



Hospice Workgroup 2025 Meeting 3

Hospice Need Methodology

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Agenda:

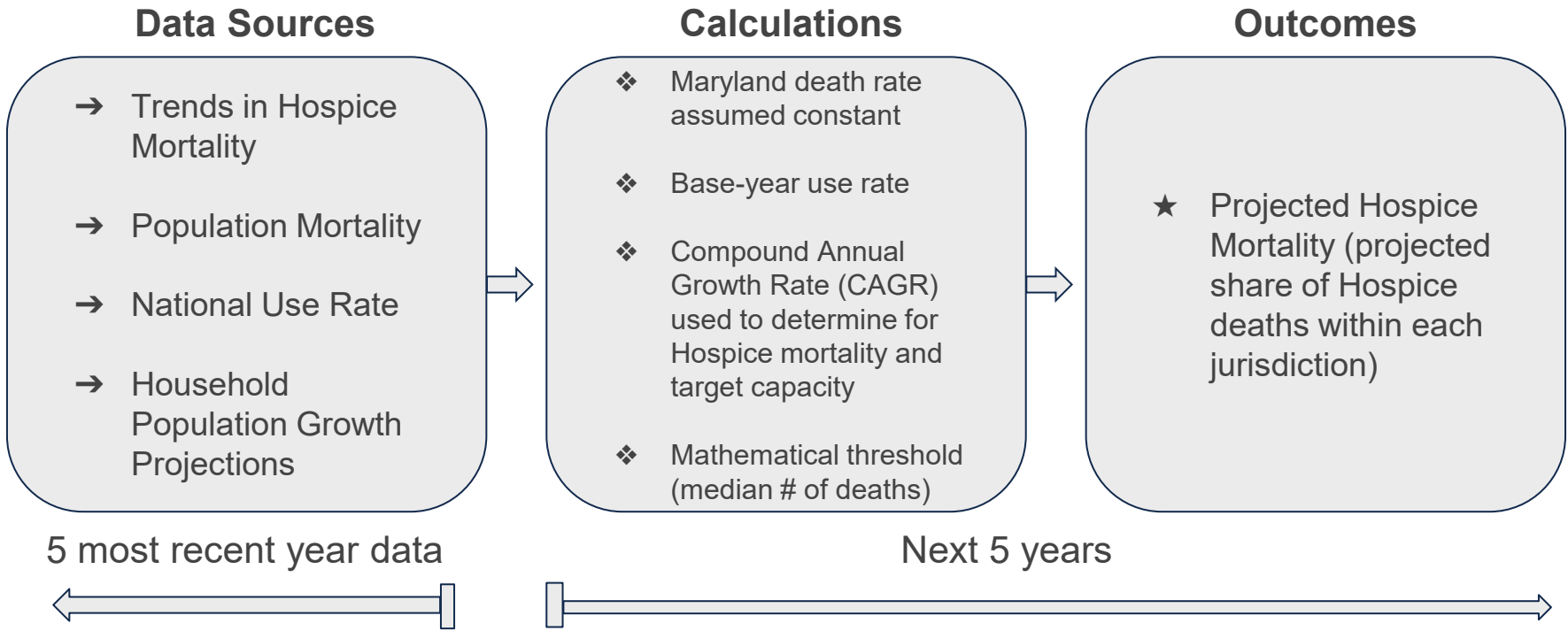


- 1. Hospice Need Methodology**
 - a. Building blocks of existing framework**
 - b. Nuances of existing framework**
- 2. Challenges in the existing framework**
 - a. Quantitative**
 - b. Qualitative**
- 3. Ideas and improvements for the future - MHCC perspectives**
- 4. Perspectives from the workgroup and open discussion**

Hospice Need Methodology - Existing framework: ‘building blocks’



‘COMAR 10.24.13.06’



Data sources: Hospice mortality data sourced from most recent and 5-year trending MHCC Annual Hospice Surveys; Population Mortality from MD Vital Statistics Administration, National Use Rate from Medicare Payment Advisory Commission (MedPAC) annual report; Household population data from MD Dept. of Planning; refer [COMAR 10.24.13.06](#) for details.

Hospice Need Methodology - Existing framework: 'nuances'



- ✓ Need is projected by jurisdiction/county
- ✓ Hospice utilization rate is defined as total deaths in Hospice as % of total Medicare deaths within that jurisdiction
- ✓ Projections are for 35+ age group
- ✓ Median Volume of deaths acts as threshold or gating criteria: projected share of Hospice deaths within each jurisdiction may exceed the target capacity however it must exceed the volume threshold to be recognized as net need¹
- ✓ Overall, Maryland uses formulaic approach to need determination similar to that in states such as New York, Florida, North Carolina and few others

1: Appendix A: Maryland Hospice Need Projections Target Year 2019 ([link](#)); see notes for explanation

Challenges in the existing framework:



Quantitative:

✗ Does not account for current year capacity when projecting future capacity; e.g. previous year survey data used to project current+4 years - skips current year capacity fluctuations

✗ Does not account for the high-touch nature of Hospice business which depends on staffing and team-based care, average length of stay and other parameters

✗ Does not account for In, Intra and Out-of state migration of population

✗ Previous need projection done for target year (TY) 2019 underestimated the target capacity and gross need¹:

- The projected target capacity for 2019 compared with Actual Mortality for the year showed - 11 jurisdictions with higher deaths than projected capacity, ranging from 2%-106%²;
- The projected gross need for 2019 compared with Actual Mortality for the year showed - 16 jurisdictions with higher deaths than projected gross need, ranging from 4%-43%²

1: Appendix A: Maryland Hospice Need Projections Target Year 2019 ([link](#))

2: Appendix B: Comparison of 2019 need projections with actual Hospice mortality in 2019, based on MHCC Hospice Survey 2019 public use files (Patient_Volume_By_County, includes 24 MD jurisdictions/counties only, [link](#))

Challenges in the existing framework:



Qualitative:

- ✗ SHP chapter states it should be reviewed and amended as necessary “at least every 5 years” and “the commission intends to update the need projections every three years” - both are long overdue
- ✗ Existing methodology does not account for provider performance and quality indicators
- ✗ Does not account for special needs population such as - racially & ethnically diverse population, urban versus rural populations, children, etc.
- ✗ Does not account for patient/consumer choices
- ✗ Does not account for Market concentration

Ideas and improvements for the future:



MHCC perspectives:



Patient Choice and Quality:

Explore use of Hospice Care Index type Indicator Scoring Criteria or other relevant Hospice Outcomes and Patient Evaluation measures



Mechanism for quantifying special populations and needs:

Explore mechanism to account for jurisdictions with underserved communities¹, jurisdictions with below average utilization or creation of special needs projections



Age adjustment:

Lower minimum age from 35 to 25 (or eliminate age criteria entirely)²



Area Deprivation Index or Social Vulnerability Index:

Explore the interplay of patient race/ethnicity and county-level vulnerability relative to patterns of hospice utilization and effects in need projections^{3, 4, 5, 6}



Staffing and Capacity:

Explore incorporation of staffing and capacity fluctuations; explore use of average growth rate v/s compound growth rate, inclusion of average length of stay

1, 2: Feedback received from constituents of Hospice & Palliative Care Network of Maryland as part of the Hospice CON Modernization Task Force 2018

3: <https://ohiostate.elsevierpure.com/en/publications/raceethnicity-and-county-level-social-vulnerability-impact-hospic>

4: <https://www.graham-center.org/maps-data-tools/social-deprivation-index.html#:~:text=Addressing%20social%20determinants%20of%20health,need%20additional%20health%20care%20resources.>

5: <https://www.neighborhoodatlas.medicine.wisc.edu/>

6: https://www.atsdr.cdc.gov/place-health/php/svi/index.html#cdc_generic_section_5-svi-in-action

Ideas and improvements for the future:



Perspectives from the Workgroup:

 Open discussion

Appendix A:



MARYLAND HOSPICE NEED PROJECTIONS FOR TARGET YEAR 2019

Region	Jurisdiction	Hospice Deaths 2014	Population Deaths Age 35+ 2014	Baseline Use Rate 2014	Compound Annual Growth Rate in Hospice Deaths 2010-2014	Target Year Capacity 2019	Gross Need 2019 @ Target Use Rate of 0.473	Net Need 2019	Need Recognized Based on Volume Threshold of 359
Western Maryland	Allegany	195	886	0.22	0.03	231	427	196	No
	Carroll	730	1,470	0.50	0.02	805	722	(83)	No
	Frederick	735	1,611	0.46	0.11	1,259	817	(442)	No
	Garrett	63	275	0.23	-0.05	48	133	85	No
	Washington	817	1,441	0.57	0.16	1,727	719	(1,008)	No
Central Maryland	Anne Arundel	1,926	3,922	0.49	0.04	2,365	1,947	(418)	No
	Baltimore City	1,434	5,707	0.25	0.01	1,522	2,756	1,233	Yes
	Baltimore Co.	4,321	7,706	0.56	0.05	5,429	3,752	(1,677)	No
	Harford	966	1,900	0.51	0.07	1,385	935	(450)	No
	Howard	766	1,548	0.49	0.08	1,116	791	(324)	No
Montgomery	Montgomery	2,601	5,505	0.47	0.03	2,945	2,745	(200)	No
Southern Maryland	Calvert	223	609	0.37	0.02	248	304	56	No
	Charles	265	914	0.29	0.02	286	479	192	No
	Prince George's	1,430	5,025	0.28	0.05	1,812	2,474	662	Yes
	St. Mary's	338	718	0.47	0.06	458	378	(80)	No
Eastern Shore	Caroline	89	329	0.27	0.04	108	167	59	No
	Cecil	379	817	0.46	0.00	374	408	34	No
	Dorchester	75	381	0.20	0.05	95	189	94	No
	Kent	111	240	0.46	0.09	173	121	(52)	No
	Queen Anne's	200	412	0.49	0.08	291	210	(81)	No
	Somerset	66	260	0.25	-0.02	59	126	67	No
	Talbot	167	453	0.37	0.02	188	226	38	No
	Wicomico	422	914	0.46	0.06	553	457	(96)	No
	Worcester	235	588	0.40	0.03	275	296	20	No
State of Maryland		18,554	43,631	0.43	0.05	23,199	21,640	(1,560)	

■ Data from TY 2019 projections

Notes:

1. Data shows 'Need Recognized' across 2 jurisdictions Baltimore City and PG County for Target Year 2019
2. While there is a positive 'Net Need' identified across Allegany, Garrett, Calvert, Charles, Caroline, Cecil, Dorchester, Somerset, Talbot and Worcester counties, they DID NOT meet the volume threshold criteria of 359 which was the median of the 'Hospice deaths in 2014'.

Sources:

Methodology: COMAR 10.24.13.06

Hospice Deaths: MHCC Annual Hospice Survey



Population Deaths: Maryland Vital Statistics Administration



Target Year Use Rate: MedPAC (2013 Medicare use rate published March 2015)

Household Population Projections: Maryland Department of Planning, January, 2015 series

Appendix B:

Data from TY 2019 projections
 Comparative analysis with CY 2019 Hospice Deaths

Compare: C/B % change

Region	Jurisdiction.	Hospice Deaths 2014	A	B	Net Need 2019	Need Recognized Based on Volume-Threshold of 359	C	Compare: A and C	Compare: C/A % change	Compare: B and C	Compare: C/B % change
			Target Year Capacity 2019	Gross Need 2019@ Target Use Rate of 0.473			CY 2019 Actual Deaths (Source: MHCC Survey)	Were Actual CY-19 Deaths Lower or Higher than TY-19 capacity projections?	% Difference between CY-19 Deaths and TY-19 capacity projections	Were Actual CY-19 Deaths Lower or Higher than TY-19 Gross Need projections?	% Difference between CY-19 Deaths and TY-19 Gross Need projections
Western Maryland	Allegany	195	231	427	196	No	208	Lower	-10%	Lower	-51%
	Carroll	730	805	722	-83	No	1031	Higher	28%	Higher	43%
	Frederick	735	1,259	817	-442	No	1050	Lower	-17%	Higher	29%
	Garrett	63	48	133	85	No	99	Higher	106%	Lower	-26%
	Washington	817	1,727	719	-1008	No	935	Lower	-46%	Higher	30%
	Anne Arundel	1,926	2,365	1,947	-418	No	2285	Lower	-3%	Higher	17%
	Baltimore City	1,434	1,522	2,756	1233	Yes	1839	Higher	21%	Lower	-33%
Central Maryland	Baltimore County	4,321	5,429	3,752	-1677	No	4557	Lower	-16%	Higher	22%
	Harford	966	1,385	935	-450	No	1141	Lower	-18%	Higher	22%
	Howard	766	1,116	791	-324	No	861	Lower	-23%	Higher	9%
Montgomery	Montgomery	2,601	2,945	2,745	-200	No	3003	Higher	2%	Higher	9%
Southern Maryland	Calvert	223	248	304	56	No	317	Higher	28%	Higher	4%
	Charles	265	286	479	192	No	317	Higher	11%	Lower	-34%
	Prince George's	1430	1,812	2,474	662	Yes	1692	Lower	-7%	Lower	-32%
	St. Mary's	338	458	378	-80	No	398	Lower	-13%	Higher	5%
Eastern Shore	Caroline	89	108	167	59	No	108	No Change	0%	Lower	-35%
	Cecil	379	374	408	34	No	426	Higher	14%	Higher	4%
	Dorchester	75	95	189	94	No	119	Higher	25%	Lower	-37%
	Kent	111	173	121	-52	No	127	Lower	-27%	Higher	5%
	Queen Anne's	200	291	210	-81	No	230	Lower	-21%	Higher	10%
	Somerset	66	59	126	67	No	96	Higher	63%	Lower	-24%
	Talbot	167	188	226	38	No	257	Higher	37%	Higher	14%
	Wicomico	422	553	427	-96	No	492	Lower	-11%	Higher	8%
	Worcester	235	275	296	20	No	307	Higher	12%	Higher	4%
	Total	18,554					21,895				
State of Maryland	Median	359					412				

Notes: 1. Comparison of A and C shows 11 jurisdictions - Carroll, Garrett, Baltimore City, Montgomery, Calvert, Charles, Cecil, Dorchester, Somerset, Talbot and Worcester all recorded higher deaths as compared to projected capacity for 2019.

2. Comparison of B and C shows 16 jurisdictions - Carroll, Frederick, Washington, Anne Arundel, Baltimore County, Harford, Howard, Montgomery, Calvert, St. Mary's, Kent, Queen Anne, Talbot, Wicomico and Worcester all recorded higher deaths as compared to projected Gross Need for 2019.