

The comparable facility population is based on MassHealth members residing in a nursing home or chronic/rehabilitation hospital for 180 or more consecutive days (only 1 day of the stay need have occurred in the current waiver year.) The facility population is separated into two subgroups, Nursing Facility or Chronic/Rehabilitation Hospital.

Factor G' is derived from a weighted average (based on the expected proportion of waiver participants at each level of care over the 5 year waiver period as indicated in Appendix J-2-a) of Waiver Year 2020 annualized actual average cost per member per year for non-facility Medicaid State Plan costs for a comparable population.

Factor G' costs are trended forward from the base year of 2020 by 3.2% annually, based on the Medical Consumer Price Index for the first six months of calendar year 2022 (according to BLS CPI-All Urban Consumers, US City Average, Medical Care, 2022 Calendar Year average of the first six months). The annualized value of Factor G' is adjusted by the average length of stay used for Factor D to make the period of comparison comparable (i.e., the annualized value of Factor G' for each waiver year was multiplied by the average length of stay [ALOS] for that waiver year and divided by 365).

In summary, the WY1 baseline estimate for Factor G' is calculated as follows:

$$G' = 1.032 \times [((\% \text{ of Waiver Population at Nursing Facility LOC} \times \text{Nursing Facility Annualized } G') + (\% \text{ of Waiver Population at Hospital LOC} \times \text{Hospital Annualized } G')) \times \text{WY1 Factor D ALOS} \div 365]$$

Appendix J: Cost Neutrality Demonstration

J-2: Derivation of Estimates (4 of 9)

Component management for waiver services. If the service(s) below includes two or more discrete services that are reimbursed separately, or is a bundled service, each component of the service must be listed. Select “manage components” to add these components.

Waiver Services	
Prevocational Services	
Residential Habilitation	
Supported Employment	
Assisted Living Services	
Assistive Technology	
Community Based Day Supports	
Community Behavioral Health Support and Navigation	
Day Services	
Home Accessibility Adaptations	
Individual Support and Community Habilitation	
Occupational Therapy	
Orientation and Mobility Services	
Peer Support	
Physical Therapy	
Residential Family Training	
Shared Living - 24 Hour Supports	
Skilled Nursing	
Specialized Medical Equipment	
Speech Therapy	
Transitional Assistance Services	
Transportation	

Appendix J: Cost Neutrality Demonstration

The first service for the first year is annotated below

d. Estimate of Factor D.

WVR_SRVC_COMPNT_COST_YR1

i. Non-Concurrent Waiver. Complete the following table for each waiver year. Enter data into the Unit, # Users, Avg. Units Per User, and Avg. Cost/Unit fields for all the Waiver Service/Component items. Select Save and Calculate to automatically calculate and populate the Component Costs and Total Costs fields. All fields in this table must be completed in order to populate the Factor D fields in the J-1 Composite Overview table.

WVR_SRVC_UNITTYPE_YR1

WVR_SRVC_USERAVGUNITS_YR1

Waiver Year: Year 1

WVR_SRVC_USERAVGCOST_YR1

Waiver Service/ Component	Unit	# Users	Avg. Units Per User	Avg. Cost/ Unit	Component Cost	Total Cost
Prevocational Services Total:						596451.12
Prevocational Services	15 min	58	852.00	12.07	596451.12	
Residential Habilitation Total:						100184709.90
Residential Habilitation	Per diem	535	302.00	620.07	100184709.90	
Supported Employment Total:						397141.50
Supported Employment	15 min	42	545.00	17.35	397141.50	
Assisted Living Services Total:						313443.72
Assisted Living Services	Per diem	12	239.00	109.29	313443.72	
Assistive Technology Total:						38871.96
Assistive Technology - devices	Item	12	5.00	290.62	17437.20	
Assistive Technology - evaluation and training	15 min	12	89.00	20.07	21434.76	
Community Based Day Supports Total:						82320.00
Community Based Day Supports	15 min	105	160.00	4.90	82320.00	
Community Behavioral Health Support and Navigation Total:						999.32
Community Behavioral Health Support and Navigation	15 min	2	43.00	11.62	999.32	
Day Services Total:						3240014.76
Day Services - Per Diem	Per diem	206	104.00	135.99	2913449.76	
Day Services -					326565.00	
GRAND TOTAL:						116173239.56
Total Estimated Unduplicated Participants:						624
Factor D (Divide total by number of participants):						186175.06
Average Length of Stay on the Waiver:						323

Waiver Service/ Component	Unit	# Users	Avg. Units Per User	Avg. Cost/ Unit	Component Cost	Total Cost
Partial	Partial per diem	75	60.00	72.57		
Home Accessibility Adaptations Total:						5245.46
Home Accessibility Adaptations	Item	1	1.00	5245.46	5245.46	
Individual Support and Community Habilitation Total:						459.36
Individual Support and Community Habilitation	15 min	3	24.00	6.38	459.36	
Occupational Therapy Total:						1098112.40
Occupational Therapy	Visit	353	40.00	77.77	1098112.40	
Orientation and Mobility Services Total:						1577.38
Orientation and Mobility Services	15 min	1	38.00	41.51	1577.38	
Peer Support Total:						1511448.39
Peer Support	15 min	137	1409.00	7.83	1511448.39	
Physical Therapy Total:						1102370.85
Physical Therapy	Visit	279	53.00	74.55	1102370.85	
Residential Family Training Total:						1186.50
Residential Family Training	15 min	1	175.00	6.78	1186.50	
Shared Living - 24 Hour Supports Total:						3070623.34
Shared Living - 24 Hour Supports	Per diem	37	326.00	254.57	3070623.34	
Skilled Nursing Total:						39685.80
Skilled Nursing	Visit	14	30.00	94.49	39685.80	
Specialized Medical Equipment Total:						1046438.40
Specialized Medical Equipment	Item	408	7.00	366.40	1046438.40	
Speech Therapy Total:						198981.12
Speech Therapy	Visit	48	52.00	79.72	198981.12	
GRAND TOTAL: Total Estimated Unduplicated Participants: Factor D (Divide total by number of participants): Average Length of Stay on the Waiver:						116173239.56 624 186175.06 323

Waiver Service/Component	Unit	# Users	Avg. Units Per User	Avg. Cost/ Unit	Component Cost	Total Cost
Transitional Assistance Services Total:						353089.80
Transitional Assistance Services	Per Episode	90	2.00	1961.61	353089.80	
Transportation Total:						2890068.48
Transportation	1 way trip	192	156.00	96.49	2890068.48	
GRAND TOTAL: Total Estimated Unduplicated Participants: Factor D (Divide total by number of participants): Average Length of Stay on the Waiver:						116173239.56 624 186175.06 323

Appendix J: Cost Neutrality Demonstration

J-2: Derivation of Estimates (6 of 9)

d. Estimate of Factor D.

i. Non-Concurrent Waiver. Complete the following table for each waiver year. Enter data into the Unit, # Users, Avg. Units Per User, and Avg. Cost/Unit fields for all the Waiver Service/Component items. Select Save and Calculate to automatically calculate and populate the Component Costs and Total Costs fields. All fields in this table must be completed in order to populate the Factor D fields in the J-1 Composite Overview table.

Waiver Year: Year 2

Waiver Service/Component	Unit	# Users	Avg. Units Per User	Avg. Cost/ Unit	Component Cost	Total Cost
Prevocational Services Total:						658187.04
Prevocational Services	15 min	62	852.00	12.46	658187.04	
Residential Habilitation Total:						111700129.96
Residential Habilitation	Per diem	578	302.00	639.91	111700129.96	
Supported Employment Total:						439242.75
Supported Employment	15 min	45	545.00	17.91	439242.75	
Assisted Living Services Total:						350438.53
Assisted Living Services	Per diem	13	239.00	112.79	350438.53	
Assistive Technology Total:						90255.33
Assistive Technology - devices	Item	27	5.00	299.92	40489.20	
Assistive					49766.13	
GRAND TOTAL: Total Estimated Unduplicated Participants: Factor D (Divide total by number of participants): Average Length of Stay on the Waiver:						129553446.80 674 192215.80 324

Waiver Service/ Component	Unit	# Users	Avg. Units Per User	Avg. Cost/ Unit	Component Cost	Total Cost
Technology - evaluation and training	15 min	27	89.00	20.71		
Community Based Day Supports Total:						92294.40
Community Based Day Supports	15 min	114	160.00	5.06	92294.40	
Community Behavioral Health Support and Navigation Total:						1031.14
Community Behavioral Health Support and Navigation	15 min	2	43.00	11.99	1031.14	
Day Services Total:						3604135.32
Day Services - Per Diem	Per Diem	222	104.00	140.34	3240169.92	
Day Services - Partial	Partial Per Diem	81	60.00	74.89	363965.40	
Home Accessibility Adaptations Total:						5413.31
Home Accessibility Adaptations	Item	1	1.00	5413.31	5413.31	
Individual Support and Community Habilitation Total:						631.68
Individual Support and Community Habilitation	15 min	4	24.00	6.58	631.68	
Occupational Therapy Total:						1223162.40
Occupational Therapy	Visit	381	40.00	80.26	1223162.40	
Orientation and Mobility Services Total:						1627.92
Orientation and Mobility Services	15 min	1	38.00	42.84	1627.92	
Peer Support Total:						1684938.56
Peer Support	15 min	148	1409.00	8.08	1684938.56	
Physical Therapy Total:						1231501.64
Physical Therapy	Visit	302	53.00	76.94	1231501.64	
Residential Family Training Total:						1225.00
Residential Family Training	15 min		175.00	7.00	1225.00	
GRAND TOTAL: Total Estimated Unduplicated Participants: Factor D (Divide total by number of participants): Average Length of Stay on the Waiver:						129553446.80 674 192215.80 324

Waiver Service/ Component	Unit	# Users	Avg. Units Per User	Avg. Cost/ Unit	Component Cost	Total Cost
		1				
Shared Living - 24 Hour Supports Total:						3425868.80
Shared Living - 24 Hour Supports	Per diem	40	326.00	262.72	3425868.80	
Skilled Nursing Total:						43879.50
Skilled Nursing	Visit	15	30.00	97.51	43879.50	
Specialized Medical Equipment Total:						1164609.60
Specialized Medical Equipment	Item	440	7.00	378.12	1164609.60	
Speech Therapy Total:						222458.08
Speech Therapy	Visit	52	52.00	82.27	222458.08	
Transitional Assistance Services Total:						396778.48
Transitional Assistance Services	Per Episode	98	2.00	2024.38	396778.48	
Transportation Total:						3215637.36
Transportation	1 way trip	207	156.00	99.58	3215637.36	
GRAND TOTAL: Total Estimated Unduplicated Participants: Factor D (Divide total by number of participants): Average Length of Stay on the Waiver:						12953446.80 674 192215.80 324

Appendix J: Cost Neutrality Demonstration

J-2: Derivation of Estimates (7 of 9)

d. Estimate of Factor D.

i. Non-Concurrent Waiver. Complete the following table for each waiver year. Enter data into the Unit, # Users, Avg. Units Per User, and Avg. Cost/Unit fields for all the Waiver Service/Component items. Select Save and Calculate to automatically calculate and populate the Component Costs and Total Costs fields. All fields in this table must be completed in order to populate the Factor D fields in the J-1 Composite Overview table.

Waiver Year: Year 3

Waiver Service/ Component	Unit	# Users	Avg. Units Per User	Avg. Cost/ Unit	Component Cost	Total Cost
Prevocational Services Total:						734100.24
Prevocational					734100.24	
GRAND TOTAL: Total Estimated Unduplicated Participants: Factor D (Divide total by number of participants): Average Length of Stay on the Waiver:						143707859.81 724 198491.52 324

Waiver Service/ Component	Unit	# Users	Avg. Units Per User	Avg. Cost/ Unit	Component Cost	Total Cost
Services	15 min	67	852.00	12.86		
Residential Habilitation Total:						123850861.38
Residential Habilitation	Per diem	621	302.00	660.39	123850861.38	
Supported Employment Total:						493508.40
Supported Employment	15 min	49	545.00	18.48	493508.40	
Assisted Living Services Total:						389474.40
Assisted Living Services	Per diem	14	239.00	116.40	389474.40	
Assistive Technology Total:						148329.79
Assistive Technology - devices	Item	43	5.00	309.52	66546.80	
Assistive Technology - evaluation and training	15 min	43	89.00	21.37	81782.99	
Community Based Day Supports Total:						101894.40
Community Based Day Supports	15 min	122	160.00	5.22	101894.40	
Community Behavioral Health Support and Navigation Total:						1063.82
Community Behavioral Health Support and Navigation	15 min	2	43.00	12.37	1063.82	
Day Services Total:						4003348.28
Day Services - Per Diem	Per diem	239	104.00	144.83	3599894.48	
Day Services - Partial	Partial per diem	87	60.00	77.29	403453.80	
Home Accessibility Adaptations Total:						5586.54
Home Accessibility Adaptations	Item	1	1.00	5586.54	5586.54	
Individual Support and Community Habilitation Total:						651.84
Individual Support and Community Habilitation	15 min	4	24.00	6.79	651.84	
Occupational Therapy Total:						1355098.80
GRAND TOTAL:						143707859.81
Total Estimated Unduplicated Participants:						724
Factor D (Divide total by number of participants):						198491.52
Average Length of Stay on the Waiver:						324

Waiver Service/ Component	Unit	# Users	Avg. Units Per User	Avg. Cost/ Unit	Component Cost	Total Cost
Occupational Therapy	Visit	409	40.00	82.83	1355098.80	
Orientation and Mobility Services Total:						1679.98
Orientation and Mobility Services	15 min	1	38.00	44.21	1679.98	
Peer Support Total:						1868418.54
Peer Support	15 min	159	1409.00	8.34	1868418.54	
Physical Therapy Total:						1363456.80
Physical Therapy	Visit	324	53.00	79.40	1363456.80	
Residential Family Training Total:						1263.50
Residential Family Training	15 min	1	175.00	7.22	1263.50	
Shared Living - 24 Hour Supports Total:						3800700.34
Shared Living - 24 Hour Supports	Per diem	43	326.00	271.13	3800700.34	
Skilled Nursing Total:						51321.30
Skilled Nursing	Visit	17	30.00	100.63	51321.30	
Specialized Medical Equipment Total:						1292018.42
Specialized Medical Equipment	Item	473	7.00	390.22	1292018.42	
Speech Therapy Total:						247228.80
Speech Therapy	Visit	56	52.00	84.90	247228.80	
Transitional Assistance Services Total:						438723.60
Transitional Assistance Services	Per Episode	105	2.00	2089.16	438723.60	
Transportation Total:						3559130.64
Transportation	1 way trip	222	156.00	102.77	3559130.64	
GRAND TOTAL:					143707859.81	
Total Estimated Unduplicated Participants:					724	
Factor D (Divide total by number of participants):					198491.52	
Average Length of Stay on the Waiver:						324

Appendix J: Cost Neutrality Demonstration

J-2: Derivation of Estimates (8 of 9)

d. Estimate of Factor D.

i. Non-Concurrent Waiver. Complete the following table for each waiver year. Enter data into the Unit, # Users, Avg. Units Per User, and Avg. Cost/Unit fields for all the Waiver Service/Component items. Select Save and Calculate to automatically calculate and populate the Component Costs and Total Costs fields. All fields in this table must be completed in order to populate the Factor D fields in the J-1 Composite Overview table.

Waiver Year: Year 4

Waiver Service/ Component	Unit	# Users	Avg. Units Per User	Avg. Cost/ Unit	Component Cost	Total Cost
Prevocational Services Total:						814034.88
Prevocational Services	15 min	72	852.00	13.27	814034.88	
Residential Habilitation Total:						136663842.56
Residential Habilitation	Per diem	664	302.00	681.52	136663842.56	
Supported Employment Total:						540443.80
Supported Employment	15 min	52	545.00	19.07	540443.80	
Assisted Living Services Total:						401921.52
Assisted Living Services	Per diem	14	239.00	120.12	401921.52	
Assistive Technology Total:						220692.10
Assistive Technology - devices	Item	62	5.00	319.42	99020.20	
Assistive Technology - evaluation and training	15 min	62	89.00	22.05	121671.90	
Community Based Day Supports Total:						112974.40
Community Based Day Supports	15 min	131	160.00	5.39	112974.40	
Community Behavioral Health Support and Navigation Total:						1098.22
Community Behavioral Health Support and Navigation	15 min	2	43.00	12.77	1098.22	
Day Services Total:						4403954.40
Day Services - Per Diem	Per diem	255	104.00	149.46	3963679.20	
Day Services - Partial	Partial per diem	92	60.00	79.76	440275.20	
Home Accessibility						5765.31
GRAND TOTAL:						158607983.80
Total Estimated Unduplicated Participants:						774
Factor D (Divide total by number of participants):						204919.88
Average Length of Stay on the Waiver:						324

Waiver Service/ Component	Unit	# Users	Avg. Units Per User	Avg. Cost/ Unit	Component Cost	Total Cost
Adaptations Total:						
Home Accessibility Adaptations	Item	1	1.00	5765.31	5765.31	
Individual Support and Community Habilitation Total:						672.96
Individual Support and Community Habilitation	15 min	4	24.00	7.01	672.96	
Occupational Therapy Total:						1497609.60
Occupational Therapy	Visit	438	40.00	85.48	1497609.60	
Orientation and Mobility Services Total:						1733.56
Orientation and Mobility Services	15 min	1	38.00	45.62	1733.56	
Peer Support Total:						2062353.30
Peer Support	15 min	170	1409.00	8.61	2062353.30	
Physical Therapy Total:						1506958.54
Physical Therapy	Visit	347	53.00	81.94	1506958.54	
Residential Family Training Total:						1303.75
Residential Family Training	15 min	1	175.00	7.45	1303.75	
Shared Living - 24 Hour Supports Total:						4196030.76
Shared Living - 24 Hour Supports	Per diem	46	326.00	279.81	4196030.76	
Skilled Nursing Total:						56079.00
Skilled Nursing	Visit	18	30.00	103.85	56079.00	
Specialized Medical Equipment Total:						1426398.82
Specialized Medical Equipment	Item	506	7.00	402.71	1426398.82	
Speech Therapy Total:						273374.40
Speech Therapy	Visit	60	52.00	87.62	273374.40	
Transitional Assistance Services Total:						482946.24
GRAND TOTAL: Total Estimated Unduplicated Participants: Factor D (Divide total by number of participants): Average Length of Stay on the Waiver:						158607983.80 774 204919.88 324

Waiver Service/ Component	Unit	# Users	Avg. Units Per User	Avg. Cost/ Unit	Component Cost	Total Cost
Transitional Assistance Services	Per Episode	112	2.00	2156.01	482946.24	
Transportation Total:						3937795.68
Transportation	1 way trip	238	156.00	106.06	3937795.68	
GRAND TOTAL: Total Estimated Unduplicated Participants: Factor D (Divide total by number of participants): Average Length of Stay on the Waiver:						158607983.80 774 204919.88 324

Appendix J: Cost Neutrality Demonstration

J-2: Derivation of Estimates (9 of 9)

d. Estimate of Factor D.

i. Non-Concurrent Waiver. Complete the following table for each waiver year. Enter data into the Unit, # Users, Avg. Units Per User, and Avg. Cost/Unit fields for all the Waiver Service/Component items. Select Save and Calculate to automatically calculate and populate the Component Costs and Total Costs fields. All fields in this table must be completed in order to populate the Factor D fields in the J-1 Composite Overview table.

Waiver Year: Year 5

Waiver Service/ Component	Unit	# Users	Avg. Units Per User	Avg. Cost/ Unit	Component Cost	Total Cost
Prevocational Services Total:						886454.88
Prevocational Services	15 min	76	852.00	13.69	886454.88	
Residential Habilitation Total:						150170801.62
Residential Habilitation	Per diem	707	302.00	703.33	150170801.62	
Supported Employment Total:						600633.60
Supported Employment	15 min	56	545.00	19.68	600633.60	
Assisted Living Services Total:						444396.60
Assisted Living Services	Per diem	15	239.00	123.96	444396.60	
Assistive Technology Total:						301254.88
Assistive Technology - devices	Item	82	5.00	329.64	135152.40	
Assistive Technology - evaluation and training	15 min	82	89.00	22.76	166102.48	
GRAND TOTAL: Total Estimated Unduplicated Participants: Factor D (Divide total by number of participants): Average Length of Stay on the Waiver:						174339729.68 824 211577.34 324

Waiver Service/ Component	Unit	# Users	Avg. Units Per User	Avg. Cost/ Unit	Component Cost	Total Cost
Community Based Day Supports Total:						123654.40
Community Based Day Supports	15 min	139	160.00	5.56	123654.40	
Community Behavioral Health Support and Navigation Total:						1133.48
Community Behavioral Health Support and Navigation	15 min	2	43.00	13.18	1133.48	
Day Services Total:						4847123.92
Day Services - Per Diem	Per diem	272	104.00	154.24	4363141.12	
Day Services - Partial	Partial per diem	98	60.00	82.31	483982.80	
Home Accessibility Adaptations Total:						5949.80
Home Accessibility Adaptations	Item	1	1.00	5949.80	5949.80	
Individual Support and Community Habilitation Total:						694.08
Individual Support and Community Habilitation	15 min	4	24.00	7.23	694.08	
Occupational Therapy Total:						1644420.80
Occupational Therapy	Visit	466	40.00	88.22	1644420.80	
Orientation and Mobility Services Total:						1789.04
Orientation and Mobility Services	15 min	1	38.00	47.08	1789.04	
Peer Support Total:						2267207.81
Peer Support	15 min	181	1409.00	8.89	2267207.81	
Physical Therapy Total:						1653739.92
Physical Therapy	Visit	369	53.00	84.56	1653739.92	
Residential Family Training Total:						1345.75
Residential Family Training	15 min	1	175.00	7.69	1345.75	
Shared Living - 24 Hour Supports Total:						4612652.24
GRAND TOTAL:						174339729.68
Total Estimated Unduplicated Participants:						824
Factor D (Divide total by number of participants):						211577.34
Average Length of Stay on the Waiver:						324

Waiver Service/ Component	Unit	# Users	Avg. Units Per User	Avg. Cost/ Unit	Component Cost	Total Cost
Shared Living - 24 Hour Supports	Per diem	49	326.00	288.76	4612652.24	
Skilled Nursing Total:						61086.90
Skilled Nursing	Visit	19	30.00	107.17	61086.90	
Specialized Medical Equipment Total:						1565149.60
Specialized Medical Equipment	Item	538	7.00	415.60	1565149.60	
Speech Therapy Total:						300917.76
Speech Therapy	Visit	64	52.00	90.42	300917.76	
Transitional Assistance Services Total:						529550.00
Transitional Assistance Services	Per Episode	119	2.00	2225.00	529550.00	
Transportation Total:						4319772.60
Transportation	1 way trip	253	156.00	109.45	4319772.60	
GRAND TOTAL:					174339729.68	
Total Estimated Unduplicated Participants:					824	
Factor D (Divide total by number of participants):					211577.34	
Average Length of Stay on the Waiver:						324