHCN) coordinates programs and initiatives focused on developing, promoting and supporting community-based systems for Missourians with special health care needs. SHCN programs and initiatives include the Children and Youth with Special Health Care Needs Program, the Family Partnership Initiative, the Healthy Children and Youth (HCY) Program and the Medically Fragile (MF) Adult Waiver Program. Also within DCPH, the Section for Disease Prevention (Section) has specific responsibilities related to various diseases and illnesses including HIV/AIDS. The Section administers various programs including the AIDS Drug Assistance Program, Ryan White Part B, Housing Opportunities for People with AIDS and the MO HealthNet AIDS Waiver (AIDS) program for eligible low-income Missourians living with HIV.

DSDS administers three 1915(c) waivers that provide home and community-based services (HCBS) and supports to seniors and adults with disabilities. These waivers include the Aged and Disabled (AD) Waiver, the Adult Day Care (ADC) Waiver and the Independent Living (IL) Waiver. Through these waivers, DHSS aims to establish and maintain a community-based system of care and offer an array of services to meet each individual's support needs. In some cases, these waivers offer additional units of service to an individual whose service limits have been met within the State Plan.

A summary of the services included as part of this rate study and the program under which each service is offered are provided in Table 1.

**TABLE 1: SERVICES INCLUDED IN RATE STUDY**

SERVICE	PROGRAM					
	AD	IL	MF	AIDS	STATE PLAN HCY	STATE PLAN
<b>Basic Care Services</b>						
Basic In-Home Respite	X					
Homemaker	X					
Chore	X					
Attendant Care			X	X		
Personal Care				X	X	X
<b>Advanced Care Services</b>						
Advanced Respite	X					
Advanced Personal Care					X	X
<b>Consumer Directed Services</b>						
Personal Care		X				X
<b>Nursing Services</b>						
Authorized Nurse Visits					X	X
Evaluation Visits					X	
Private Duty Nursing			X	X	X	
Skilled Nurse Visits					X	
<b>Other</b>						
Home Delivered Meals	X					
Case Management		X				
Financial Management Services (FMS)		X				

While the target population and array of covered services varies for each of these programs, the definitions and provider qualifications for a given service are generally consistent across the programs. In addition, the rates for a given service are not generally differentiated by program. Based on discussions with DHSS and a review of the waivers, DHSS's fee schedule rates are updated by the State Legislature through the State of Missouri annual budgeting and appropriations process. The State Legislature works independently with legislative budgetary and research staff and obtains input from DHSS, the Missouri provider industry and advocates. One fee schedule rate is developed for each service, and that rate applies to all providers statewide.

The majority of the services included in this study are delivered by agency-based providers. However, there are two services, State Plan Personal Care and Waiver Personal Care, that can be delivered via the consumer directed model. The consumer directed model of care allows the individual more choice, control and authority over their supports due to their ability to hire, train and schedule their own employees.

#### RATE STUDY SCOPE

DHSS initiated this study to understand if the fee schedule rates being paid to providers are reasonable and appropriate given current market conditions and to ensure compliance with requirements from the Centers for Medicare and Medicaid Services (CMS). At the request of DHSS, Mercer modeled market-based ranges for the services shown in Table 1 for the SFY 2019 time period.

#### OVERVIEW OF RATE STUDY PROCESS

The rate study involved several key steps, which began in October 2018 and were conducted through August 2019. First, Mercer obtained and reviewed relevant DHSS documents to ensure a clear understanding of each service and to identify key cost components associated with service delivery. For each service, Mercer held discussions with DHSS to determine whether each cost component should be modeled within the rates. This step included discussions on the differences in cost components between agency and consumer directed service models. After reviewing the staffing qualifications outlined in the applicable service definitions and program manuals, Mercer developed a summary of key staffing requirements by service (refer to Appendix A). Using the Bureau of Labor Statistics (BLS) wage data, Mercer proposed service-specific job positions necessary for providers to meet the staffing requirements, appropriately support individuals and deliver high quality services. Mercer then conducted research to obtain market data related to each market-based cost component and also administered a provider questionnaire to collect data to benchmark against the market data. Each of these key steps is described in more detail in subsequent paragraphs.

Mercer facilitated discussions with DHSS throughout the study to ensure alignment of the rate development process with DHSS's expectations of providers. These expectations applied to various elements of service delivery such as staff qualifications, competitive wages, training time, overtime and other allowable service-related expenses. DHSS selected assumptions for each of the key cost components based on current marketplace conditions and provider feedback, and Mercer modeled this information to establish SFY 2019 rate ranges for each service in the rate study. In cases where market data or provider questionnaire data was not available to inform a specific cost component (e.g., productivity), Mercer developed assumptions based on discussions with DHSS.

## SERVICE DEFINITIONS AND DHSS EXPECTATIONS FOR SERVICE DELIVERY

As part of the study, Mercer reviewed several documents containing background information on the various programs and the services under review. In addition, DHSS and Mercer held several meetings to ensure Mercer had a clear understanding of DHSS's expectations for providers delivering these services. Key information reviewed included:

- Missouri regulations and service manuals (dated January 2018) that described State Plan and 1915(c) waiver services
- Waiver service definitions included in Appendix C of the 1915(c) waivers
- Missouri licensure regulations cited within the service definitions
- Data analyses and other relevant information provided by DHSS

Note that the study was based upon an understanding of the service definitions, regulations and other DHSS policies as of June 2019. If the service definitions, regulations, policies or any other material aspect related to these services change, the study results may need to be revised accordingly.

Using the information above, Mercer identified the key elements associated with each service that would need to be considered in the analysis and discussed with DHSS. Mercer then developed the following list of key cost components that may be incurred by providers in the delivery of each service:

- Direct care and other program staff wages
- Employee-related expenses (ERE) (e.g., health insurance, other benefits, employer taxes)
- Productivity (e.g., paid time off (PTO), training time, other non-billable time)
- Other service-related costs (e.g., transportation, supplies)
- Administration/overhead

### **Consumer Direction**

Due to differences between the agency and consumer directed models of care, discussions were held with DHSS to identify which of the cost components were applicable to the consumer directed model. During the discussion, it was determined that many of the cost components outlined above for agency providers are typically not incurred as part of the consumer directed model. Examples include employee benefits for the direct care worker, PTO and certain other service-related costs.

There are some required consumer directed administrative tasks classified as FMS functions that include activities such as collecting time sheets and processing payroll. In the case of Waiver Consumer Directed Personal Care services, costs for these activities are separately built into the FMS rate. In the case of

State Plan Consumer Directed Personal Care services, costs for these tasks are built into the Consumer Directed rate.

## MARKET DATA REVIEW

After determining the key cost components and appropriate staffing qualifications for each service included in the study, market data was collected to inform the pricing of each of the cost components. Mercer primarily relied on publicly available market data (e.g., BLS data), which provides an independent perspective of what employers pay for specific cost components. Mercer collected Missouri-specific market data, where available, and benchmarked this against provider data for reasonability. In cases where data was not publicly available for a given cost component, Mercer relied on guidance from DHSS, Mercer's experience with other state HCBS programs and expectations communicated to states by CMS. Note that all assumptions and resulting rate ranges were reviewed with DHSS for appropriateness and consistency with their expectations and desired purchasing strategy.

The following sections provide detail on the information collected and resulting assumptions for each of the key cost components.

### Hourly Wages

For purposes of wages, Mercer began by reviewing the job categories available in the most recent BLS wage data publication (May 2017). Each service definition was reviewed to understand the key requirements of the services, including provider qualifications, licensing requirements and staffing requirements. Discussions were held to understand DHSS's expectations for direct care workers delivering each service. Based on this information, Mercer proposed specific job positions and position weightings for each service.

### Direct Care

For each job position, Missouri-specific statewide wage ranges from the BLS data were used in the modeling process. The 25<sup>th</sup> percentile wage was used for the lower bound of the wage range, the 50<sup>th</sup> percentile for the interim point in the range and the 75<sup>th</sup> percentile wage was used as the upper bound of the wage range (except for nursing positions where the 90<sup>th</sup> percentile was used at the upper bound). The wages were modeled to comply with the \$8.60 per hour minimum wage effective January 1, 2019, and an inflationary factor based on BLS wage trends was applied to the wages to project them to the SFY 2019 time period. The resulting market wages were also benchmarked against provider data for reasonability. The wage ranges used for each position are summarized in Table 2. For detail on the selected BLS job positions and weightings, please refer to Appendix B.

**TABLE 2: DIRECT CARE STAFF WAGE RANGES**

SERVICE	PROJECTED DIRECT CARE SFY 2019 WAGE RANGE <sup>1</sup>		
	LOWER BOUND	INTERIM POINT	UPPER BOUND
Basic In-Home Respite, Homemaker, Chore, Attendant Care, Personal Care (Agency)	\$9.44	\$10.64	\$11.81
Advanced Respite and Advanced Personal Care	\$10.41	\$11.58	\$12.86
Consumer Directed Personal Care	\$9.44	\$10.64	\$11.81
Authorized Nurse Visits and Nurse Evaluation Visits	\$19.66	\$23.31	\$30.69
Private Duty Nursing	\$17.39	\$20.38	\$25.48
Skilled Nursing (RN)	\$24.96	\$30.13	\$42.86
Skilled Nursing (LPN)	\$17.39	\$20.38	\$25.48
Home Delivered Meals	\$9.28	\$10.60	\$12.83
Case Management	\$12.69	\$15.44	\$19.10
FMS	\$12.36	\$16.04	\$20.43

In addition to modeling hourly wages, DHSS requested consideration for direct care staff overtime costs that providers incur to deliver certain services. Based on discussions with DHSS, Mercer included a 3% assumption in the rate modeling process to reflect the increased payroll costs due to direct care overtime hours paid at time and a half. This assumption was applied to all services, except Home Delivered Meals, Case Management and Financial Management Services.

**Other Program Staff**

In addition to direct care staff, consideration was included for costs associated with other program staff who perform tasks necessary to deliver services to individuals. Based on discussions with DHSS and requirements outlined in the service definitions and manuals, most services required a staff person to supervise and oversee the direct care staff who were delivering the service. Several services also required

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<sup>1</sup> Based on Missouri-specific wages from the Bureau of Labor Statistics (May 2017), inflated to the SFY 2019 time period using a BLS annual wage trend factor of 2.7%.

some form of nursing oversight, while other services required specific staff expertise such as dieticians or drivers.

DHSS indicated that individuals working in the supervisory role generally have more experience than direct care workers and often require higher education levels. The responsibilities for the supervisor position vary by service, but typically include tasks such as staff training, supervision, monitoring and oversight of direct care workers. Similar to the direct care staff wage assumptions, the 25<sup>th</sup> percentile wage was used for the lower bound of the other program staff wage range, the 50<sup>th</sup> percentile for the interim point and the 75<sup>th</sup> percentile wage was used as the upper bound of the wage range (except for nursing positions where the 90<sup>th</sup> percentile was used at the upper bound).

Table 3 shows the wage ranges assumed for the other program staff positions. Note that an inflationary factor based on BLS wage trends was applied to the wages to project them to the SFY 2019 time period. For detail on the selected BLS job positions and weightings, please refer to Appendix B.

**TABLE 3: SUPERVISOR WAGE RANGES**

SERVICE	PROJECTED SUPERVISOR SFY 2019 WAGE RANGE <sup>2</sup>		
	LOWER BOUND	INTERIM POINT	UPPER BOUND
Basic In-Home Respite, Homemaker, Chore, Attendant Care, Personal Care (Agency)	\$14.94	\$18.33	\$23.83
Advanced Respite and Advanced Personal Care	\$14.94	\$18.33	\$23.83
Consumer Directed Personal Care	N/A	N/A	N/A
Authorized Nurse Visits and Nurse Evaluation Visits	\$24.96	\$30.13	\$42.86
Private Duty Nursing	\$24.96	\$30.13	\$42.86
Skilled Nursing (RN)	\$24.96	\$30.13	\$42.86
Skilled Nursing (LPN)	\$24.96	\$30.13	\$42.86
Home Delivered Meals	\$10.59	\$13.42	\$17.62
Case Management	\$16.41	\$20.44	\$25.50

<sup>2</sup> Based on Missouri-specific wages from the Bureau of Labor Statistics (May 2017), inflated to the SFY 2019 time period using a BLS annual wage trend factor of 2.7%.

SERVICE	PROJECTED SUPERVISOR SFY 2019 WAGE RANGE <sup>2</sup>		
	LOWER BOUND	INTERIM POINT	UPPER BOUND
FMS	\$16.41	\$20.44	\$25.50

**TABLE 4: NURSING OVERSIGHT WAGE RANGES**

SERVICE	PROJECTED NURSING OVERSIGHT SFY 2019 WAGE RANGE <sup>3</sup>		
	LOWER BOUND	INTERIM POINT	UPPER BOUND
Basic In-Home Respite, Homemaker, Chore, Attendant Care, Personal Care (Agency)	\$24.96	\$30.13	\$42.86
Advanced Respite and Advanced Personal Care	\$24.96	\$30.13	\$42.86

**TABLE 5: OTHER PROGRAM STAFF WAGE RANGES**

SERVICE	PROJECTED OTHER STAFF SFY 2019 WAGE RANGE <sup>4</sup>		
	LOWER BOUND	INTERIM POINT	UPPER BOUND
Home Delivered Meals – Nutritionist	\$19.99	\$24.21	\$30.02
Home Delivered Meals – Meals Driver	\$9.43	\$11.89	\$18.72

Assumptions for the ratio of other program staff to direct care workers were based on service definition requirements, information collected from providers and discussions with DHSS. For agency-based services, an assumption of one supervisor to ten direct care staff (1:10) was assumed. For agency-based

<sup>2</sup> Based on Missouri specific wages from the Bureau of Labor Statistics (May 2017), inflated to the SFY 2019 time period using a BLS annual wage trend factor of 2.7%.

<sup>3</sup> Based on Missouri-specific wages from the Bureau of Labor Statistics (May 2017), inflated to the SFY 2019 time period using a BLS annual wage trend factor of 2.7%.

<sup>4</sup> Ibid.



services requiring nursing oversight (all agency-based services except Nursing, Home Delivered Meals, Case Management and FMS), a ratio of one nurse to 25 direct care staff (1:25) was assumed. For Home Delivered Meals, a dietician was assumed at a ratio of one dietician to 25 direct care staff (1:25) and a meals driver was assumed at a ratio of one driver to 8.5 direct care staff (1:8.5). Note that other program staff were not considered for the Consumer Directed services given the nature of that delivery model.

## **ERE**

There are various components that make up the ERE cost category. The items considered included:

- Health insurance for full-time employees
- Employer taxes (FICA/FUTA/SUTA)
- Workers' compensation
- Retirement benefits for full-time employees
- Other benefits (e.g., short-term disability/long-term disability, life insurance) for full-time employees

Since some ERE benefits were only factored in for full-time employees, service-specific assumptions were made regarding the percentage of direct care staff who were full-time and part-time. For most services, an assumption of 40% full-time and 60% part-time direct care staff was utilized. The exceptions included an assumption of 75% full-time and 25% part-time for Nursing services and 100% full-time for Case Management and FMS services.

The ERE cost components were priced based on data for Missouri private sector employees in comparable industries. The analysis performed for each of these assumptions is outlined below and resulted in total ERE assumptions ranging from roughly 18% to 33% of wages for agency-based services. As mentioned previously, several cost components were deemed not applicable to the consumer directed model. The ERE assumptions included for Consumer Directed Personal Care included employer taxes and workers' compensation.

### **Health Insurance (Medical/Dental/Vision)**

To establish the employer cost for health insurance, Mercer reviewed BLS market studies on employer health care costs. When reviewing this information, Mercer analyzed national and Missouri-specific data points. After discussing the assumption with DHSS, the resulting amount was trended to the SFY 2019 period using a BLS health insurance inflation factor.

### **Employer Taxes**

To comply with state and federal tax requirements of employers, FICA, FUTA and SUTA amounts were assumed as part of the rate development process. Mercer used information published by the Internal Revenue Service (IRS) to identify costs for FUTA and FICA and data from the Missouri Department of Labor for SUTA.

### **Workers' Compensation, Retirement Benefits and Other Benefits**

For workers' compensation costs, Mercer reviewed rates published by the Missouri Department of Insurance. Workers' compensation assumptions varied by service depending on the anticipated risk of injury for the direct care worker (e.g., a personal assistance direct care worker who may have to lift an individual has a greater risk of injury than a case management direct care worker who is mainly performing administrative tasks in an office).

For retirement and other benefits, Mercer reviewed BLS data. An assumption was included to cover employer costs for full-time workers related to retirement benefits and other benefits including short-term disability, long-term disability and life insurance.

### **Total Compensation (Wages and ERE)**

Although the wage and ERE assumptions were established separately, the assumptions on a total compensation basis (i.e., wages and ERE combined) were reviewed with DHSS. The focus on total compensation aims to address the fact that some providers may choose to pay lower wages and offer a more robust benefit package to their employees, while other employers may provide higher wages with fewer benefits.

### **Productivity**

The next cost component considered in the review process was non-billable time. Mercer assumed that an average full-time direct care worker could work 2,080 total hours per year (average shift of eight hours per day). As part of the direct care worker's activities, there are some tasks that are considered non-billable (i.e., the worker is being paid by the provider, but he/she is not delivering services to the individual that can be billed as a Medicaid service). Some examples include PTO, time the direct care worker spends attending staff meetings and time the worker spends driving to an individual's house to deliver a service. The major components of non-billable time are summarized below.

### **PTO**

Based on information published by BLS and provider survey data, Mercer assumed a range of 15 to 27 days of PTO (includes vacation, holiday and sick time) for full-time staff of agency services and a range of 0 to 5 days of PTO for part-time staff.

### **Training Time**

DHSS expects that agency providers are training direct care staff on an ongoing basis so they can ensure the health and welfare of individuals to whom they are delivering services. DHSS regulations outline a minimum number of direct care worker training hours that are expected to be completed annually. Based on the expected time associated with the training sessions and the fact that agency providers experience employee turnover, assumptions were established separately for new employees and experienced employees and blended together based on an assumed turnover rate. For new direct care workers, an assumption of 2.5 days of training per year was included in the agency modeling process. For experienced direct care workers, the assumption was 1.25 days per year. The only service where this assumption differed was Advanced Personal Care, where the regulations require an additional 8 hours of training. As a

result, the assumptions utilized for this service were 3.5 days for new direct care workers and 2.25 days for experienced workers.

**Other Non-Billable Time**

This category includes direct care worker non-billable tasks that are required as part of service delivery but not billable to Medicaid due to the participant not being present. Examples include direct care workers needing to attend staff meetings, documenting case notes and driving to an individual’s house to deliver a service. Discussions were held with DHSS regarding the amount of non-billable time that would reasonably be expected during a typical work day for each of the different services. The assumptions varied by service and are summarized in Table 6.

**TABLE 6: OTHER NONBILLABLE TIME ASSUMPTIONS**

SERVICE GROUP	SERVICE NAME	PERCENTAGE OF WORKDAY THAT IS BILLABLE
Basic Care Services	Basic In-Home Respite, Homemaker, Chore, Attendant Care, Personal Care (Agency)	94% for In-Home Services 100% for Personal Care in Residential Care Facilities/Assisted Living Facilities
Advanced Care Services	Advanced Respite, Advanced Personal Care	94% for In-Home Services 100% for Advanced Personal Care in Residential Care Facilities/Assisted Living Facilities
Consumer Directed Services	Personal Care	100%
Nursing Services	Authorized Nurse Visits, Evaluation Visits, Private Duty Nursing, Skilled Nurse Visits	94% for In-Home Services 100% for Authorized Nurse Visits in Residential Care Facilities/Assisted Living Facilities
Other	Home Delivered Meals	100%
	Case Management	100%
	FMS	100%

**Other Service-Related Costs**

In addition to staff wages, ERE and productivity assumptions, Mercer also considered other service-related costs that agency providers incur to deliver these services. These costs include staff training sessions (e.g., cost of the actual training session or materials), service-related supplies and transportation costs (e.g., vehicle costs or fuel), where applicable. While the assumption included for this cost component was 5% for most of the agency-based services, it was increased to 8% for Home Delivered Meals service to account for the facility costs necessary to deliver this service. This cost component was not included for Consumer Directed services given the nature of the delivery model.

### **Administrative Costs**

Administrative costs include expenses such as management, administrative office space, equipment and supplies, recruitment, information technology, human resources, billing, finance and accounting, legal, and other indirect costs necessary for program operations. Based on industry standards, CMS expectations and discussions with DHSS, a 10% administrative cost load factor was included for all agency-based services. For State Plan Consumer Directed Personal Care services, a 10% assumption was included to consider the FMS tasks that need to be completed. The 10% assumption was not included for Waiver Consumer Directed Personal Care given that FMS is a separate service, and the FMS rate includes consideration for these administrative tasks.

### **Electronic Visit Verification (EVV) Requirements**

Because DHSS providers must meet EVV requirements for certain services, Mercer included a cost component specific to EVV. As outlined in Missouri Regulation 19 CSR 15-9, DHSS requires providers to comply with EVV requirements for Basic Care In-home Services (In-Home Respite, Homemaker, Chore, Attendant Care, Personal Care), Advanced Care In-home Services (Advanced Respite and Advanced Personal Care) and Consumer Directed Personal Care. Providers were expected to come into compliance with these requirements by early 2016, and many incurred one-time, upfront costs to obtain and implement their electronic systems. After implementation, providers incur costs on an ongoing basis to maintain and administer their EVV systems (e.g., per transaction costs, rental of electronic devices, etc.).

In order to comply with the EVV requirements in the 21<sup>st</sup> Century Cures Act, DHSS will be making changes to the current provider EVV requirements. By January 1, 2020, an open EVV system will be implemented where providers can maintain their current EVV systems but must ensure their system can interact with Missouri's new aggregator system. Given this initiative is still in the planning stage and since no data is available at this time, Mercer did not build any "one-time" costs into the SFY 2019 modeled rates to cover these potential aggregator interaction costs. As the January 1, 2020 date approaches and more information is learned about the workload needed to interact with Missouri's aggregator, DHSS will monitor the significance of this cost and determine, at a later time, whether an update is needed to the assumptions in this rate study.

Although no costs were assumed for the upfront interaction with the aggregator, Mercer did include consideration for the ongoing transaction costs that providers incur to maintain and administer their EVV systems. This cost assumption was only included for services subject to EVV. DHSS and Mercer reviewed EVV cost data from Missouri providers, EVV vendors and other state programs to arrive at an EVV cost assumption of \$0.35 per hour, which translates to roughly \$0.09 per 15 minute unit. This assumption was included in the rates for all services subject to EVV, except for Consumer Directed Personal Care under the IL Waiver. For this service, the EVV cost consideration was instead included in the FMS rate given the FMS provider is responsible for EVV compliance.

### **One-to-one Staffing Ratio**

All services reviewed as part of this study are delivered via a one-to-one (1:1) staffing ratio, meaning that one direct care worker delivers services to one participant at a time. As a result, no adjustments were needed to the rates to account for group settings.

### Unit Definitions

All rate ranges were developed on a “per hour” basis and then a factor was applied to convert the rate ranges to the applicable unit definition. The unit definition for the majority of the rate study services was a 15-minute unit, so in these cases, the hourly rate range was divided by four to develop the 15-minute unit rate range.

There were some cases where the unit definition was based on a day, a month, a year, a meal or a visit. In these cases, discussions were held with DHSS, and provider data was reviewed to inform the assumptions needed to translate the hourly rate to the applicable unit definition. For purposes of the daily attendant care service, the hourly rate ranges were developed and then multiplied by a factor of 11.25 hours to model the per diem rate ranges. The Nursing rate ranges were developed based on an assumption that a visit lasts one to 1.5 hours (i.e., a factor of one to 1.5 was applied to the hourly rate). For the annual Case Management rate, the hourly rate was multiplied by 12 based on the service definition that requires 12 hours of service be provided per participant per year. For the FMS monthly rate, the hourly rate was multiplied by four based on the assumption that FMS providers deliver services one hour per week per participant (or four hours per month). The per meal rate ranges for Home Delivered Meals were developed based on an assumption that eight to ten meals can be produced and delivered in an hour.

### RATE RANGE SUMMARY

Table 7 on the following page compares DHSS’s SFY 2019 Medicaid fee schedule rates to the market-based rate ranges that are a result of modeling the assumptions developed with DHSS and described in this document. For the majority of services, the SFY 2019 fee schedule rate falls below the lower bound of the modeled rate range. In some cases, DHSS’s SFY 2019 fee schedule rate is within the modeled rate range or falls slightly above the upper bound of the modeled rate range. The subsequent paragraphs provide commentary on potential drivers of these differences.

**TABLE 7: SFY 2019 FEE SCHEDULE RATES COMPARED TO MARKET-BASED MODELED RATE RANGES**

SERVICE	PROCEDURE CODE AND MODIFIER	UNIT	SFY 2019 DHSS FEE SCHEDULE RATE	SFY 2019 MARKET-BASED MODELED RATE RANGE			PERCENT CHANGE BETWEEN SFY 2019 RATES AND MODELED RATES		
				LOWER BOUND	INTERIM POINT	UPPER BOUND	LOWER BOUND	INTERIM POINT	UPPER BOUND
<b>Basic Care Services</b>									
Basic In-Home Respite	S5150	15 min.	\$4.03	\$5.02	\$5.75	\$6.69	24.5%	42.6%	65.9%
Homemaker	S5130	15 min.	\$4.53	\$5.02	\$5.75	\$6.69	10.7%	26.9%	47.6%
Chore	S5120	15 min.	\$4.53	\$5.02	\$5.75	\$6.69	10.7%	26.9%	47.6%
Attendant Care	S5125 U5	15 min.	\$4.53	\$5.02	\$5.75	\$6.69	10.7%	26.9%	47.6%
	S5126 U4	Per day	\$201.00	\$225.71	\$258.68	\$300.95	12.3%	28.7%	49.7%
State Plan Personal Care	T1019	15 min.	\$4.53	\$5.02	\$5.75	\$6.69	10.7%	26.9%	47.6%

SERVICE	PROCEDURE CODE AND MODIFIER	UNIT	SFY 2019 DHSS FEE SCHEDULE RATE	SFY 2019 MARKET-BASED MODELED RATE RANGE			PERCENT CHANGE BETWEEN SFY 2019 RATES AND MODELED RATES		
				LOWER BOUND	INTERIM POINT	UPPER BOUND	LOWER BOUND	INTERIM POINT	UPPER BOUND
State Plan Personal Care (RCF/ALF)	T1019 U3	15 min.	\$4.38	\$4.62	\$5.31	\$6.19	5.5%	21.2%	41.3%
Waiver Personal Care	T1019 U4	15 min.	\$4.53	\$5.02	\$5.75	\$6.69	10.7%	26.9%	47.6%
HCY Personal Care	T1019 EP	15 min.	\$4.53	\$5.02	\$5.75	\$6.69	10.7%	26.9%	47.6%
<b>Advanced Care Services</b>									
Advanced Respite	S5150 TF	15 min.	\$4.84	\$5.38	\$6.11	\$7.09	11.2%	26.2%	46.4%
Advanced State Plan Personal Care	T1019 TF	15 min.	\$5.61	\$5.40	\$6.13	\$7.12	-3.7%	9.3%	26.9%

SERVICE	PROCEDURE CODE AND MODIFIER	UNIT	SFY 2019 DHSS FEE SCHEDULE RATE	SFY 2019 MARKET-BASED MODELED RATE RANGE			PERCENT CHANGE BETWEEN SFY 2019 RATES AND MODELED RATES		
				LOWER BOUND	INTERIM POINT	UPPER BOUND	LOWER BOUND	INTERIM POINT	UPPER BOUND
Advanced State Plan Personal Care (RCF/ALF)	T1019 U3 TF	15 min.	\$4.93	\$4.98	\$5.67	\$6.59	1.1%	15.0%	33.7%
Advanced HCY Personal Care	T1019 TF EP	15 min.	\$5.61	\$5.40	\$6.13	\$7.12	-3.7%	9.3%	26.9%
<b>Consumer Directed Care</b>									
State Plan Personal Care	T1019 U2	15 min.	\$3.94	\$3.13	\$3.50	\$3.88	-20.7%	-11.1%	-1.6%
Waiver Personal Care	T1019 U6	15 min.	\$3.62	\$2.73	\$3.07	\$3.41	-24.5%	-15.1%	-5.7%



SERVICE	PROCEDURE CODE AND MODIFIER	UNIT	SFY 2019 DHSS FEE SCHEDULE RATE	SFY 2019 MARKET-BASED MODELED RATE RANGE			PERCENT CHANGE BETWEEN SFY 2019 RATES AND MODELED RATES		
				LOWER BOUND	INTERIM POINT	UPPER BOUND	LOWER BOUND	INTERIM POINT	UPPER BOUND
<b>Nursing Services</b>									
State Plan Authorized Nurse Visits	T1001	Per visit	\$43.70	\$37.02	\$55.39	\$88.67	-15.3%	26.7%	102.9%
HCY Authorized Nurse Visits	T1001 EP	Per visit	\$43.70	\$37.02	\$55.39	\$88.67	-15.3%	26.7%	102.9%
HCY Evaluation Visits	T1001 TD EP	Per visit	\$43.70	\$37.02	\$55.39	\$88.67	-15.3%	26.7%	102.9%
State Plan Authorized Nurse Visits (RCF/ALF)	T1001 U3	Per visit	\$33.24	\$34.71	\$51.93	\$83.13	4.4%	56.2%	150.1%

SERVICE	PROCEDURE CODE AND MODIFIER	UNIT	SFY 2019 DHSS FEE SCHEDULE RATE	SFY 2019 MARKET-BASED MODELED RATE RANGE			PERCENT CHANGE BETWEEN SFY 2019 RATES AND MODELED RATES		
				LOWER BOUND	INTERIM POINT	UPPER BOUND	LOWER BOUND	INTERIM POINT	UPPER BOUND
Private Duty Nursing, AIDS	T1000 U4	15 min.	\$7.77	\$8.38	\$9.93	\$12.68	7.9%	27.8%	63.2%
Private Duty Nursing, MF	T1000 U5	15 min.	\$7.77	\$8.38	\$9.93	\$12.68	7.9%	27.8%	63.2%
Private Duty Nursing, MF Exception	T1000 SC	15 min.	\$7.77	\$8.38	\$9.93	\$12.68	7.9%	27.8%	63.2%
HCY Private Duty Nursing	T1000	15 min.	\$8.24	\$8.38	\$9.93	\$12.68	1.7%	20.5%	53.9%
HCY Skilled Nurse Visits – RN	G0299	Per visit	\$78.32	\$45.17	\$68.78	\$117.93	-42.3%	-12.2%	50.6%

SERVICE	PROCEDURE CODE AND MODIFIER	UNIT	SFY 2019 DHSS FEE SCHEDULE RATE	SFY 2019 MARKET-BASED MODELED RATE RANGE			PERCENT CHANGE BETWEEN SFY 2019 RATES AND MODELED RATES		
				LOWER BOUND	INTERIM POINT	UPPER BOUND	LOWER BOUND	INTERIM POINT	UPPER BOUND
HCY Skilled Nurse Visits – LPN	G0300	Per visit	\$78.32	\$33.53	\$49.65	\$76.10	-57.2%	-36.6%	-2.8%
<b>Other Services</b>									
Home Delivered Meals	S5170	Per meal	\$5.82	\$4.49	\$5.07	\$6.11	-22.8%	-12.8%	4.9%
Case Management	T2024 U6	Per year	\$100.00	\$286.98	\$348.90	\$432.19	187.0%	248.9%	332.2%
Financial Management Services	T2040 U6	Per month	\$110.00	\$102.15	\$128.12	\$160.31	-7.1%	16.5%	45.7%

## **RATE RANGE OBSERVATIONS**

When comparing the SFY 2019 market-based modeled rate ranges in Table 7 to DHSS's SFY 2019 fee schedule rates, there are a few key considerations and observations to keep in mind. The following paragraphs provide context into some of the potential drivers of the differences.

### **Wages and ERE**

When developing the rate ranges for the services covered under this study, DHSS requested that Mercer review Missouri-specific BLS wage data to understand what the current market is paying employees in these types of positions and what level of ERE benefits is being funded. These wages and ERE costs were benchmarked against provider questionnaire data on the competitive wage needed to attract and retain staff, along with the benefits being offered and the associated ERE costs. Since wages and ERE comprise the bulk of the rate, it is anticipated that these assumptions are one of the key drivers causing many of the modeled SFY 2019 rate ranges to exceed the fee schedule rates being paid to providers. This includes the Basic Care services, most of the Advanced Care services and many of the Nursing services.

### **Consumer Directed Personal Care**

The SFY 2019 fee schedule rates for Consumer Directed Personal Care services exceed the upper bound of the modeled rate range. Given the nature of the Consumer Directed model, DHSS anticipates that Consumer Directed providers are incurring fewer cost components than agency-based providers. The Consumer Directed modeled rate ranges include consideration for the direct care worker's wage, FICA, FUTA/SUTA and worker's compensation. There was also consideration for EVV costs, overtime hours and the FMS role described below.

While there are generally limited provider overhead costs associated with the Consumer Directed model, there are costs associated with performing the fiscal management tasks of collecting time sheets, processing time sheets, cutting checks to workers and so forth. Under State Plan Consumer Directed Personal Care, these functions are performed by the Personal Care provider, which means the assumed cost associated with these functions was incorporated into the State Plan Consumer Directed Personal Care rate ranges. For Waiver Consumer Directed Personal Care, these costs were not included in the Waiver Consumer Directed Personal Care rate range because they were separately built into the FMS rate range. As it is unclear what types of costs were considered in the development of the SFY 2019 Consumer Directed Medicaid fee schedule rates, it is challenging to opine on what is causing the fee schedule rates to be higher than the market-based modeled rates.

### **Home Delivered Meals**

The Home Delivered Meals fee schedule rate falls close to the upper bound of the modeled rate range. When reviewing this result, it is important to keep in mind that rate modeling for this service is especially challenging given the different delivery models that providers use for this service. Examples range from providers who buy groceries and cook meals in house to providers who fully contract out the task and purchase pre-made meals from a specialized vendor. For purposes of meal delivery, some providers pay drivers, while others rely on volunteers who are not paid an hourly wage. Another difference in approach is the level of donations and contributions that each provider collects to offset some of their costs. Lastly,

productivity of meal production and delivery can vary widely depending on the types of meals being prepared and the distance of the delivery trip.

### **Case Management**

The Case Management fee schedule rate is \$100 per year, and the service definition requires 12 hours of service be delivered to an individual annually. This translates to an hourly rate of \$8.33. Prior to January 1, 2019, Missouri's minimum wage was \$7.85, which means the SFY 2019 fee schedule rate essentially funds an hourly minimum wage and limited other costs. Based on discussions with DHSS, Mercer modeled the Case Management rate ranges using assumptions similar to the FMS service given similarities observed between the job functions. This approach resulted in modeled rate ranges that are significantly higher than the Case Management fee schedule rate, but the ranges are reasonable based on Mercer's experience in other states. Mercer recommends DHSS review the assumptions closely and determine if there is something unique to DHSS's Case Management service that merits modification.

### **HCY Skilled Nurse Visits**

In the case of the HCY Skilled Nurse Visits (RN and LPN), DHSS's fee schedule rates do not vary between the RN and LPN procedure codes. As part of the study, Mercer did differentiate the rates between these services given the different level of qualifications (and likely resulting wage) for an RN versus an LPN. These differences result in the modeled LPN rate range being lower than the LPN Medicaid fee schedule rate, while the modeled RN rate range encompasses the RN Medicaid fee schedule rate.

### **Fee Schedule Rates Paid by Other Missouri Medicaid Divisions**

Throughout this project, DHSS and Mercer made comparisons to assumptions and rate ranges used by the Missouri Department of Mental Health (DMH) in their recent 1915(c) waiver rate studies. This comparison was only available for a subset of services that were comparable between the DMH and DHSS programs. In cases where the DMH assumption was appropriate for the DHSS population, DHSS generally assumed a similar value. In other cases, the DMH assumption was not appropriate for the DHSS populations or was not supported by the DHSS provider data or provider qualifications. As DHSS determines whether updates will be made to the DHSS fee schedule rates, it is important to consider how this may impact other offices within Missouri that are responsible for rates for comparable services. If the providers of DHSS and DMH services are significantly different, than differences in rates between programs may not be an issue. However, if the provider bases are very similar, rate differences for similar services can result in challenges.

## **FUTURE CONSIDERATIONS**

In addition to completing a rate study specific to the SFY 2019 time period, DHSS requested information on how the modeled rates would be impacted by future Missouri minimum wage increases. DHSS and Mercer discussed the Missouri Proposition B (Minimum Wage) legislation passed in November 2018. The legislation includes a phase-in of minimum wage increases over the course of five years as shown in the table below.

**TABLE 8: SUMMARY OF MINIMUM WAGE PHASE-IN**

TIME PERIOD	MINIMUM WAGE (PER HOUR)	DOLLAR INCREASE YEAR OVER YEAR	PERCENT INCREASE YEAR OVER YEAR
Prior to January 1, 2019	\$7.85	N/A	N/A
Beginning January 1, 2019 (during SFY 2019)	\$8.60	\$0.75	9.6%
Beginning January 1, 2020 (during SFY 2020)	\$9.45	\$0.85	9.9%
Beginning January 1, 2021 (during SFY 2021)	\$10.30	\$0.85	9.0%
Beginning January 1, 2022 (during SFY 2022)	\$11.15	\$0.85	8.3%
Beginning January 1, 2023 (during SFY 2023)	\$12.00	\$0.85	7.6%

As mentioned previously, the market-based hourly wages used to model the SFY 2019 rate ranges for all services were at least \$8.60 to ensure compliance with the minimum wage increase effective January 1, 2019. Therefore, no additional adjustments were needed for purposes of the SFY 2019 rate study.

When the next minimum wage increase occurs on January 1, 2020, the lower bound of the SFY 2019 modeled rate ranges for some services will no longer be compliant with minimum wage requirements (i.e., lower bound assumed hourly wages for some services were below \$9.45 per hour). These services include Basic Care services (In-Home Respite, Homemaker, Chore, Attendant Care, Personal Care), Home Delivered Meals and Consumer Directed Personal Care. This same issue begins to occur for additional services as the minimum wage continues to increase in future years.

Wages comprise a large portion of the modeled rates, so the minimum wage increases will drive the rate ranges to increase in future years. However, there are other cost components considered in the rate ranges that won't necessarily change as a result of minimum wage increases. For example, it is unlikely that productivity assumptions will change as a result of a minimum wage increase. Questions have been raised as to whether wages for higher paid direct care workers and other program staff will also increase to maintain the current wage differential among these workers. For purposes of this analysis, Mercer assumed only the wages of workers not making at least minimum wage would increase.

Table 9 shows how the lower bound of the SFY 2019 modeled rate ranges for each impacted service would need to be increased to comply with the increasing minimum wage. The percentages in Table 9 build off of each other. For example, the SFY 2019 lower bound Basic In-home Respite rate would need to be increased by the cumulative impact of the percentages in each of the four columns to determine the rate impact associated with the January 1, 2023 minimum wage level. Impacts were not analyzed at any other point in the rate range given the focus was to ensure the lower bound was compliant. Note that only

the minimum wage increase was considered; other potential cost changes associated with cost of living increases or other market changes were not analyzed and are not reflected in Table 9.

**TABLE 9: PROJECTED ESTIMATED IMPACTS TO SFY 2019 MODELED LOWER BOUND RATES TO COMPLY WITH MINIMUM WAGE INCREASES**

SERVICE GROUP	SERVICE NAME	EFFECTIVE DATE			
		JAN 1, 2020	JAN 1, 2021	JAN 1, 2022	JAN 1, 2023
Basic Care Services	Basic In-home Respite, Homemaker, Chore, Attendant Care, Personal Care (Agency)	0.1%	6.4%	5.9%	5.6%
	Personal Care – RCF/ALF (Agency)	0.1%	6.5%	6.0%	5.7%
Advanced Care Services	Advanced Respite, Advanced In-home Personal Care	N/A	N/A	5.1%	5.6%
	Advanced Personal Care – RCF/ALF	N/A	N/A	5.1%	5.7%
Consumer Directed Care	State Plan Personal Care	0.1%	8.6%	7.9%	7.4%
	Waiver Personal Care	0.1%	8.9%	8.1%	7.6%
Nursing Services	Authorized Nurse Visits, Private Duty Nursing, Evaluation Visits, Skilled Nurse Visits	N/A	N/A	N/A	N/A
Other	Home Delivered Meals	0.5%	3.0%	3.1%	3.0%
	Case Management	N/A	N/A	N/A	N/A
	FMS	N/A	N/A	N/A	N/A

### STAKEHOLDER ENGAGEMENT

As mentioned previously, DHSS collected provider feedback on specific cost components during the rate study process. This feedback was reviewed and benchmarked against the market data to inform the rate study assumptions. Upon completion of the draft study, DHSS invited stakeholders to attend an in-person meeting on June 26, 2019 in the Fulton State Hospital Auditorium. Mercer presented a detailed overview of the rate study methodology and shared the slide deck with attendees. Mercer’s presentation described the key rate study steps conducted, the data that was reviewed and the assumptions that were made. Mercer explained how the resulting rate ranges compared to DHSS’s fee schedule rates. In addition to having the opportunity to ask questions during the presentation, DHSS also provided stakeholders the opportunity to submit written feedback through August 15, 2019. DHSS and Mercer reviewed the feedback, held discussions and finalized the rate study.

## LIMITATIONS AND CAVEATS

In preparing these ranges, Mercer considered publicly available market information and guidance from DHSS. Mercer reviewed the data and information for internal consistency and reasonableness, but did not audit them. If the data or information are incomplete or inaccurate, the values may need to be revised accordingly. The following limitations apply to the development of these ranges:

- Assumptions were based upon the service definitions contained in DHSS program manuals and 1915(c) waivers. When the service definition was not specific regarding a particular rate component, the applicable assumptions were developed in conjunction with DHSS.
- To the extent changes or clarifications are made to the service definitions, rate ranges may be impacted and need to be updated accordingly.
- Rate range assumptions were developed based upon information available as of June 2019. Should additional information become available regarding the cost of providing these services, the rate ranges may need to be updated accordingly.

Rate ranges developed by Mercer are projections of future contingent events. Actual provider costs may differ from these projections. Mercer has developed these ranges on behalf of DHSS to support the delivery of the rate study services and ongoing program design decisions. Use of these ranges for any purpose beyond that stated may not be appropriate.

Potential providers are advised that the use of these ranges may not be appropriate for their particular circumstance, and Mercer disclaims any responsibility for the use of these rates by providers for any purpose. Mercer recommends that any organization considering contracting with DHSS analyze its own projected expenses and revenue needs for comparison to the rates offered before deciding whether to contract with DHSS.

This methodology document assumes the reader is familiar with the DHSS programs and waivers, Medicaid eligibility and projection techniques. It is intended for DHSS and should not be relied upon by third parties. Other readers should seek advice of qualified professionals to understand the technical nature of these results. This document should only be reviewed in its entirety.



APPENDIX A — SERVICE SUMMARY CHART

## APPENDIX A: SERVICE SUMMARY CHART

The Missouri Department of Health and Senior Services (DHSS) engaged Mercer Government Human Services Consulting (Mercer) to perform a rate study on select State Plan and 1915(c) waiver services. The programs included in this rate study are:

- Aged and Disabled Waiver (AD)
- Independent Living Waiver (IL)
- Medically Fragile Adult Waiver (MF)
- AIDS Waiver (AIDS)
- State Plan Healthy Children and Youth (HCY)
- State Plan

The subsequent tables provide a high-level description of each rate study service with the associated procedure code, unit definition and state fiscal year (SFY) 2019 Medicaid fee schedule rate. The tables also present various service definition and DHSS regulation requirements that are associated with key cost components under consideration during the rate study process.

SERVICE NAME	KEY ELEMENTS OF SERVICE	SERVICE SETTING	CODE, UNIT AND RATE	STAFFING RATIO	PROVIDER QUALIFICATION REQUIREMENTS	OTHER KEY COST COMPONENTS
<b>Basic Care Services</b>						
Basic In-Home Respite	Maintenance and supervisory services provided to a participant with nonskilled needs because of the absence or need for relief of those persons who normally provide care for the participant. Comply with 19 CSR 15-7.021	In the individual's home	AD Waiver: S5150 – 15 minutes SFY19 Rate: \$4.03	1:1	<p>Direct Care Worker</p> <ul style="list-style-type: none"> <li>At least 18-years old</li> <li>At least 6 months paid work experience as agency homemaker, nurse aide or household worker OR at least one year of experience caring for sick or aged individuals OR completion of formal training (e.g., nursing assistant training)</li> <li>Able to read, write and follow directions.</li> </ul> <p>Supervisor</p> <ul style="list-style-type: none"> <li>At least 21-years old</li> <li>Registered Nurse (RN) OR Bachelor's OR Licensed Practical Nurse (LPN) with one year of experience OR individual with three years of experience</li> </ul> <p>Staff RN or RN Consultant</p> <ul style="list-style-type: none"> <li>Not required if Supervisor is an RN</li> <li>Could be performed by an LPN who is supervised by an RN</li> </ul>	<ul style="list-style-type: none"> <li>Staff training requirements</li> <li>Insurance</li> <li>Time spent on travel, breaks and administrative activities is not billable</li> <li>DHSS does not fund any room and board expenses for this service</li> <li>Subject to EVV</li> </ul>

## APPENDIX A: SERVICE SUMMARY CHART

SERVICE NAME	KEY ELEMENTS OF SERVICE	SERVICE SETTING	CODE, UNIT AND RATE	STAFFING RATIO	PROVIDER QUALIFICATION REQUIREMENTS	OTHER KEY COST COMPONENTS
Homemaker	<p>The performance of general household tasks (e.g., meal preparation and routine household care) provided by a qualified homemaker, when the individual regularly responsible for these activities is temporarily absent or unable to manage the home and care for him or herself or others in the home.</p> <p>Comply with 19 CSR 15-7.021</p>	In the individual's home	<p>AD Waiver: S5130 – 15 minutes</p> <p>SFY19 Rate: \$4.53</p>	1:1	<p>Direct Care Worker</p> <ul style="list-style-type: none"> <li>• At least 18-years old</li> <li>• At least 6 months paid work experience as agency homemaker, nurse aide or household worker OR at least one year of experience caring for sick or aged individuals OR completion of formal training (e.g., nursing assistant training)</li> <li>• Able to read, write and follow directions.</li> </ul> <p>Supervisor</p> <ul style="list-style-type: none"> <li>• At least 21-years old</li> <li>• RN OR Bachelor's OR LPN with one year of experience OR individual with three years of experience</li> </ul> <p>Staff RN or RN Consultant</p> <ul style="list-style-type: none"> <li>• Not required if Supervisor is an RN</li> <li>• Could be performed by LPN who is supervised by an RN</li> </ul>	<ul style="list-style-type: none"> <li>• Staff training requirements</li> <li>• Insurance</li> <li>• Time spent on travel, breaks and administrative activities is not billable</li> <li>• Subject to EVV</li> </ul>

## APPENDIX A: SERVICE SUMMARY CHART

SERVICE NAME	KEY ELEMENTS OF SERVICE	SERVICE SETTING	CODE, UNIT AND RATE	STAFFING RATIO	PROVIDER QUALIFICATION REQUIREMENTS	OTHER KEY COST COMPONENTS
Chore	<p>Short-term, intermittent tasks necessary to maintain a clean, safe, sanitary and habitable home environment and critical in maintaining the participant's health and safety.</p> <p>Comply with 19 CSR 15-7.021</p>	In the individual's home	<p>AD Waiver: S5120 - 15 minutes</p> <p>SFY19 Rate: \$4.53</p>	1:1	<p>Direct Care Worker</p> <ul style="list-style-type: none"> <li>• At least 18-years old</li> <li>• At least 6 months paid work experience as agency homemaker, nurse aide or household worker OR at least one year of experience caring for sick or aged individuals OR completion of formal training (e.g., nursing assistant training)</li> <li>• Able to read, write and follow directions.</li> </ul> <p>Supervisor</p> <ul style="list-style-type: none"> <li>• At least 21-years old</li> <li>• RN OR Bachelor's OR LPN with one year of experience OR individual with three years of experience</li> </ul> <p>Staff RN or RN Consultant</p> <ul style="list-style-type: none"> <li>• Not required if Supervisor is an RN</li> <li>• Could be performed by LPN who is supervised by an RN</li> </ul>	<ul style="list-style-type: none"> <li>• Staff training requirements</li> <li>• Insurance</li> <li>• Time spent on travel, breaks and administrative activities is not billable</li> <li>• Subject to EVV</li> </ul>

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SERVICE NAME	KEY ELEMENTS OF SERVICE	SERVICE SETTING	CODE, UNIT AND RATE	STAFFING RATIO	PROVIDER QUALIFICATION REQUIREMENTS	OTHER KEY COST COMPONENTS
Attendant Care	<p>Provides hand-on care with ADLs. Supportive and health-related services that substitute for the absence, loss, diminution, or impairment of a physical or cognitive function.</p> <p>Bound by 13 CSR 70-3.020 and 13 CSR 70-91.010</p>	In the individual's home	<p>MF Waiver: S5125U5 – 15 minutes</p> <p>SFY19 Rate: \$4.53</p> <p>AIDS Waiver: S5126U4 – Day</p> <p>SFY19 Rate: \$204.01</p>	1:1	<p>Direct Care Worker</p> <ul style="list-style-type: none"> <li>• At least 18-years old</li> <li>• At least 6 months paid work experience as agency homemaker, nurse aide or household worker OR at least one year of experience caring for sick or aged individuals OR completion of formal training (e.g., nursing assistant training)</li> <li>• Able to read, write and follow directions.</li> </ul> <p>Supervisor</p> <ul style="list-style-type: none"> <li>• At least 21-years old</li> <li>• RN OR Bachelor's OR LPN with one year of experience OR individual with three years of experience</li> </ul> <p>Staff RN or RN Consultant</p> <ul style="list-style-type: none"> <li>• Not required if Supervisor is an RN</li> <li>• Could be performed by LPN who is supervised by an RN</li> </ul>	<ul style="list-style-type: none"> <li>• Staff training requirements</li> <li>• Insurance</li> <li>• Time spent on travel, breaks and administrative activities is not billable</li> <li>• Subject to EVV</li> </ul>

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SERVICE NAME	KEY ELEMENTS OF SERVICE	SERVICE SETTING	CODE, UNIT AND RATE	STAFFING RATIO	PROVIDER QUALIFICATION REQUIREMENTS	OTHER KEY COST COMPONENTS
Basic State Plan Personal Care	Medically-oriented, maintenance services to assist with activities of daily living. The basic level applies to situations where the assistance does not require devices or procedures related to altered body functions.  Subject to 13 CSR 70-91.010 and 19 CSR 15-7.021	In the individual's home	State Plan: T1019 – 15 Minutes  SFY19 Rate: \$4.53  HCY: T1019EP – 15 Minutes  SFY19 Rate: \$4.53	1:1	Direct Care Worker <ul style="list-style-type: none"> <li>At least 18-years old</li> <li>At least 6 months paid work experience as agency homemaker, nurse aide or household worker OR at least one year of experience caring for sick or aged individuals OR completion of formal training (e.g., nursing assistant training)</li> </ul>	<ul style="list-style-type: none"> <li>Staff training requirements</li> <li>Insurance</li> <li>Time spent on travel, breaks and administrative activities is not billable</li> <li>In-home vs. facility</li> <li>In-home services subject to EVV</li> </ul>
		In an RCF/ALF	State Plan: T1019U3 – 15 Minutes  SFY19 Rate: \$4.38	1:1	<ul style="list-style-type: none"> <li>Able to read, write and follow directions.</li> </ul> Supervisor <ul style="list-style-type: none"> <li>At least 21-years old</li> <li>RN OR Bachelor's OR LPN with one year of experience OR individual with three years of experience</li> </ul> Staff RN or RN Consultant <ul style="list-style-type: none"> <li>Not required if Supervisor is an RN</li> <li>Could be performed by LPN who is supervised by an RN</li> </ul>	

APPENDIX A: SERVICE SUMMARY CHART

SERVICE NAME	KEY ELEMENTS OF SERVICE	SERVICE SETTING	CODE, UNIT AND RATE	STAFFING RATIO	PROVIDER QUALIFICATION REQUIREMENTS	OTHER KEY COST COMPONENTS
Waiver Personal Care	Scope and nature of these services is equivalent to State Plan Personal Care. Comply with 19 CSR 15-7.021	In the individual's home	AIDS Waiver: T1019U4 - 15 minutes SFY19 Rate: \$4.53	1:1	<p>Direct Care Worker</p> <ul style="list-style-type: none"> <li>At least 18-years old</li> <li>At least 6 months paid work experience as agency homemaker, nurse aide or household worker OR at least one year of experience caring for sick or aged individuals OR completion of formal training (e.g., nursing assistant training)</li> <li>Able to read, write and follow directions.</li> </ul> <p>Supervisor</p> <ul style="list-style-type: none"> <li>At least 21-years old</li> <li>RN OR Bachelor's OR LPN with one year of experience OR individual with three years of experience</li> </ul> <p>Staff RN or RN Consultant</p> <ul style="list-style-type: none"> <li>Not required if Supervisor is an RN</li> <li>Could be performed by LPN who is supervised by an RN</li> </ul>	<ul style="list-style-type: none"> <li>Staff training requirements</li> <li>Insurance</li> <li>Time spent on travel, breaks and administrative activities is not billable</li> <li>Subject to EVV</li> </ul>



SERVICE NAME	KEY ELEMENTS OF SERVICE	SERVICE SETTING	CODE, UNIT AND RATE	STAFFING RATIO	PROVIDER QUALIFICATION REQUIREMENTS	OTHER KEY COST COMPONENTS
<b>Advanced Care Services</b>						
Advanced Respite	Respite for participants with complex needs that require specialized training. Involves maintenance and supervisory services provided to a participant because of the absence or need for relief of those persons who normally provide care for the participant.  Comply with 19 CSR 15-7.021	In the individual's home	AD Waiver: S5150TF – 15 minutes  SFY19 Rate: \$4.84	1:1	Direct Care Worker <ul style="list-style-type: none"> <li>LPN OR certified nursing assistant OR home health aide who has completed portions of the DHSS test OR worked for the provider for at least three consecutive months with necessary training</li> </ul> Supervisor <ul style="list-style-type: none"> <li>At least 21-years old</li> <li>RN OR Bachelor's OR LPN with one year of experience OR individual with three years of experience</li> </ul> Staff RN or RN Consultant <ul style="list-style-type: none"> <li>Not necessary if Supervisor is an RN</li> <li>Could also be performed by LPN who is supervised by an RN</li> </ul>	<ul style="list-style-type: none"> <li>Staff training requirements</li> <li>Insurance</li> <li>Time spent on travel, breaks and administrative activities is not billable</li> <li>DHSS does not fund any Room and Board expenses for this service.</li> <li>Subject to EVV</li> </ul>

APPENDIX A: SERVICE SUMMARY CHART

SERVICE NAME	KEY ELEMENTS OF SERVICE	SERVICE SETTING	CODE, UNIT AND RATE	STAFFING RATIO	PROVIDER QUALIFICATION REQUIREMENTS	OTHER KEY COST COMPONENTS
<p>Advanced State Plan Personal Care</p>	<p>Medically-oriented, maintenance services to assist with activities of daily living. The advanced level applies to situations where the assistance requires devices or procedures related to altered body functions.</p> <p>Subject to 13 CSR 70-91.010 and 19 CSR 15-7.021.</p>	<p>In the individual's home</p>	<p>State Plan: T1019TF – 15 Minutes</p> <p>SFY19 Rate: \$5.61</p> <p>HCY: T1019TFEP – 15 Minutes</p> <p>SFY19 Rate: \$5.61</p>	<p>1:1</p>	<p>Direct Care Worker</p> <ul style="list-style-type: none"> <li>LPN OR certified nursing assistant OR home health aide who has completed portions of the DHSS test OR worked for the provider for at least three consecutive months with necessary training</li> </ul> <p>Supervisor</p> <ul style="list-style-type: none"> <li>At least 21-years old</li> <li>RN OR Bachelor's OR LPN with one year of experience OR individual with three years of experience</li> </ul> <p>Staff RN or RN Consultant</p> <ul style="list-style-type: none"> <li>Not necessary if Supervisor is an RN</li> <li>Could also be performed by LPN who is supervised by an RN</li> </ul>	<ul style="list-style-type: none"> <li>Staff training requirements</li> <li>Insurance</li> <li>Time spent on travel, breaks and administrative activities is not billable</li> <li>In-home vs. facility</li> <li>In-home services subject to EVV</li> </ul>
		<p>In an RCF/ALF</p>	<p>State Plan: T1019U3TF – 15 Minutes</p> <p>SFY19 Rate: \$4.93</p>			

SERVICE NAME	KEY ELEMENTS OF SERVICE	SERVICE SETTING	CODE, UNIT AND RATE	STAFFING RATIO	PROVIDER QUALIFICATION REQUIREMENTS	OTHER KEY COST COMPONENTS
<b>Consumer Directed Care</b>						
State Plan Personal Care	Basic State Plan Personal Care services delivered through the consumer directed model to individuals who are physically disabled.  Subject to 19 CSR 15-8	In the individual's home or outside the home in the community	State Plan: T1019U2 – 15 Minutes  SFY19 Rate: \$3.94	1:1	<ul style="list-style-type: none"> <li>At least 18-years old</li> <li>Be able to meet the physical and mental demands required to perform specific tasks required by a particular participant</li> <li>Able to read, write and follow directions.</li> </ul>	<ul style="list-style-type: none"> <li>Within this scope of this service, the consumer directed personal care provider also performs FMS functions (e.g., activities such as collecting time sheets and processing payroll).</li> <li>Subject to EVV</li> </ul>
Waiver Personal Care	Scope and nature of these services is equivalent to State Plan Personal Care, but delivered through the Consumer Directed model where participant has authority to recruit, hire, train, monitor and fire his/her attendant.  Comply with 19 CSR 15-8 and Section 208.900 through 208.930, RSMo	In the individual's home or outside the home in the community	IL Waiver: T1019U6 - 15 Minutes  SFY19 Rate: \$3.62	1:1	<ul style="list-style-type: none"> <li>At least 18-years old</li> <li>Be able to meet the physical and mental demands required to perform specific tasks required by a particular participant</li> <li>Able to read, write and follow directions.</li> </ul>	<ul style="list-style-type: none"> <li>Because there is a separate FMS waiver service, FMS functions (e.g., activities such as collecting time sheets and processing payroll) are not within the scope of this service.</li> <li>Subject to EVV</li> </ul>

SERVICE NAME	KEY ELEMENTS OF SERVICE	SERVICE SETTING	CODE, UNIT AND RATE	STAFFING RATIO	PROVIDER QUALIFICATION REQUIREMENTS	OTHER KEY COST COMPONENTS
<b>Nursing Services</b>						
Authorized Nurse Visits	Assists individual with various medical-oriented tasks (e.g., clipping nails). Also provides increased supervision of the personal care aide, in addition to assessment of the participant’s health and suitability of the care plan in meeting his/her needs.  Subject to 13 CSR 70-91.010 and 19 CSR 15-7.021	In the individual’s home	State Plan: T1001 – per visit  SFY19 Rate: \$43.70  HCY: T1001EP – per visit  SFY19 Rate: \$43.70  HCY: T1001TDEP – per visit  SFY19 Rate: \$43.70	1:1	Direct Care Worker <ul style="list-style-type: none"> <li>• RN or</li> <li>• LPN under direction of RN or physician</li> </ul> Supervisor <ul style="list-style-type: none"> <li>• RN</li> </ul>	<ul style="list-style-type: none"> <li>• No minimum or maximum time is required to constitute a visit, but visits are typically less than 4 hours</li> <li>• Staff training requirements</li> <li>• Insurance</li> <li>• Time spent on travel, breaks and administrative activities is not billable</li> </ul>
		In an RCF/ALF	State Plan: T1001U3 – per visit  SFY19 Rate: \$33.24	1:1		

## APPENDIX A: SERVICE SUMMARY CHART

SERVICE NAME	KEY ELEMENTS OF SERVICE	SERVICE SETTING	CODE, UNIT AND RATE	STAFFING RATIO	PROVIDER QUALIFICATION REQUIREMENTS	OTHER KEY COST COMPONENTS
Private Duty Nursing	<p>The delivery of individual and continuous care skilled nursing services. Requires a physician order and generally involves tasks such as administering medications, tube feedings, wound care, etc.</p> <p>State Home Health Agency under 197.400-475 RSMo and comply with 13 CSR 70-95.010</p>	In the individual's home	<p>AIDS Waiver: T1000U4 – 15 minutes SFY19 Rate: \$7.77</p> <p>MF Waiver: T1000U5 – 15 Minutes SFY19 Rate: \$7.77</p> <p>MF Waiver Exception: T1000SC – 15 Minutes SFY19 Rate: \$7.77</p> <p>HCY: T1000 – 15 minutes SFY19 Rate: \$8.24</p>	1:1	<p>Direct Care Worker</p> <ul style="list-style-type: none"> <li>Delivered by an RN or LPN</li> </ul> <p>Supervisor</p> <ul style="list-style-type: none"> <li>RN with at least 3 years of experience</li> </ul>	<ul style="list-style-type: none"> <li>Individual needs to require at least a 4-hour continuous block of this service in order to be authorized to receive it</li> <li>Staff training requirements</li> <li>Insurance</li> </ul>

APPENDIX A: SERVICE SUMMARY CHART

SERVICE NAME	KEY ELEMENTS OF SERVICE	SERVICE SETTING	CODE, UNIT AND RATE	STAFFING RATIO	PROVIDER QUALIFICATION REQUIREMENTS	OTHER KEY COST COMPONENTS
<p>Skilled Nurse Visits</p>	<p>The delivery of intermittent skilled nursing services. Requires a physician prescribed individualized plan of care and generally involves tasks such as catheter changes, tracheostomy care, infusion of intravenous medications, etc.</p> <p>State Home Health Agency under 197.400-475 RSMo and comply with 13 CSR 70-95.010</p>	<p>In the individual's home</p>	<p>HCY, RN: G0299 – per visit SFY19 Rate: \$78.32</p> <p>HCY, LPN: G0300 – per visit SFY19 Rate: \$78.32</p>	<p>1:1</p>	<p>Direct Care Worker</p> <ul style="list-style-type: none"> <li>• Delivered by an RN or LPN</li> </ul> <p>Supervisor</p> <ul style="list-style-type: none"> <li>• RN</li> </ul>	<ul style="list-style-type: none"> <li>• Staff training requirements</li> <li>• Insurance</li> <li>• Requires prior authorization</li> </ul>

SERVICE NAME	KEY ELEMENTS OF SERVICE	SERVICE SETTING	CODE, UNIT AND RATE	STAFFING RATIO	PROVIDER QUALIFICATION REQUIREMENTS	OTHER KEY COST COMPONENTS
<b>Other Services</b>						
Home Delivered Meals	<p>Provide aged and disabled individuals with one or two meals per day. Each meal contains at least one-third of the recommended daily nutritional requirements.</p> <p>Comply with 19 CSR 15-7.010, 19 CSR 15-4.240, 19 CSR 15-7.060 and Older Americans Act. PL 114-144</p>	In the individual's home	<p>AD Waiver: S5170 – meal</p> <p>SFY19 Rate: \$5.82</p>	Service is generally conducted without the individual present. When delivering meals to the participant, the ratio is 1:1.	<p>Various staff needed including:</p> <ul style="list-style-type: none"> <li>Cook</li> <li>Assistant to cook</li> <li>Administrative staff to develop menu and maintain records</li> <li>Nutritionist or Dietician to review menus</li> </ul> <p>No specific staff education or experience requirements outlined</p>	<ul style="list-style-type: none"> <li>Staff training requirements</li> <li>Insurance</li> <li>Costs associated with transporting meals to individuals' homes</li> </ul>
Case Management	<p>Assist participants in gaining access to waiver and other State plan services, as well as medical, social, educational and other services. Perform ongoing review and review of services in care plan.</p> <p>Comply with Sections 208.900 through 208.930, RSMo and 19 CSR 15-8.</p>	Generally not while in the individual's home	<p>IL Waiver: T2024U6 – 1 year (minimum of 12 hours)</p> <p>SFY19 Rate: \$100.00</p>	Mix of conducting the service with and without the individual being present. When present, the staffing ratio is 1:1.	<p>No specific staff education or experience requirements outlined in the service definition.</p> <p>Based on discussions with DHSS, the expectation is that case managers are experienced.</p>	<ul style="list-style-type: none"> <li>Staff training requirements</li> <li>Insurance</li> </ul>

APPENDIX A: SERVICE SUMMARY CHART

SERVICE NAME	KEY ELEMENTS OF SERVICE	SERVICE SETTING	CODE, UNIT AND RATE	STAFFING RATIO	PROVIDER QUALIFICATION REQUIREMENTS	OTHER KEY COST COMPONENTS
Financial Management Services	<p>Assists participant or their designee to facilitate the employment of staff by performing as the participant’s agent. Functions performed include processing timesheets, processing payroll, providing information to the participant to help them manage their services, etc.</p> <p>Comply with Sections 208.900 through 208.930, RSMo and 19 CSR 15-8.</p>	Generally not while in the individual’s home	<p>IL Waiver: T2040U6 – per month</p> <p>SFY19 Rate: \$110.00</p>	Mix of conducting the service with and without the individual being present. When present, the staffing ratio is 1:1	<p>No specific staff education or experience requirements outlined in the service definition.</p> <p>Based on discussions with DHSS, the expectation is that case managers are experienced and have fiscal skills.</p>	<ul style="list-style-type: none"> <li>• Staff training requirements</li> <li>• Insurance</li> </ul>



APPENDIX B — BLS OCCUPATIONS AND WAGE ASSUMPTIONS BY  
SERVICE

**Basic In-Home Respite, Homemaker, Chore, Attendant Care, State Plan Personal Care - Basic Level, Waiver Personal Care, add HCY Personal Care - Basic**

(A)		(B)	(C)	(D)		(E)	(F)
Occupational Code	Occupational Title		Job Position Weighting	Lower Bound Hourly Wage <sup>1,2</sup>	Interim Point Hourly Wage <sup>1,2</sup>	Upper Bound Hourly Wage <sup>1,2</sup>	
39-9021	Personal Care Aides		100%	\$ 9.44	\$ 10.64	\$ 11.81	
			<b>Direct Care Worker Wages</b>	<b>\$ 9.44</b>	<b>\$ 10.64</b>	<b>\$ 11.81</b>	
			<b>Annual Salary</b>	<b>\$ 19,633</b>	<b>\$ 22,122</b>	<b>\$ 24,568</b>	
39-1021	First-Line Supervisors of Personal Service Workers		50%	\$ 12.48	\$ 16.28	\$ 22.19	
29-2061	Licensed Practical and Licensed Vocational Nurses		50%	\$ 17.39	\$ 20.38	\$ 25.48	
			<b>Supervisor Wages</b>	<b>\$ 14.94</b>	<b>\$ 18.33</b>	<b>\$ 23.83</b>	
			<b>Annual Salary</b>	<b>\$ 31,069</b>	<b>\$ 38,128</b>	<b>\$ 49,576</b>	
29-1141	Registered Nurses		100%	\$ 24.96	\$ 30.13	\$ 42.86	
			<b>Nursing/Oversight Wages</b>	<b>\$ 24.96</b>	<b>\$ 30.13</b>	<b>\$ 42.86</b>	
			<b>Annual Salary</b>	<b>\$ 51,925</b>	<b>\$ 62,675</b>	<b>\$ 89,152</b>	

<sup>1</sup> Based on Missouri-specific, statewide BLS wage data published May 2017 and trended to SFY 2019 period. BLS data from: <http://www.bls.gov/>.

<sup>2</sup> Weighted wage ranges reflect the 25th percentile at the lower bound, the 50th percentile at the interim point, and the 75th percentile at the upper bound for all occupational titles except 'Licensed Practical and Licensed Vocational Nurses' and 'Registered Nurses', which reflect the 90th percentile at the upper bound.

**Advanced Respite, State Plan Personal Care - Advanced, and HCY Personal Care - Advanced**

(A)		(B)	(C)	(D)	(E)	(F)
Occupational Code	Occupational Title		Job Position Weighting	Lower Bound Hourly Wage <sup>1,2</sup>	Interim Point Hourly Wage <sup>1,2</sup>	Upper Bound Hourly Wage <sup>1,2</sup>
29-2061	Licensed Practical and Licensed Vocational Nurses		5%	\$ 17.39	\$ 20.38	\$ 25.48
31-1011	Home Health Aides		95%	\$ 10.05	\$ 11.12	\$ 12.19
<b>Direct Care Worker Wages</b>				<b>\$ 10.41</b>	<b>\$ 11.58</b>	<b>\$ 12.86</b>
<b>Annual Salary</b>				<b>\$ 21,663</b>	<b>\$ 24,094</b>	<b>\$ 26,744</b>
39-1021	First-Line Supervisors of Personal Service Workers		50%	\$ 12.48	\$ 16.28	\$ 22.19
29-2061	Licensed Practical and Licensed Vocational Nurses		50%	\$ 17.39	\$ 20.38	\$ 25.48
<b>Supervisor Wages</b>				<b>\$ 14.94</b>	<b>\$ 18.33</b>	<b>\$ 23.83</b>
<b>Annual Salary</b>				<b>\$ 31,069</b>	<b>\$ 38,128</b>	<b>\$ 49,576</b>
29-1141	Registered Nurses		100%	\$ 24.96	\$ 30.13	\$ 42.86
<b>Nursing/Oversight Wages</b>				<b>\$ 24.96</b>	<b>\$ 30.13</b>	<b>\$ 42.86</b>
<b>Annual Salary</b>				<b>\$ 51,925</b>	<b>\$ 62,675</b>	<b>\$ 89,152</b>

<sup>1</sup> Based on Missouri-specific, statewide BLS wage data published May 2017 and trended to SFY 2019 period. BLS data from: <http://www.bls.gov/>.

<sup>2</sup> Weighted wage ranges reflect the 25th percentile at the lower bound, the 50th percentile at the interim point, and the 75th percentile at the upper bound for all occupational titles except 'Licensed Practical and Licensed Vocational Nurses' and 'Registered Nurses', which reflect the 90th percentile at the upper bound.

**State Plan Authorized Nurse Visits, HCY Authorized Nurse Visits, and HCY Evaluation Visits**

(A)		(B)	(C)	(D)	(E)	(F)
Occupational Code	Occupational Title		Job Position Weighting	Lower Bound Hourly Wage <sup>1,2</sup>	Interim Point Hourly Wage <sup>1,2</sup>	Upper Bound Hourly Wage <sup>1,2</sup>
29-1141	Registered Nurses		30%	\$ 24.96	\$ 30.13	\$ 42.86
29-2061	Licensed Practical and Licensed Vocational Nurses		70%	\$ 17.39	\$ 20.38	\$ 25.48
			<b>Direct Care Worker Wages</b>	<b>\$ 19.66</b>	<b>\$ 23.31</b>	<b>\$ 30.69</b>
			<b>Annual Salary</b>	<b>\$ 40,901</b>	<b>\$ 48,481</b>	<b>\$ 63,844</b>
29-1141	Registered Nurses		100%	\$ 24.96	\$ 30.13	\$ 42.86
			<b>Supervisor Wages</b>	<b>\$ 24.96</b>	<b>\$ 30.13</b>	<b>\$ 42.86</b>
			<b>Annual Salary</b>	<b>\$ 51,925</b>	<b>\$ 62,675</b>	<b>\$ 89,152</b>

<sup>1</sup> Based on Missouri-specific, statewide BLS wage data published May 2017 and trended to SFY 2019 period. BLS data from: <http://www.bls.gov/>.

<sup>2</sup> Weighted wage ranges reflect the 25th percentile at the lower bound, the 50th percentile at the interim point, and the 75th percentile at the upper bound for all occupational titles except 'Licensed Practical and Licensed Vocational Nurses' and 'Registered Nurses', which reflect the 90th percentile at the upper bound.

**Waiver Personal Care - Consumer Directed and State Plan Personal Care - Consumer Directed**

(A)		(B)	(C)	(D)	(E)	(F)	
Occupational Code	Occupational Title		Job Position Weighting	Lower Bound Hourly Wage <sup>1,2</sup>	Interim Point Hourly Wage <sup>1,2</sup>	Upper Bound Hourly Wage <sup>1,2</sup>	
39-9021	Personal Care Aides		100%	\$ 9.44	\$ 10.64	\$ 11.81	
				<b>Direct Care Worker Wages</b>	<b>\$ 9.44</b>	<b>\$ 10.64</b>	<b>\$ 11.81</b>
				<b>Annual Salary</b>	<b>\$ 19,633</b>	<b>\$ 22,122</b>	<b>\$ 24,568</b>

<sup>1</sup> Based on Missouri-specific, statewide BLS wage data published May 2017 and trended to SFY 2019 period. BLS data from: <http://www.bls.gov/>.

<sup>2</sup> Weighted wage ranges reflect the 25th percentile at the lower bound, the 50th percentile at the interim point, and the 75th percentile at the upper bound for all occupational titles except 'Licensed Practical and Licensed Vocational Nurses' and 'Registered Nurses', which reflect the 90th percentile at the upper bound.

**Home Delivered Meals**

(A)		(B)	(C)	(D)	(E)	(F)
Occupational Code	Occupational Title		Job Position Weighting	Lower Bound Hourly Wage <sup>1,2</sup>	Interim Point Hourly Wage <sup>1,2</sup>	Upper Bound Hourly Wage <sup>1,2</sup>
35-2012	Cooks, Institution and Cafeteria		50%	\$ 9.52	\$ 11.36	\$ 13.87
35-2021	Food Preparation Workers		50%	\$ 9.04	\$ 9.84	\$ 11.78
				<b>Direct Care Worker Wages</b>	<b>\$ 10.60</b>	<b>\$ 12.83</b>
				<b>Annual Salary</b>	<b>\$ 22,047</b>	<b>\$ 26,681</b>
35-1012	First-Line Supervisors of Food Preparation and Serving Workers		50%	\$ 11.05	\$ 13.80	\$ 18.51
21-1093	Social and Human Service Assistants		50%	\$ 10.14	\$ 13.04	\$ 16.74
				<b>Supervisor Wages</b>	<b>\$ 13.42</b>	<b>\$ 17.62</b>
				<b>Annual Salary</b>	<b>\$ 27,915</b>	<b>\$ 36,659</b>
29-1031	Dietitians and Nutritionists		100%	\$ 19.99	\$ 24.21	\$ 30.02
				<b>Nutritionist Wages</b>	<b>\$ 24.21</b>	<b>\$ 30.02</b>
				<b>Annual Salary</b>	<b>\$ 50,359</b>	<b>\$ 62,439</b>
53-3031	Driver/Sales Workers		100%	\$ 9.43	\$ 11.89	\$ 18.72
				<b>Driver Wages</b>	<b>\$ 11.89</b>	<b>\$ 18.72</b>
				<b>Annual Salary</b>	<b>\$ 24,740</b>	<b>\$ 38,944</b>

<sup>1</sup> Based on Missouri-specific, statewide BLS wage data published May 2017 and trended to SFY 2019 period. BLS data from: <http://www.bls.gov/>.

<sup>2</sup> Weighted wage ranges reflect the 25th percentile at the lower bound, the 50th percentile at the interim point, and the 75th percentile at the upper bound for all occupational titles except 'Licensed Practical and Licensed Vocational Nurses' and 'Registered Nurses', which reflect the 90th percentile at the upper bound.

**Case Management**

(A)		(B)	(C)	(D)	(E)	(F)
Occupational Code	Occupational Title		Job Position Weighting	Lower Bound Hourly Wage <sup>1,2</sup>	Interim Point Hourly Wage <sup>1,2</sup>	Upper Bound Hourly Wage <sup>1,2</sup>
21-1094	Community Health Workers		50%	\$ 15.24	\$ 17.84	\$ 21.46
21-1093	Social and Human Service Assistants		50%	\$ 10.14	\$ 13.04	\$ 16.74
<b>Direct Care Worker Wages</b>				<b>\$ 12.69</b>	<b>\$ 15.44</b>	<b>\$ 19.10</b>
<b>Annual Salary</b>				<b>\$ 26,392</b>	<b>\$ 32,110</b>	<b>\$ 39,727</b>
11-9151	Social and Community Service Managers		50%	\$ 22.67	\$ 27.84	\$ 34.25
21-1093	Social and Human Service Assistants		50%	\$ 10.14	\$ 13.04	\$ 16.74
<b>Supervisor Wages</b>				<b>\$ 16.41</b>	<b>\$ 20.44</b>	<b>\$ 25.50</b>
<b>Annual Salary</b>				<b>\$ 34,127</b>	<b>\$ 42,516</b>	<b>\$ 53,030</b>

<sup>1</sup> Based on Missouri-specific, statewide BLS wage data published May 2017 and trended to SFY 2019 period. BLS data from: <http://www.bls.gov/>.

<sup>2</sup> Weighted wage ranges reflect the 25th percentile at the lower bound, the 50th percentile at the interim point, and the 75th percentile at the upper bound for all occupational titles except 'Licensed Practical and Licensed Vocational Nurses' and 'Registered Nurses', which reflect the 90th percentile at the upper bound.

**Financial Management Services**

(A)		(B)	(C)	(D)	(E)	(F)
Occupational Code	Occupational Title		Job Position Weighting	Lower Bound Hourly Wage <sup>1,2</sup>	Interim Point Hourly Wage <sup>1,2</sup>	Upper Bound Hourly Wage <sup>1,2</sup>
43-3051	Payroll and Timekeeping Clerks		50%	\$ 14.58	\$ 19.04	\$ 24.11
21-1093	Social and Human Service Assistants		50%	\$ 10.14	\$ 13.04	\$ 16.74
<b>Direct Care Worker Wages</b>				<b>\$ 12.36</b>	<b>\$ 16.04</b>	<b>\$ 20.43</b>
<b>Annual Salary</b>				<b>\$ 25,705</b>	<b>\$ 33,365</b>	<b>\$ 42,484</b>
11-9151	Social and Community Service Managers		50%	\$ 22.67	\$ 27.84	\$ 34.25
21-1093	Social and Human Service Assistants		50%	\$ 10.14	\$ 13.04	\$ 16.74
<b>Supervisor Wages</b>				<b>\$ 16.41</b>	<b>\$ 20.44</b>	<b>\$ 25.50</b>
<b>Annual Salary</b>				<b>\$ 34,127</b>	<b>\$ 42,516</b>	<b>\$ 53,030</b>

<sup>1</sup> Based on Missouri-specific, statewide BLS wage data published May 2017 and trended to SFY 2019 period. BLS data from: <http://www.bls.gov/>.

<sup>2</sup> Weighted wage ranges reflect the 25th percentile at the lower bound, the 50th percentile at the interim point, and the 75th percentile at the upper bound for all occupational titles except 'Licensed Practical and Licensed Vocational Nurses' and 'Registered Nurses', which reflect the 90th percentile at the upper bound.



**Nursing Private Duty Nursing and HCY Skilled Nursing - LPN**

(A)	(B)	(C)	(D)	(E)	(F)
Occupational Code	Occupational Title	Job Position Weighting	Lower Bound Hourly Wage <sup>1,2</sup>	Interim Point Hourly Wage <sup>1,2</sup>	Upper Bound Hourly Wage <sup>1,2</sup>
29-2061	Licensed Practical and Licensed Vocational Nurses	100%	\$ 17.39	\$ 20.38	\$ 25.48
		<b>Direct Care Worker Wages</b>	<b>\$ 17.39</b>	<b>\$ 20.38</b>	<b>\$ 25.48</b>
		<b>Annual Salary</b>	<b>\$ 36,176</b>	<b>\$ 42,398</b>	<b>\$ 52,998</b>
29-1141	Registered Nurses	100%	\$ 24.96	\$ 30.13	\$ 42.86
		<b>Supervisor Wages</b>	<b>\$ 24.96</b>	<b>\$ 30.13</b>	<b>\$ 42.86</b>
		<b>Annual Salary</b>	<b>\$ 51,925</b>	<b>\$ 62,675</b>	<b>\$ 89,152</b>

<sup>1</sup> Based on Missouri-specific, statewide BLS wage data published May 2017 and trended to SFY 2019 period. BLS data from: <http://www.bls.gov/>.

<sup>2</sup> Weighted wage ranges reflect the 25th percentile at the lower bound, the 50th percentile at the interim point, and the 75th percentile at the upper bound for all occupational titles except 'Licensed Practical and Licensed Vocational Nurses' and 'Registered Nurses', which reflect the 90th percentile at the upper bound.

**HCY Skilled Nursing - RN**

(A)		(B)	(C)	(D)	(E)	(F)
Occupational Code	Occupational Title		Job Position Weighting	Lower Bound Hourly Wage <sup>1,2</sup>	Interim Point Hourly Wage <sup>1,2</sup>	Upper Bound Hourly Wage <sup>1,2</sup>
29-1141	Registered Nurses		100%	\$ 24.96	\$ 30.13	\$ 42.86
			<b>Direct Care Worker Wages</b>	<b>\$ 24.96</b>	<b>\$ 30.13</b>	<b>\$ 42.86</b>
			<b>Annual Salary</b>	<b>\$ 51,925</b>	<b>\$ 62,675</b>	<b>\$ 89,152</b>
29-1141	Registered Nurses		100%	\$ 24.96	\$ 30.13	\$ 42.86
			<b>Supervisor Wages</b>	<b>\$ 24.96</b>	<b>\$ 30.13</b>	<b>\$ 42.86</b>
			<b>Annual Salary</b>	<b>\$ 51,925</b>	<b>\$ 62,675</b>	<b>\$ 89,152</b>

<sup>1</sup> Based on Missouri-specific, statewide BLS wage data published May 2017 and trended to SFY 2019 period. BLS data from: <http://www.bls.gov/>.

<sup>2</sup> Weighted wage ranges reflect the 25th percentile at the lower bound, the 50th percentile at the interim point, and the 75th percentile at the upper bound for all occupational titles except 'Licensed Practical and Licensed Vocational Nurses' and 'Registered Nurses', which reflect the 90th percentile at the upper bound.