Governor's EMS and Trauma Advisory Council

Pre-Hospital Whole Blood Task Force: State EMS Blood Utilization & Cost Estimate

Presented November 22, 2024, GETAC PHWBTF

First, we looked at the TSA-P / STRAC Whole Blood Utilization Data (robust dataset over 2-year period, all blood administered prehospital, medical and trauma)

			Monthly		Monthly			
		Aggregate	Average		Total		Estimated	
		2yr Total	WB	Add Air	WB		Monthly Cost	Estimated
	Population	WB	Utilization	Medical WB	Utilization	# Counties	Per Unit \$500	Annual Cost
Population (2023)	Category	Utilization	(Agg2yr/24)	Utilization*	(Avg+AM)	in STRAC (22)	(Mo Ut*# Co)	(Mo Cost*12)
< 10,000	Frontier	12.00	0.50	0.82	1.32	6	\$ 3,959.02	\$ 47,508.20
10,001 - 50,000	Rural	46.00	1.92	3.14	5.06	7	\$ 17,705.60	\$ 212,467.21
50,001 - 99,999	Suburban	64.00	2.67	4.37	7.04	6	\$ 21,114.75	\$ 253,377.05
100,000 - 999,999	Urban	154.00	6.42	NA	6.42	2	\$ 6,416.67	\$ 77,000.00
1M-2.99M	Super Urban	676.00	28.17	NA	28.17	1	\$ 14,083.33	\$ 169,000.00
<u>></u> 3M	HOU-BER URBAN	NA	NA	NA	NA	0	NA	NA
	TOTALS	952.00	39.67	8.33	48.00		\$ 63,279.37	\$ 759,352.46

<u>Aggregate 2yr Total WB Utilization</u> – pulled directly from STRAC regional utilization data; example Frontier Counties:

- a. There are 6 frontier counties in the STRAC region
- b. We have data on 1 of the 6 frontier counties
- c. Average = sum of units used monthly divided by 1 county

<u>Number of counties</u> – simple count by population category

Monthly Total WB Utilization - Sum of Monthly Average plus Air Medical* Utilization

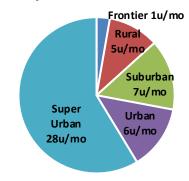
a. *Air Medical WB Utilization is based on % of Utilization across the Frontier, Rural, and Suburban Counties.

Estimated Monthly Cost Per Unit – (Monthly Total WB Utilization X Number of Counties) X \$500.00

Estimated Annual Cost – Estimated Monthly Cost X 12



Monthly Est. Total WB Utilization



Next, we applied the same math to the State (using the robust STRAC Data Set, same math, same starting point)

			Monthly		Monthly			
		Aggregate	Average		Total		Estimated	
		2yr Total	WB	Add Air	WB		Monthly Cost	Estimated
	Population	WB	Utilization	Medical WB	Utilization	# Counties/	Per Unit \$500	Annual Cost
Population (2023)	Category	Utilization	(Agg2yr/24)	Utilization*	(Avg+AM)	State (254)	(Mo Ut*# Co)	(Mo Cost*12)
< 10,000	Frontier	12.00	0.50	0.82	1.32	92	\$ 60,704.92	\$ 728,459.02
10,001 - 50,000	Rural	46.00	1.92	3.14	5.06	89	\$ 225,114.07	\$ 2,701,368.85
50,001 - 99,999	Suburban	64.00	2.67	4.37	7.04	30	\$ 105,573.77	\$ 1,266,885.25
100,000 - 999,999	Urban	154.00	6.42	NA	6.42	36	\$ 115,500.00	\$ 1,386,000.00
1M-2.99M	Super Urban	676.00	28.17	NA	28.17	6	\$ 84,500.00	\$ 1,014,000.00
<u>></u> 3M	HOU-BER URBAN	NA	29.50	NA	29.50	1	\$ 14,750.00	\$ 177,000.00
	TOTALS	952.00	69.17	8.33	77.50		\$ 606,142.76	\$ 7,273,713.11

<u>Aggregate 2yr Total WB Utilization</u> – pulled directly from STRAC regional utilization data; example Frontier Counties:

- a. There are 6 frontier counties in the STRAC region
- b. We have data on 1 of the 6 frontier counties
- c. Average = sum of units used monthly divided by 1 county

<u>Number of counties</u> – simple count by population category

Monthly Total WB Utilization - Sum of Monthly Average plus Air Medical* Utilization

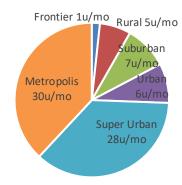
a. *Air Medical WB Utilization is based on % of Utilization across the Frontier, Rural, and Suburban Counties.

Estimated Monthly Cost Per Unit – (Monthly Total WB Utilization X Number of Counties) X \$500.00

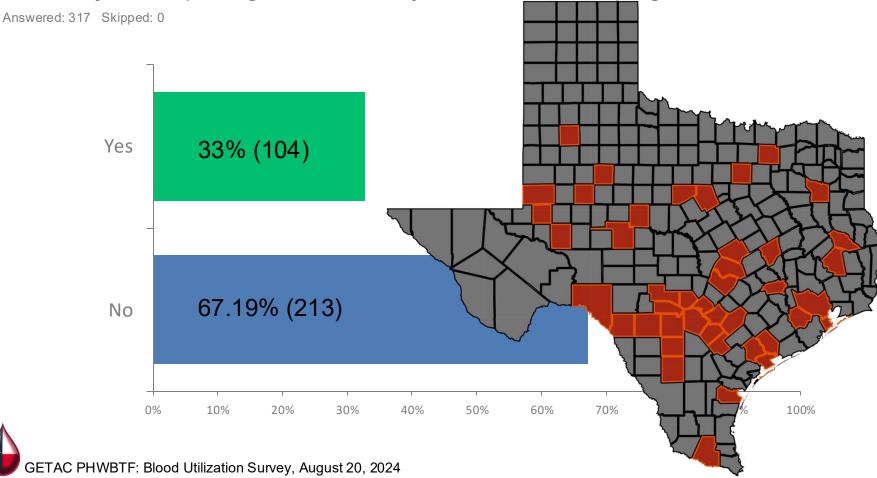
Estimated Annual Cost – Estimated Monthly Cost X 12



Monthly Est. Total WB Utilization



From the Survey Monkey data presented at the August GETAC PHWBTF, we asked how many Prehospital agencies currently have whole blood programs.



TX EMTF 1

Lead RAC: Panhandle RAC TSAs: $A \& B \sim HSR 1$ www.PanhandleRAC.com

TX EMTF 2

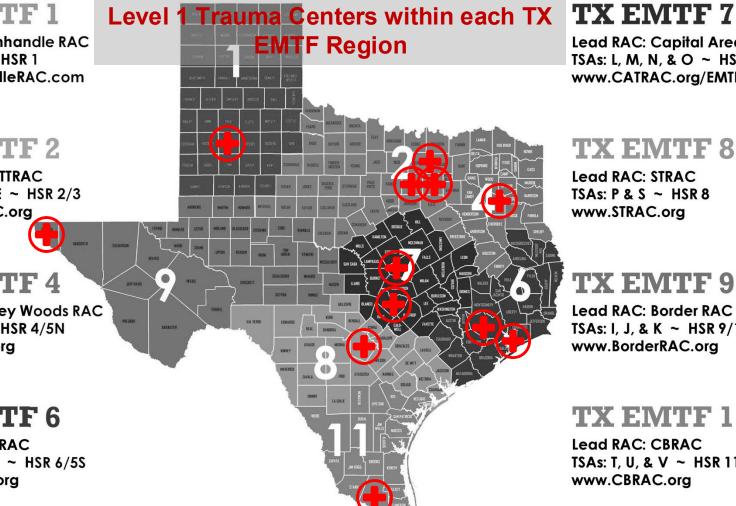
Lead RAC: NCTTRAC TSAs: C, D, & E ~ HSR 2/3www.NCTTRAC.org

TX EMTF 4

Lead RAC: Piney Woods RAC TSAs: F & G ~ HSR 4/5Nwww.RAC-G.org

TX EMTF 6

Lead RAC: SETRAC TSAs: H, Q, & R ~ HSR 6/5Swww.SETRAC.org



Lead RAC: Capital Area Trauma RAC TSAs: L, M, N, & O ~ HSR 7 www.CATRAC.org/EMTF

TX EMTF 8

Lead RAC: STRAC TSAs: $P \& S \sim HSR 8$ www.STRAC.org

TX EMTF 9

Lead RAC: Border RAC TSAs: I, J, & K ~ HSR 9/10 www.BorderRAC.org

TX EMTF 11

Lead RAC: CBRAC TSAs: T, U, & V ~ HSR 11 www.CBRAC.org

Each EMTF Region has at least one Level I Trauma Center that could potentially be used as a Blood Bank:

			EMTF	
<u>TSA</u>	Facility Name	<u>City (TX)</u>	Region	<u>County</u>
В	University Medical Center	Lubbock	1	Lubbock
Е	Medical City Plano	Plano	2	Collin & Denton
Е	Baylor University Medical Center	Dallas	2	Dallas
Е	Childrens Medical Center of Dallas	Dallas	2	Dallas
Е	Methodist Dallas Medical Center	Dallas	2	Dallas
Е	Parkland Memorial Hospital	Dallas	2	Dallas
Е	Texas Health Presbyterian Hospital Dallas	Dallas	2	Dallas
Е	John Peter Smith Hospital	Fort Worth	2	Tarrant
Е	Texas Health Harris Methodist Hospital Fort Worth	Fort Worth	2	Tarrant
G	UT Health East Texas Tyler Regional Hospital	Tyler	4	Smith
Ι	University Medical Center of El Paso	El Paso	9	El Paso
L	Baylor Scott & White Medical Center - Temple	Temple	7	Bell
0	Dell Childrens Medical Center	Austin	7	Travis
0	Dell Seton Medical Center at The University of Texas	Austin	7	Travis
Р	Brooke Army Medical Center	Fort Sam Houston	8	Bexar
Р	University Hospital	San Antonio	8	Bexar
Q	Harris Health System Ben Taub Hospital	Houston	6	Harris
Q	Memorial Hermann - Texas Medical Center	Houston	6	Harris
Q	Texas Childrens Hospital	Houston	6	Harris
R	University of Texas Medical Branch	Galveston	6	Galveston
V	Doctors Hospital at Renaissance	Edinburg	11	Hidalgo
V	South Texas Health System McAllen	McAllen	11	Hidalgo



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Questions?

Presented November 22, 2024 AcuteCare@strac.org