

ETSU Health: Expanding Rural Access in NE Tennessee

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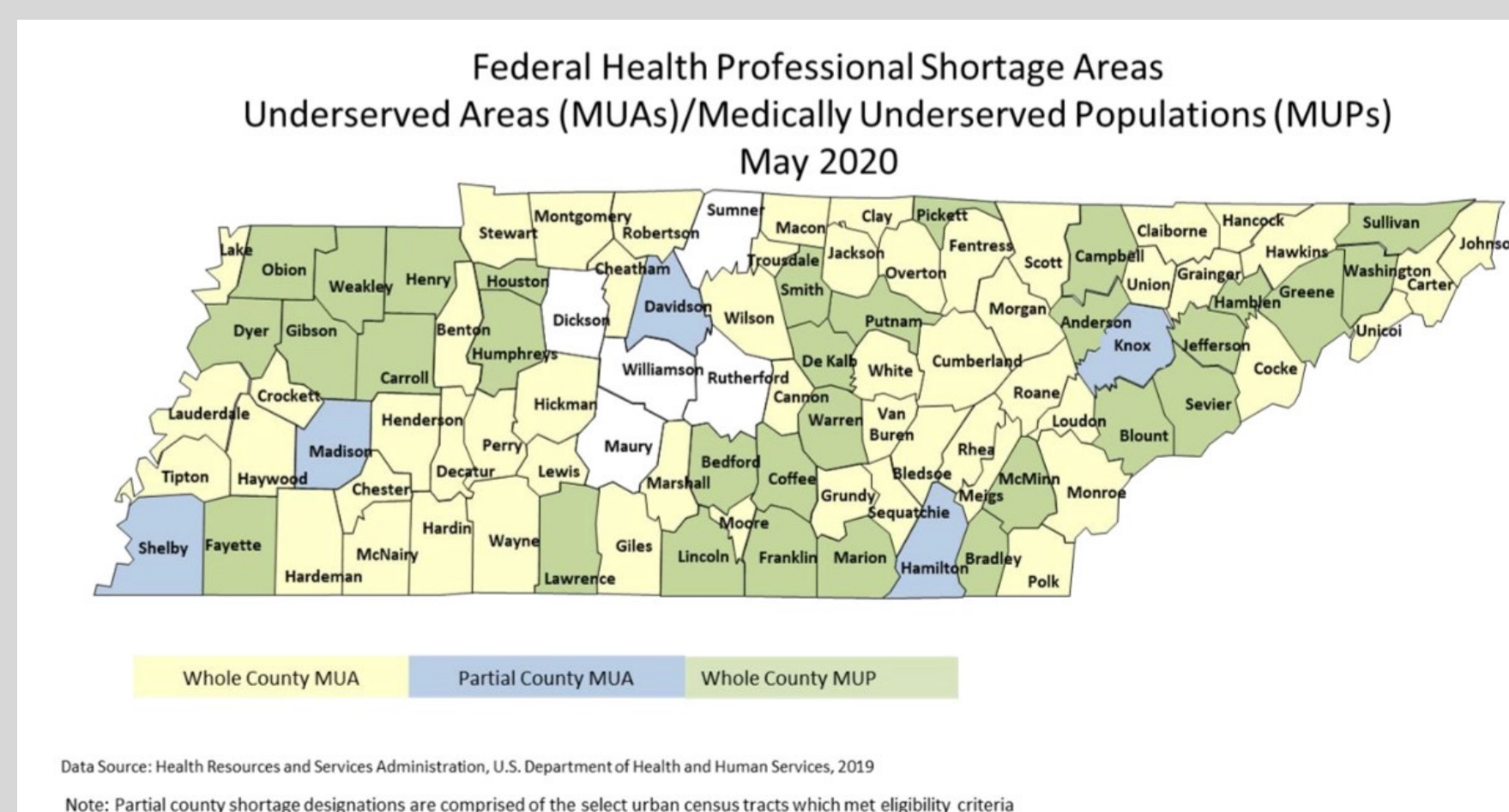
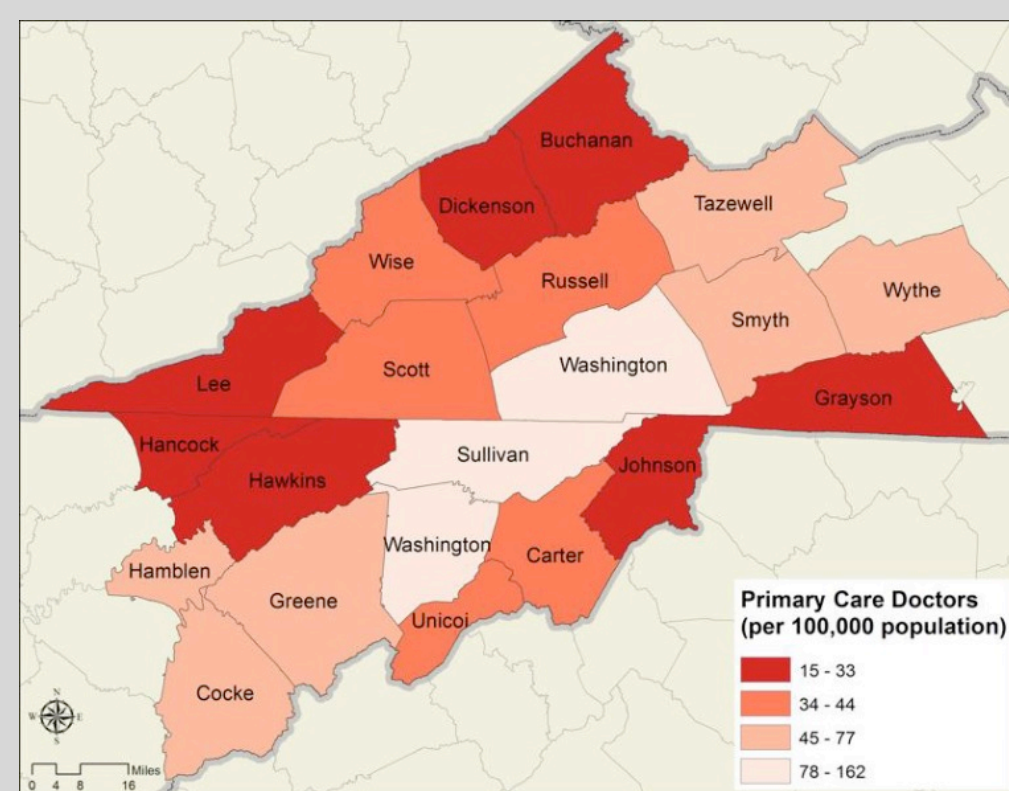


Background

- East Tennessee State University Quillen College of Medicine in NE Tennessee and within Appalachia
- Vision: Revolutionize Rural Health
- Mission Statement: “The primary mission of the Quillen College of Medicine is to educate future generations of physicians and biomedical scientists, especially those with an interest in primary care, to practice in underserved rural communities. In addition, the College is committed to the contribution of knowledge and excellence in biomedical research that improves medicine and is dedicated to the improvement of health care in Northeast Tennessee and the surrounding Appalachian Region.”
- ETSU Health serves the areas of Northeast Tennessee and Southwest Virginia positioned within Appalachia.
- Much of this region is rural and designated as medically underserved areas or home to medically underserved populations.
- There is a high prevalence of chronic disease and premature death within the communities.
- There is a high prevalence of hypertension, obesity, diabetes, and smoking along with maternal and fetal morbidity and mortality.
- The health of the communities is complicated by higher rates of unemployment and poverty than the state and nation, along with geographic isolation and lack of available clinicians.
- East Tennessee State University Quillen College of Medicine (QCOM) has as its primary mission to educate future physicians with a focus on primary care and rural and underserved medicine.
- In addition ETSU Health and QCOM seek to positively impact the health of the region.

Objectives

- Obtain and compile targeted four county demographic data
- Obtain and compile targeted four county health data
- Create a business plan for a new clinical venture
- Review potential clinical practice models
- Deliver the initial findings to COM leadership



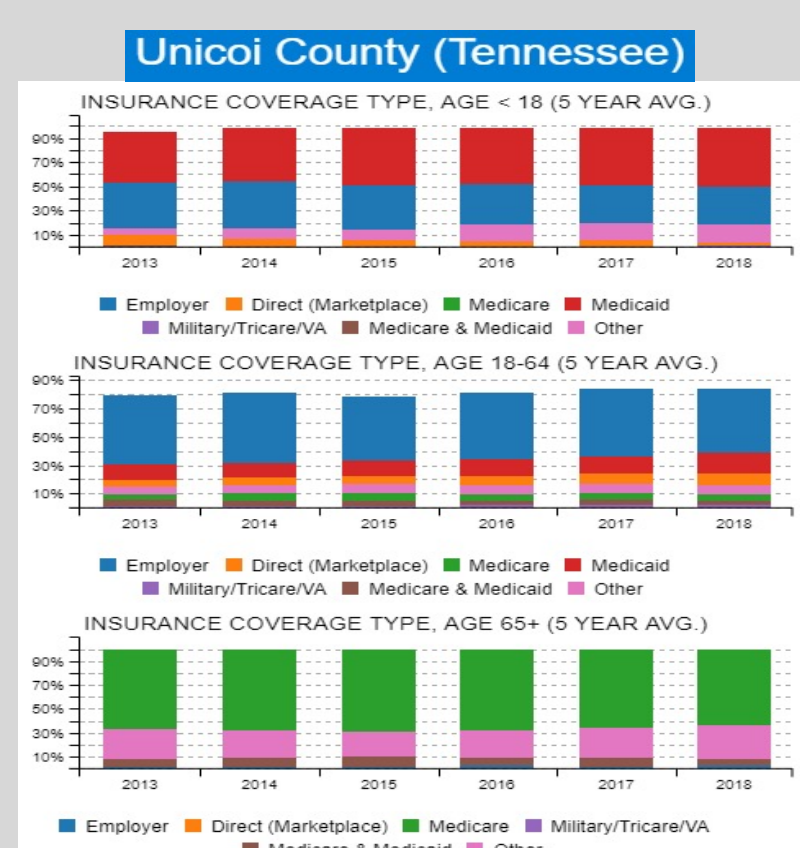
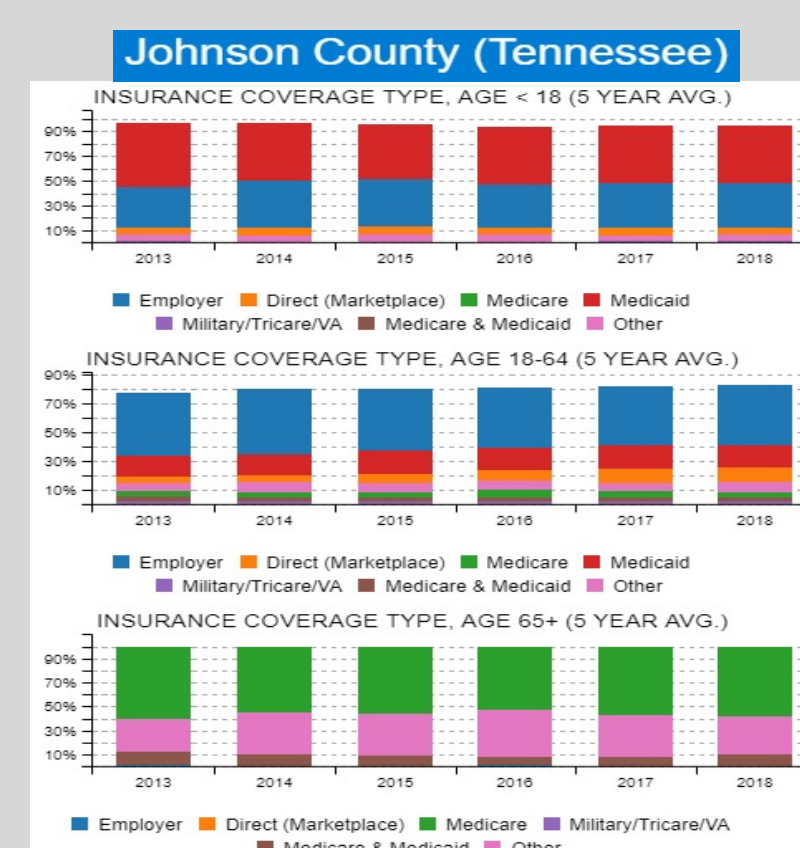
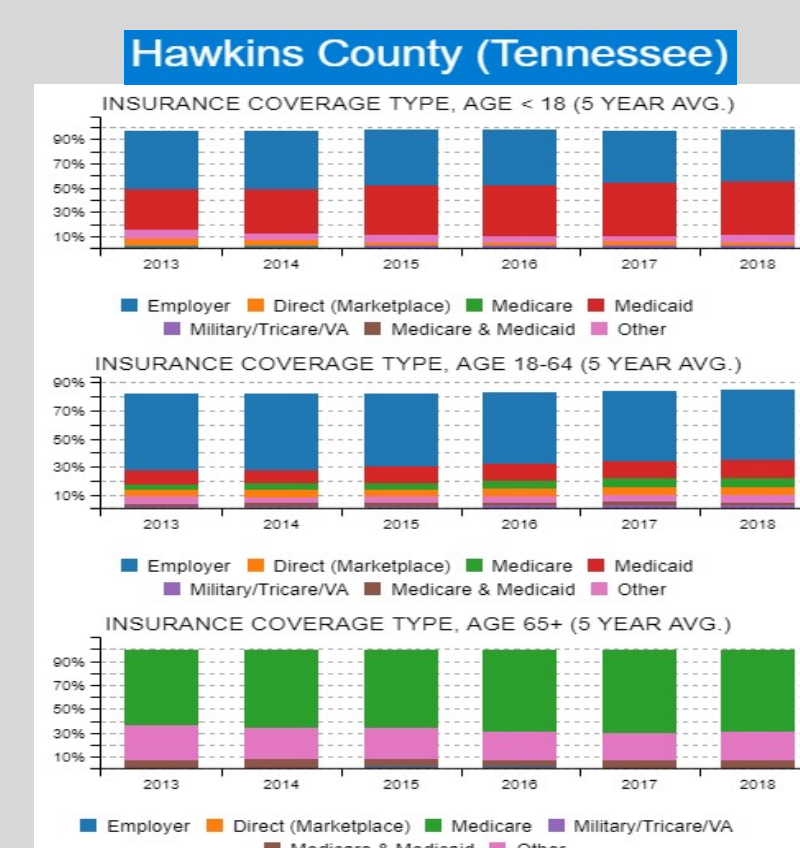
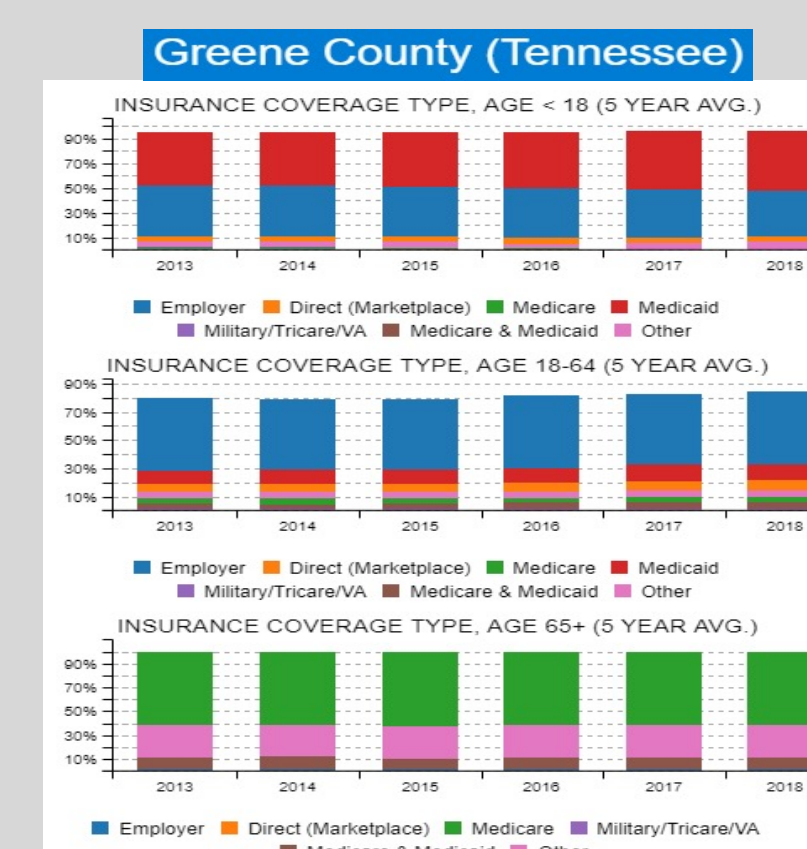
Method

- Contacted the medical library resource team to assist with identifying the most current data available for the four NE Tennessee counties of interest, specifically demographic and health data; S
- Contacted the American Academy of Family Physicians (AAFP) to determine available AAFP resources compiled for national rural areas;
- Interviewed local experts on Academic FQHC clinics and the community CEO of an Area Health Education Center (FQHC-like practices);
- Consulted the Associate Dean for Finance and Administration regarding the creation of a budget for a clinic; and
- Planning with the Dean to present to COM Leadership

Results

Report Area	Total Population	White	Black	Asian	Native American or Alaska Native	Native Hawaiian or Pacific Islander	Some Other Race	Multiple Race
Greene County, TN Non-Hispanic	66,845	64,048 (95.82%)	1,475 (2.21%)	273 (0.41%)	176 (0.26%)	0 (0%)	15 (0.02%)	858 (1.28%)
Greene County, TN Hispanic / Latino	1,989	1,048 (52.69%)	26 (1.31%)	0 (0%)	1 (0.05%)	69 (3.47%)	481 (24.18%)	364 (18.30%)
Hawkins County, TN Non-Hispanic	55,733	53,811 (96.55%)	747 (1.34%)	293 (0.53%)	99 (0.18%)	41 (0.07%)	6 (0.01%)	736 (1.32%)
Hawkins County, TN Hispanic / Latino	878	552 (62.87%)	0 (0.0%)	6 (0.68%)	0 (0.0%)	21 (2.39%)	117 (13.33%)	182 (20.73%)
Johnson County, TN Non-Hispanic	17,392	16385 (94.21%)	613 (3.52%)	85 (0.49%)	90 (0.52%)	0 (0%)	6 (0.03%)	213 (1.22%)
Johnson County, TN Hispanic / Latino	361	309 (85.60%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	30 (8.31%)	22 (6.09%)
Unicoi County, TN Non-Hispanic	16,938	16,589 (97.94%)	60 (0.35%)	50 (0.30%)	18 (0.11%)	0 (0%)	14 (0.08%)	207 (1.22%)
Unicoi County, TN Hispanic / Latino	873	581 (66.55%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	222 (25.43%)	70 (8.02%)
Tennessee	6,709,356	5,205,132 (77.58%)	1,124,473 (16.76%)	117,600 (1.75%)	18,189 (0.27%)	3,771 (0.06%)	92,655 (1.38%)	147,536 (2.20%)
United States	324,697,795	235,377,662 (72.49%)	41,234,642 (12.70%)	17,924,209 (5.52%)	2,750,143 (0.85%)	599,868 (0.18%)	16,047,369 (4.94%)	10,763,932 (3.32%)

Report Area	Rural Population Under Age 18	Rural Population Age 18-64	Rural Population Age 65+
Greene County, TN	9,596 (65.80%)	27,932 (66.12%)	7,346 (61.19%)
Hawkins County, TN	7,271 (57.30%)	20,356 (58.53%)	5,257 (56.12%)
Johnson County, TN	7,805 (83.43%)	10140 (87.01%)	2601 (80.58%)
Unicoi County, TN	1,614 (43.73%)	5,172 (46.93%)	1,394 (38.71%)
Tennessee	481,416 (32.18%)	1,326,359 (33.19%)	325,085 (38.09%)
United States	13,907,394 (18.52%)	36,734,957 (18.69%)	9,082,449 (22.26%)



Results

Report Area	Population Age 20+	Adults 20+ with Diabetes (Age-Adjusted Rate) 2017	Adults 20+ with Obesity 2017	Population Age 18+ 2011-12	Adults 18+ with Heart Disease 2011-12	Adults 18+ with High Blood Pressure 2006-12	Adults 18+ with High Cholesterol 2011-12	Adult 18+ Smoking (Age-Adjusted Rate) 2006-12
Greene County, TN	53,646	10,622 (17.7%)	20,200 (37.2%)	54,179	5,944 (11.00%)	18,014 (33.40%)	18,302 (47.14%)	15,425 (30.20%)
Hawkins County, TN	43,847	7,147 (13.9%)	14,034 (31.8%)	51,744	3,773 (7.30%)	17,251 (39.10%)	12,724 (32.80%)	11,560 (26.00%)
Johnson County, TN	14,344	1,836 (11.2%)	4,246 (29.7%)	27,924	3,213 (11.50%)	5,145 (34.40%)	6,034 (27.68%)	4,188 (27.60%)
Unicoi County, TN	14,068	2,490 (14.9%)	3,846 (27.9%)	12,399	1,826 (14.70%)	6,016 (41.30%)	6,814 (56.66%)	3,409 (26.40%)
Tennessee	5,037,598	631,576 (11.3%)	1,677,950 (33.2%)	4,858,316	297,311 (6.10%)	1,614,989 (33.60%)	1,477,761 (38.68%)	1,086,272 (22.80%)
United States	245,628,960	25,942,874 (9.5%)	72,159,365 (29.5%)	236,406,904	10,407,185 (4.40%)	65,476,522 (28.20%)	69,662,357 (38.52%)	41,491,223 (18.10%)

Report Area	Total Population	Cancer Mortality 2013-2017 Average Annual Deaths / (Age-Adjusted Rate Per 100,000 Pop.)	Coronary Artery Disease Mortality 2013-2017 Average Annual Deaths / (Age-Adjusted Rate Per 100,000 Pop.)	Drug Poisoning Mortality 2013-2017 Average Annual Deaths / (Age-Adjusted Rate Per 100,000 Pop.)	Heart Disease Mortality 2013-2017 Average Annual Deaths / (Age-Adjusted Rate Per 100,000 Pop.)	Lung Disease Mortality 2013-2017 Average Annual Deaths / (Age-Adjusted Rate Per 100,000 Pop.)	Stroke Mortality 2013-2017 Average Annual Deaths / (Age-Adjusted Rate Per 100,000 Pop.)	Infant Mortality 2006-10 / (Rate per 1,000 Live Births)
Greene County, TN	68,685	188 (183.6)	116 (117.8)	15 (23.5)	227 (234.1)	75 (73.5)	47 (48.1)	16 (4.60)
Hawkins County, TN	56,552	157 (192.5)	105 (130.0)	16 (29.5)	182 (228.7)	52 (62.4)	31 (40.6)	19 (6.30)
Johnson County, TN	17,782	59 (217.0)	26 (98.4)	3 (Suppressed)	49 (186.6)	16 (58.0)	10 (38.3)	4 (4.70)
Unicoi County, TN	17,812	59 (203.7)	43 (148.5)	4 (Suppressed)	66 (225.5)	17 (58.5)	10 (33)	8 (9.20)
Tennessee	6,657,368	14,256 (177.06)	9,888 (126.11)	1,335 (20.40)	15,764 (203.21)	4,369 (55.11)	3,460 (45.24)	3434 (8.20)
United States	323,258,000	596,810 (155.3)	365,301 (94.7)	49,715 (15.60)	637,258 (165.9)	155,285 (40.6)	141,952 (37.2)	136369 (6.50)

Conclusions and Future Directions

- Challenges:
 - Personnel recruitment – Family Medicine physicians, nursing, staff
 - Communication –
 - Interested parties
 - Experts/experienced
 - Shared goals and outcomes
 - Payer mix
 - Federal sources
 - Reserves
 - Loan
 - Funding considerations
 - Payer mix
 - Federal sources
 - Reserves
 - Loan
- Potential funding resources:
 - Federally Qualified Health Center (new or expansion, look-alike)
 - Health Center Program (Awardee or Look-alike; qualifies for HPSA and NHSC)
 - Tennessee Center for Health Workforce Development
 - Investment funding
 - Loan
- Next steps:
 - Disseminate information to Dean and COM leadership
 - Engage community leaders
 - Approach local medical community
 - Identify potential physical locations
 - Solidify funding source

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