Utah's Physician Workforce, 2020

The Utah Medical Education Council

UTAH'S PHYSICIAN WORKFORCE, 2020

The Utah Medical Education Council

State of Utah

www.umec.utah.gov

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THE UTAH MEDICAL EDUCATION COUNCIL

The Utah Medical Education Council (UMEC) was created in 1997 to secure and stabilize the state's supply of health care clinicians. The enabling legislation authorized the UMEC to conduct healthcare workforce research, advise on Utah's healthcare training needs, and influence graduate medical education financing policies. In addition, UMEC facilitates the training of healthcare professionals in rural areas of the state. The state legislature expanded UMEC's research responsibilities in 2013 to include nursing and UMEC has accepted the designation as the Nursing Workforce Information Center. The UMEC is presided over by an eight-member board appointed by the Governor to bridge the gap between the health care workforce industry and educational interests. Members of the UMEC include:

Wayne Samuelson, MD (Chair)	**C. Gregory Elliott, MD**
Vice Dean, School of Medicine University of Utah	Intermountain Healthcare
John Berneike, MD	**Douglas D. Gray, MD**
Director, Family Practice Residency Program Utah Health Care Institute	School of Medicine University of Utah
Amy Khan, MD	**Mary Williams, RN, Ph.D.**
Executive Medical Director Regence BlueCross BlueShield of Utah	Public Member
Sue Wilkey, DNP, RN	**Gar Elison**
Public Member	Public Member

ACKNOWLEDGEMENTS

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ADDITIONAL RESOURCES

HEALTHCARE WORKFORCE REPORTS

Since its establishment, the UMEC has completed multiple reports on Utah's healthcare workforce, including:

- Advanced Practice Nurses
- Dentists
- Genetic Counselors
- Medical Technologists
- Mental Health Professionals
- Occupational Therapists
- Pharmacists
- Podiatrists
- Physical Therapists
- Physicians
- Physician Assistants
- Radiology Technologists
- Registered Nurses

For access to any of these reports, please visit umec.utah.gov.

PHYSICIAN JOB OPPORTUNITIES IN UTAH

The UMEC conducts annual job fairs for Physicians and Advanced Practitioners (PAs, APRNs including CNAs, CNMs, CRNAs, and NPs) attending training programs and/or practicing in Utah. These job fairs are free of cost for attendees and are geared towards promoting retention of Utah trained workforce in Utah. Major health care employers in Utah are invited to recruit at the fairs. As a part of its rural workforce initiative, the UMEC encourages rural and frontier hospitals, clinics, and practices to take part in these job fairs by discounting their participation fees.

The UMEC also hosts a listing of Utah physician jobs by specialty at umec.utah.gov/umec-job-board.

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EXECUTIVE SUMMARY

- As of September 2019, there were 12,318 physicians licensed in the state of Utah, an increase of 23.3% since 2015.

- The share of licensed physicians reporting that they actively practice in Utah stands at 65.8% (8,101 physicians).

- Of physicians practicing in the state, 7,161 (88.4%) spend more than 50% of their time in direct patient care, higher than what was reported in both 2015 (75.1%) and 2010 (82.9%).

- The distribution of physicians across primary or specialty care has remained constant. Similar to the 2010 and 2015 surveys, roughly one-third (34.5%) of physicians provide primary care (Family Practice, General Internal Medicine, General OB/GYN, and General Pediatrics) and approximately two-thirds (64.3%) provide specialty care. Over half of DOs in Utah provide primary care.

- The median age of Utah physicians is 48.

- Utah physicians remain disproportionately non-Hispanic white (89.6% vs. 78% of the overall Utah population), but the younger cohorts are more diverse. The under 35 cohort is 80.7% non-Hispanic white, compared to 95.3% of the over 65 cohort.

- Women now represent 27% of Utah's physician workforce, continuing the trend toward gender parity seen both in the state and in the nation. Looking at the workforce by age cohorts, the younger the physician cohort, the closer to gender parity, with the youngest cohort nearly achieving that status.

- A primary care physician's median income, adjusting to a standard 40-hour workweek, is $194,415 ($244,533 unadjusted). A specialist, on the other hand, makes an adjusted $262,436 ($325,362 unadjusted).

- The Association of American Medical Colleges (AAMC) reports that the cost of medical training continues to grow: the 4-year cost of attendance has risen to $255,517 for public institutions and $337,584 for private institutions (AAMC, 2019b). The median inflation-adjusted debt for Utah physicians graduating from a public institution is $108,254, while physicians graduating from a private institution report a median of $215,756.

- 60.6% of physicians report that they have experienced burnout, and of that share, 51.2% say their burnout has led them to either reduce the number of hours worked or years until retirement. Administrative burden, work-life balance issues, and health information technology are the top contributors to feelings of burnout.

- Although there have been significant increases in telemedicine use since 2015 (13.1% of providers reporting its use then and 50.2% in 2020), this growth is likely understated as most survey responses were collected before the COVID-19 public health emergency, which has led to rapid uptake of this technology.

- Utah's current ratio of providers to 100,000 people is 243.6 physicians, which falls below the national ratio of 277.8. In order to maintain the current ratio of 243.6 physicians per 100,000 population, Utah needs to add 137 physicians to the workforce per year.
- An average of 413.2 physicians are added to the Utah workforce each year, equivalent to 478.1 FTEs at the average FTE of 1.157.
- Profiles of every specialty are found in the Appendix. These profiles include FTEs, demographics, geographic distribution, recommendations on the pursuit of a specialty, hours, income, debt, practice information, and factors influencing specialty choice.

POLICY RECOMMENDATIONS

In keeping with the mission of the UMEC, the 2020 update to the report on Utah's Physician Workforce continues to provide decision-makers with timely healthcare workforce research and advice on Utah's healthcare training needs and graduate medical education (GME) policies. In this role, the UMEC facilitates communication and collaboration between the stakeholders of Utah's medical workforce. As such, the UMEC recommends supporting the following policies to develop and maintain a sustainable, efficient, and adequate medical workforce supply for the state.

1. **Research the Impact of Telemedicine**
   To fully and accurately assess Utah's physician capacity, a more detailed understanding of the ocntributions of telehealth providers working outside Utah is needed. Additionally, the rapid growth of telemedicine as a method of care delivery in the wake of the COVID-19 public health emergency and what it means for meeting the health needs of the state should be explored.

2. **Support for Pipeline Development for Medical Careers**
   It is crucial to introduce medicine as a career choice early in the educational pipeline and mentor students through their educational experience. Focus placed on geographic and ethnic diversity, along with gender parity, will result in a workforce that reflects the culture and needs of the state's population. The Area Health Education Centers in Utah and the Southern Utah University's Center for Rural Health are two agencies that are actively engaged in this process. The UMEC recommends continued support for these agencies to strengthen their efforts.

3. **Workforce Training Development**
   Utah faces a maldistribution, in terms of both specialty and geographic location, of physician practices. Efforts must be maintained to train not just more physicians but the right types of physicians to meet the needs of the population. According to the American Association of Medical Colleges (AAMC)'s most recent rankings, Utah is ranked 44th in the nation in physician-per-100,000 population ratio and last for primary care physician-per-100,000 population ratio. The UMEC recommends the following:

   a. **Research into Interprofessional Care**
      Health care is changing rapidly to achieve better health, better quality, controlled cost, and a sustainable workforce. One fundamental change is interprofessional team care development, including diverse professionals such as physicians, nurses, nurse practitioners, physician assistants, clinical pharmacists, medical assistants, social workers, care managers, psychologists, educators, and others. Preparing and deploying the right number and mix of these team members to serve the needs of the

population is complicated, costly, and requires long lead times. However, old models of estimating the need for different professionals, based on simple ratios of individual disciplines to population (e.g., physicians per 100,000 population) do not account for the emergence of team care and changing organizational and payment models for health care.

The UMEC recommends conducting further research into the delivery of interprofessional care. Certainly, considerable growth in the Nurse Practitioner and Physician Assistant workforces over the last five years will influence future physician requirements to meet the needs of the population.

4. **Collect and Update Core Workforce Data More Frequently**

Access to timely information is critical for policymakers and industry leaders to make effective decisions. Improvement of data collection will allow for a more complete picture of the workforce when it is gathered at more regular intervals. The collection of basic demographic data from the entire physician workforce would enable more accurate reporting, especially for smaller specialties.

The UMEC continues to collect demographic and practice information from healthcare providers in Utah through periodic paper surveys. While this method has historically resulted in high response rates and statistically sound data, response rates are declining over time and paper surveys are time-intensive, requiring multiple surveys sent out to each provider to increase response rates and manual data entry. It is also more prone to the introduction of human error in the handling of surveys and processing of data. Based on national minimum data set recommendations for what is important to track about the workforce, a core set of questions could be added to the license and renewal process. This change would require a sponsor from the medical professional community to call for legislative direction to change the rules governing what data is collected by DOPL at the time of licensure and renewal and to direct that the UMEC manage this data. Automating the data collection process would allow the UMEC to produce analysis on a two-year cycle rather than the current five-year cycle. It would also allow UMEC staff more time to focus work on advanced analytics such as workforce optimization modeling, machine learning-based predictive modeling, and incorporation of other existing government datasets into analyses of the medical workforce.

PHYSICIAN CHARACTERISTICS

SUPPLY AND DISTRIBUTION

AGGREGATE SUPPLY

As of September 2019, there were 12,318 physicians licensed in Utah, an increase of 23.3% since 2015, representing a significantly increased growth rate compared to the previous iteration of this report, which saw only an 11.8% increase over five years. The share of licensed physicians reporting that they actively practice[1] in Utah stands at 65.8%, up from 60.4% in 2015 and similar to the 67.1% reported in 2010.

Figure 1: *Utah-licensed Physician Status*
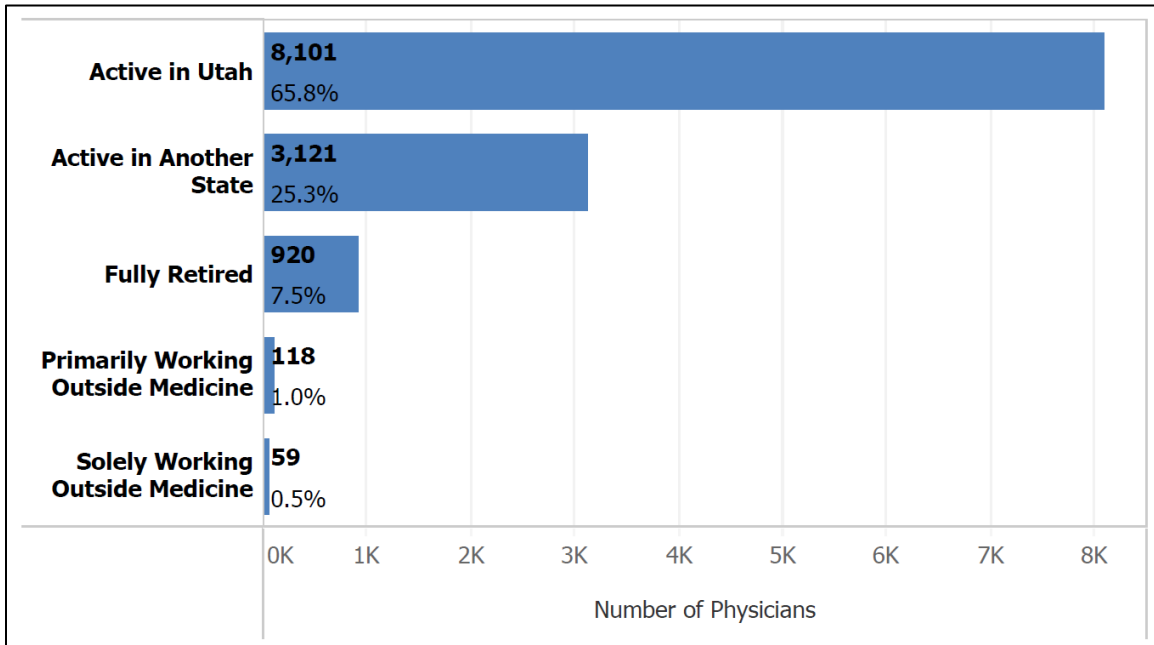
MoE +/- 1.5%

Of the 8,101 physicians actively practicing in Utah, 7,161 (88.4%) spend more than 50% of their time in direct patient care, higher than what was reported in both 2015 (75.1%) and 2010 (82.9%). The five-year growth numbers can be seen in *Figure 2* on page 6 and specialty-specific numbers can be seen in the "Specialty Profiles" section beginning on page 57.

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[1] An actively practicing physician includes all activities: patient care, teaching, research, etc.

Figure 2: *Physician Practice Status — 5-Year Change*
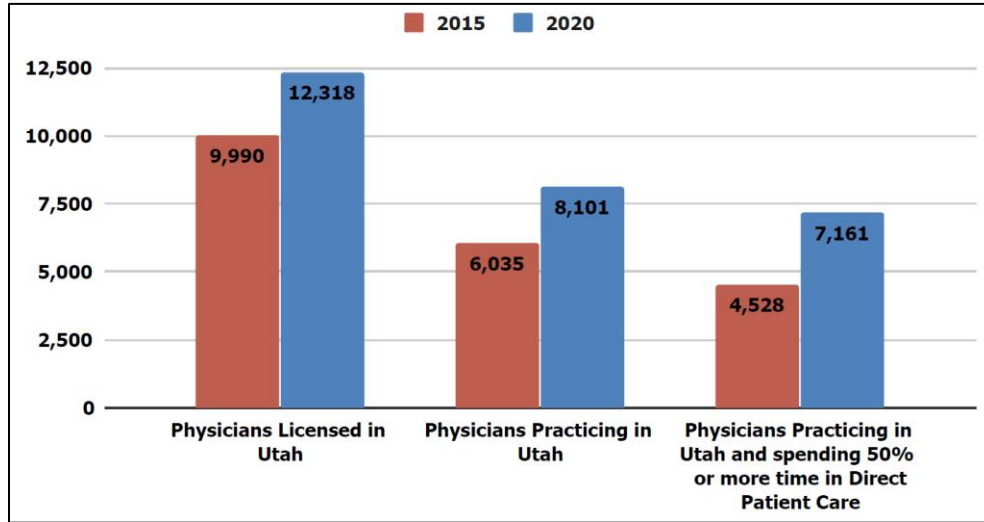
OUT-OF-STATE PHYSICIANS

Roughly a quarter of physicians licensed in Utah report actively practicing in another state. A thematic analysis was done on this group to gauge their reasons for maintaining Utah licensure (*Figure 3* on page 7), along with an analysis of the relative importance of factors that led to practicing outside of Utah.

Reasons for Maintaining Utah Licensure

The ***possibility*** of relocating to or working in Utah was the most frequently mentioned response, with roughly 35% of respondents citing it. In conjunction, 5.4% said they were ***planning*** to relocate to or work in Utah, while another 0.7% reported ***actively looking*** to relocate to or work in Utah. If applied to the entire population of physicians working outside of Utah, this would represent 1,104, 169, and 22 physicians, respectively. The other significant response came from those reporting working either in telehealth, remotely, [2] or on a locum tenens basis (27% of responses). The remaining coded responses could be classified as the following: physician has ties to Utah (e.g., family, former residence), does a limited amount of work in Utah, is keeping options open, [3] works for the federal government, [4] is required to by an employer, [5] simply finds it easier to maintain their Utah license, and will be letting the Utah license expire at the end of the cycle.

The reasons for maintaining licensure numbers presented in *Figure 3* reflect the results of UMEC staff coding a free-response question. Thus, they should not be interpreted as representative of all possible

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[2] Radiology and pathology services are frequently provided by remote physicians
[3] Responses coded as "keeping options open" are likely keeping open the possibility of working in Utah, but since the language used was not confirmatory coding was done conservatively
[4] Federal employment (e.g., VA) allows for any state license to ensure eligibility for employment
[5] One example would be an employer who also runs clinics in Utah and requires employees be available to work in those clinics if needed

reasons physicians may have given if they had instead been presented with a list of responses to choose from. They should only be viewed as insight into the relative importance of various factors and as preliminary research into any future efforts at a more quantitatively based approach to researching this topic. Comments were also analyzed by age but did not produce any notable difference in results.

Figure 3: *Reasons for Maintaining Utah Licensure*
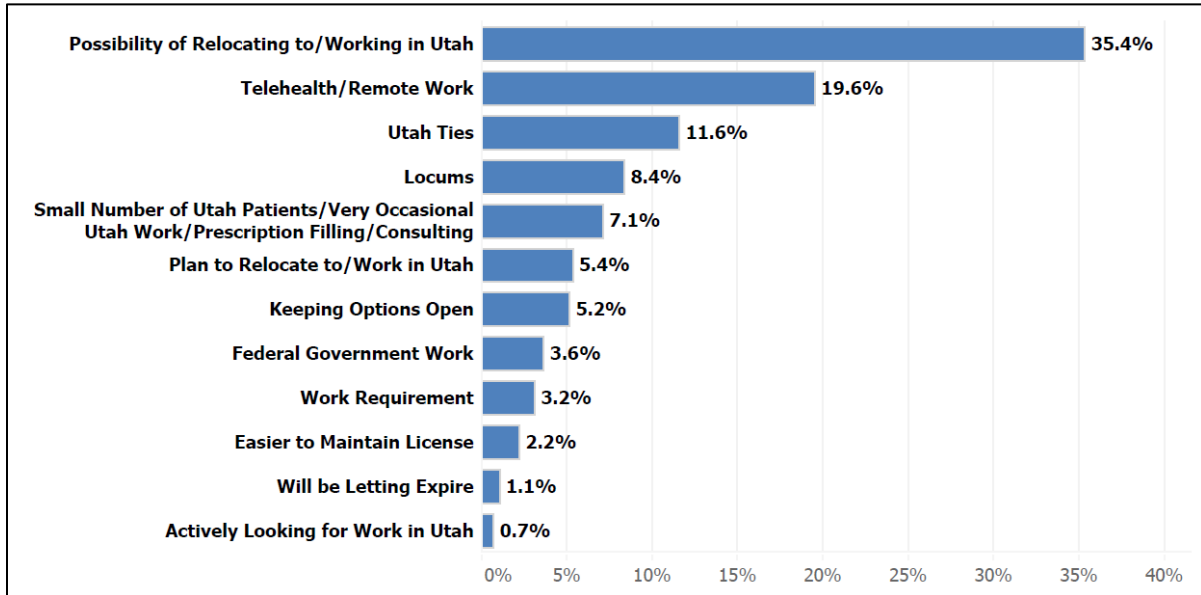
Note: *Total adds up to more than 100% since respondents could list multiple reasons for maintaining licensure*

Ratings of Factors Influencing Work Outside Utah

Physicians working outside Utah were also asked to rate the importance of various factors in their decision to work outside Utah. A ranking of 5 indicated a highly influential factor, while a ranking of 1 indicated the opposite. While health systems trying to attract physician talent may not have much control over family, lifestyle, or climate, they do have control over wages and working environment, which both rank right after family.[6]

Table 1: *Ratings on Importance of Various Factors for Working Outside of Utah*

1	Family	3.52
2	Wage/Payscale	3.17
2	Work Environment	3.15
4	Lifestyle	2.89
5	Climate	2.5

MoE: +/- 0.12

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[6] Wage/payscale and work environment are statistically equivalent

FULL-TIME EQUIVALENTS

There are an estimated 8,101 physicians currently practicing in Utah, although not all work the same number of hours each week (see "Work Hours" on page 38). Full-time-equivalent (FTE) calculations allow for a better understanding of actual physician capacity in the state. UMEC reports three FTE calculations, shown in *Table 2*.

- **Total Hour FTE:** This calculation simply adds up hours across primary and, if applicable, secondary sites and divides by a "standard" 40-hour workweek (e.g., 60 hours would equate to 1.5 FTEs, 20 hours would be 0.5 FTEs)
- **Standardized FTE:** Used by the Health Resources and Services Administration (HRSA), this calculation counts anything over 40 hours as 1 FTE and anything less than 40 hours in the same manner as the Total Hour FTE (e.g., 60 hours equates to 1 FTE, 20 hours equates to 0.5 FTEs)
- **Adjusted Standardized FTE:** Operates like the Standardized FTE, but when a physician reports only a secondary location in Utah, they are assigned .33 FTEs, regardless of hours reported

Table 2: FTEs

Total Hour FTEs	9,332
Standardized FTEs	7,230
Adjusted Standardized FTEs	7,234

The numbers reported in *Table 2* are based on work hours, as reported by survey respondents. However, some respondents chose not to respond to the relevant questions, meaning that FTEs are undercounted. To account for this, when respondents reported a location but no work hours, values were imputed based on averages for their age and gender. In total, hours were imputed for 85 primary sites and 13 secondary sites. When taking these imputed values into account, the Total Hour FTE increases to 9,514.

Figure 4: *FTEs — 5-Year Change*
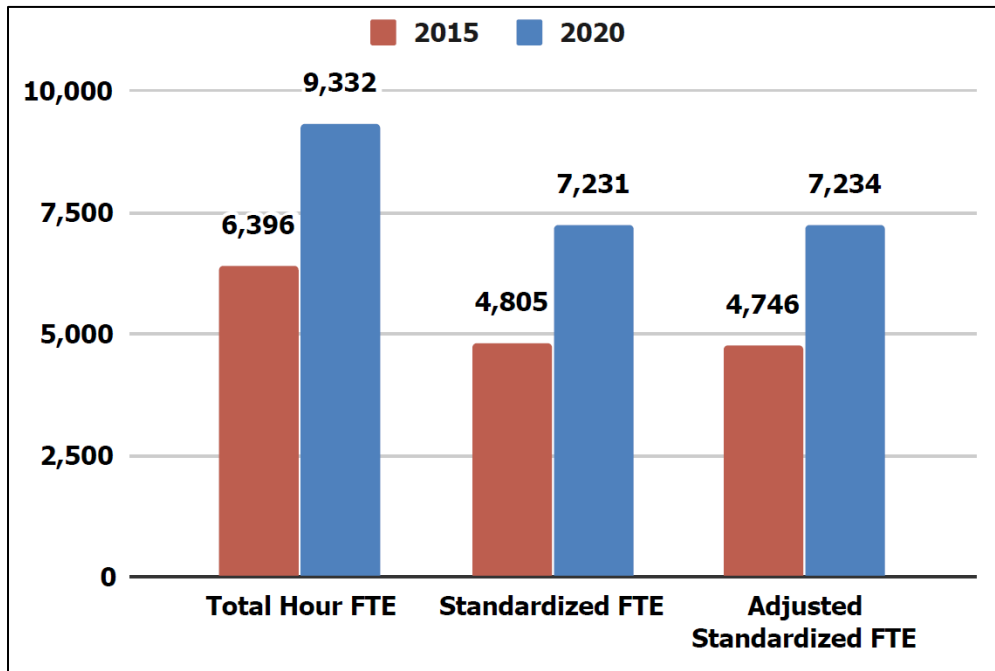
Figure 5: *Average FTEs per Physician— 5-Year Change*
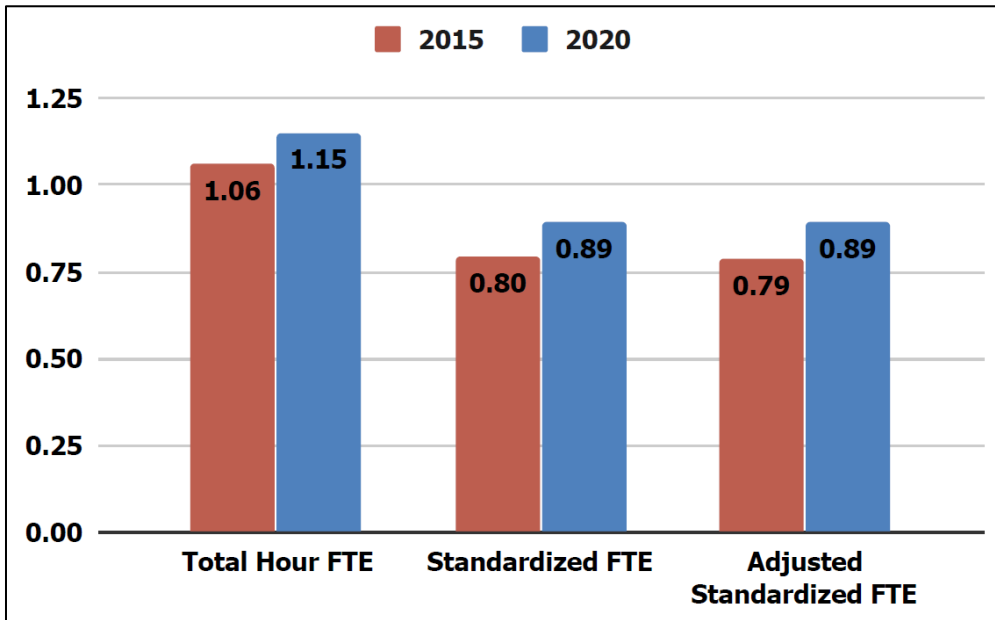
Figure 4 shows the absolute increase in FTEs since 2015, mostly driven by the increase in physicians practicing in the state. However, *Figure 5* shows the average FTEs worked per physician, which indicates that some of the growth seen in *Figure 4* is due to an increase in the number of hours physicians work. If these numbers had stayed constant between 2015 and 2020, there would be 746 fewer Total Hour FTEs or 781 fewer Standardized FTEs.

SPECIALTY DISTRIBUTION

The distribution of physicians in primary or specialty care has remained constant. Similar to the 2010 and 2015 surveys, roughly one-third of physicians provide primary care (Family Practice, General Internal Medicine, General OB/GYN, and General Pediatrics), while approximately two-thirds provide specialty care.

Figure 6: Specialty Distribution
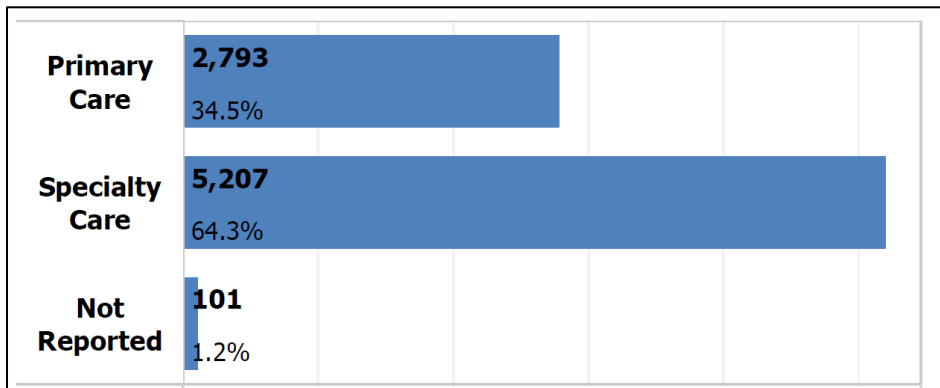
MoE: +/- 2%

However, when looking only at physicians with a DO degree, the pattern changes significantly from the overall makeup shown in *Figure 6*; over half of DOs in Utah provide primary care. With the addition of Rocky Vista University in Ivins and the soon-to-be-completed Noorda College of Osteopathic Medicine in Provo, more primary care physicians will be trained in Utah; this may, in time, lead to a greater proportion of Utah physicians practicing primary care.

Figure 7: Specialty Distribution — DOs
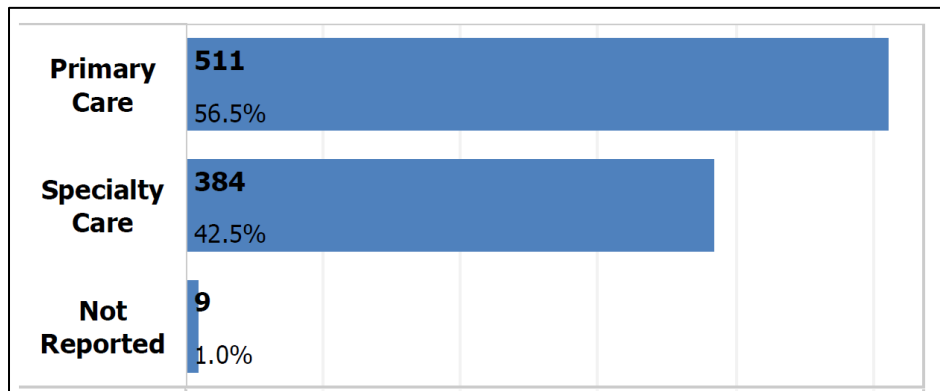
MoE: +/- 6.5%

Table 3: *Detailed Specialty Distribution*

Specialty	2020 Estimate	Lower Est.	Upper Est.
Addiction Medicine	22	9	38
Allergy & Immunology	47	23	71
Anesthesiology - General	659	570	748
Anesthesiology - Pain Management	44	20	68
Anesthesiology - Other subspecialties	23	7	39
Cardiology	119	78	160
Critical Care Medicine	83	51	115
Dermatology	216	167	265
Emergency Medicine	467	394	540
Endocrinology	32	8	56
Family Medicine - General	1,383	1,261	1,505
Family Medicine - Geriatrics	41	17	65
Family Medicine - Sports Medicine	61	37	85
Gastroenterology	63	39	87
Hematology/Oncology	74	42	106
Hospice and Palliative Medicine	12	5	28
Hospitalist - Internal Medicine	240	183	297
Hospitalist - Pediatrics	47	23	71
Hyperbaric Medicine	12	5	28
Infectious Diseases	54	30	78
Internal Medicine - General	419	346	492
Internal Medicine - Pediatrics	67	35	99
Internal Medicine - Other subspecialties	17	6	33
Medical Genetics	11	5	19
Nephrology	35	11	59
Neurology	154	113	195
OB/GYN - General	357	292	422
OB/GYN subspecialties	76	44	108
Occupational Health	64	32	96
Ophthalmology	246	189	303
Otolaryngology	123	82	164
Pathology - General	129	88	170

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Specialty	2020 Estimate	Lower Est.	Upper Est.
Pathology subspecialties	94	62	126
Pediatrics - General	532	451	613
Pediatrics subspecialties	191	142	240
Physical Medicine and Rehabilitation	128	87	169
Preventive Medicine/Public Health	13	5	29
Psychiatry - General	198	149	247
Psychiatry - Child and Adolescent	109	68	150
Psychiatry - Other subspecialties	10	5	18
Pulmonology	49	25	73
Radiology - Diagnostic	189	140	238
Radiology - Interventional	26	10	42
Radiology - Therapeutic/Radiation Oncology	31	15	47
Rheumatology	18	4	34
Sleep Medicine	9	3	17
Surgery - Cardiothoracic/Thoracic	28	12	44
Surgery - Colon and Rectal	10	3	26
Surgery - General	202	153	251
Surgery - Neurological	60	36	84
Surgery - Orthopaedic	240	183	297
Surgery - Other subspecialties	56	32	80
Surgery - Plastic	105	64	146
Surgery - Vascular	29	13	45
Urgent Care Medicine	107	66	148
Urology	112	71	153
Other specialty	56	32	80

Note: Upper and lower-bound estimates are based on a 95% confidence interval with a design effect of 1.2 to account for disproportionate response rates among age groups. In instances where a lower bound estimate was below the number of surveys received, the actual count was used instead (Addiction Medicine, Hospice and Palliative Medicine, Hyperbaric Medicine, Internal Medicine – Other subspecialties, Medical Genetics, Preventive Medicine/Public Health, Psychiatry – Other subspecialties, Rheumatology, Sleep Medicine, Surgery – Colon and Rectal)

GEOGRAPHIC DISTRIBUTION

Physicians are not evenly distributed throughout the state. The following pages detail how that distribution looks overall and by primary and specialty care in each of Utah's 13 Local Health Districts (LHDs). The Total Hour FTE calculation was used as it provides the best understanding of total physician capacity and is measured in two ways:

- FTE Count and Share of Total
- FTE Physicians per 100,000

A small number of respondents indicated work hours but no location. In these instances, the ZIP code was imputed from license data. Only 49 primary sites and ten secondary sites required this imputation.

All Physicians

FTE Count *(Share)*
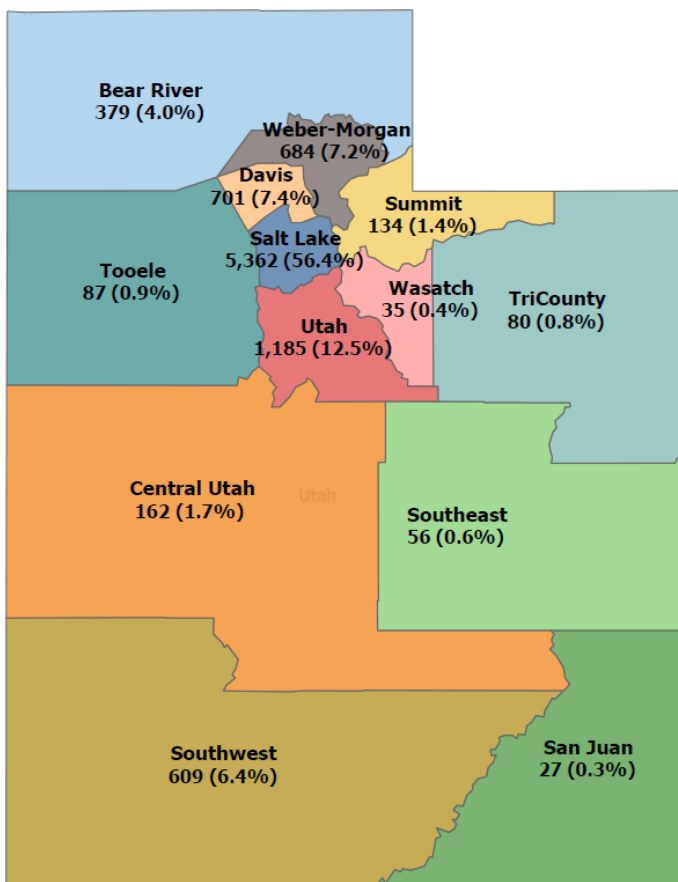
FTE Physicians per 100,000
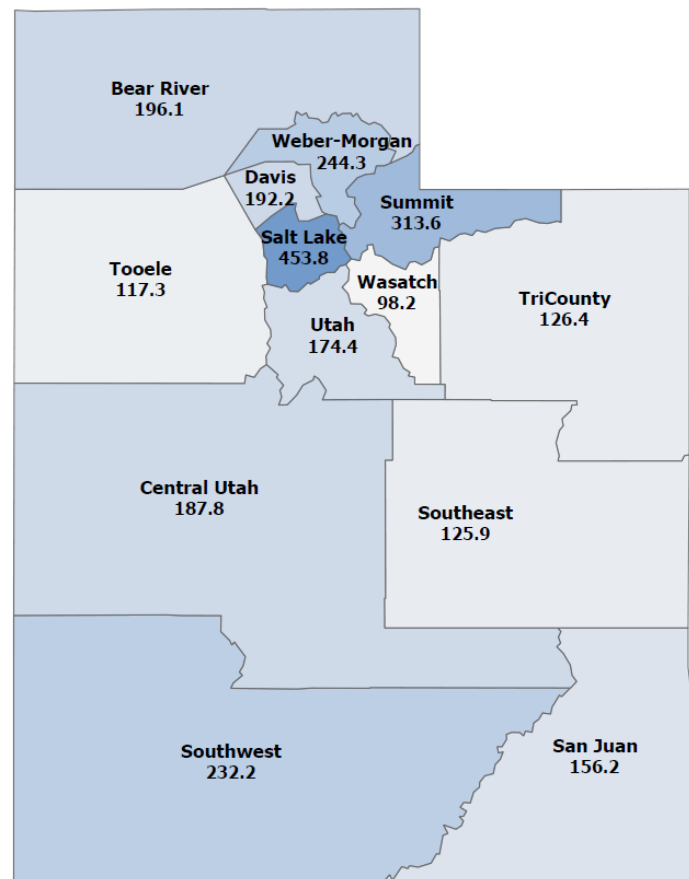
Salt Lake County and Summit County have the highest number of FTE physicians per 100,000 population while Wasatch and Tooele have the lowest ratio. However, since both these low ratio counties border the highest ratio counties, it can be assumed that care remains accessible.

Primary Care Physicians

FTE Count (Share)

Bear River
185 (5.7%)

Weber-Morgan
257 (7.9%)

Davis
315 (9.7%)

Summit
46 (1.4%)

Salt Lake
1,462 (44.9%)

Tooele
57 (1.8%)

Wasatch
12 (0.4%)

TriCounty
47 (1.4%)

Utah
472 (14.5%)

Central Utah
135 (4.1%)

Southeast
29 (0.9%)

Southwest
214 (6.6%)

San Juan
26 (0.8%)

FTE Physicians per 100,000 Population

Bear River
95.4

Weber-Morgan
96.6

Davis
86.3

Summit
107.1

Salt Lake
123.8

Tooele
76.8

Wasatch
34.8

TriCounty
75.0

Utah
69.6

Central Utah
159.2

Southeast
85.7

Southwest
81.5

San Juan
152.1

County Makeup of Multi-County LHDs

Bear River: Cache, Box Elder, Rich

Central Utah: Juab, Millard, Piute, Sanpete, Sevier, Wayne

Southeast: Carbon, Emery, Grand

Southwest: Beaver, Garfield, Iron, Kane, Washington

TriCounty: Daggett, Duchesne, Uintah

There are more primary care physician (PCP) FTEs than specialist FTEs in more rural LHDs:

- Central Utah
- San Juan
- Southeast
- TriCounty
- Tooele

With the relatively small number of survey responses for rural LHDs, a single survey response creates more dramatic changes in the numbers. For example, San Juan County shows a high PCP ratio, but the Utah Department of Health reports San Juan County being about average on this measure. However, UMEC data is not directly comparable due to inclusion of OB/GYNs as PCPs and reporting of FTE ratios.

Specialty Care Physicians

FTE Count (Share)

Bear River
195 (3.1%)

Weber-Morgan
422 (6.8%)

Davis
386 (6.2%)

Summit
84 (1.4%)

Salt Lake
3,854 (62.3%)

Tooele
30 (0.5%)

Wasatch
21 (0.3%)

TriCounty
34 (0.5%)

Utah
706 (11.4%)

Central Utah
27 (0.4%)

Southeast
26 (0.4%)

Southwest
386 (6.2%)

San Juan
1 (0.0%)

FTE Physicians per 100,000 Population

Bear River
100.6

Weber-Morgan
150.9

Davis
105.9

Summit
196.5

Salt Lake
326.2

Tooele
40.5

Wasatch
59.5

TriCounty
53.7

Utah
104.0

Central Utah
39.2

Southeast
79.4

Southwest
150.2

San Juan
4.1

County Makeup of Multi-County LHDs

Bear River: Cache, Box Elder, Rich

Central Utah: Juab, Millard, Piute, Sanpete, Sevier, Wayne

Southeast: Carbon, Emery, Grand

Southwest: Beaver, Garfield, Iron, Kane, Washington

TriCounty: Daggett, Duchesne, Uintah

There are more specialist FTEs than primary care physician FTEs in more urbanized LHDs:

- Salt Lake
- Southwest
- Utah
- Wasatch
- Summit
- Bear River
- Davis
- Weber-Morgan

Rural/Urban Divide

9.1% of physicians spend some amount of practice time in a rural county (see *Table 4*); however, rural Utahns make up 15.4% of the population (Kem C. Gardner Policy Institute, 2017). As shown in *Table 5* and

Table **6** below, primary care physicians are more likely than specialists to practice in a rural county (13.5% vs. 6.8%). Physicians over the age of 65 are also more likely than the youngest cohort of physicians to practice in a rural area (10.4% vs. 5.9%).

Table 4: County Classification as Urban or Rural

Urban Counties		Rural Counties					
Cache	Utah	Beaver	Duchesne	Iron	Morgan	Sanpete	Uintah
Davis	Washington	Box Elder	Emery	Juab	Piute	Sevier	Wasatch
Salt Lake	Weber	Carbon	Garfield	Kane	Rich	Summit	Wayne
		Daggett	Grand	Millard	San Juan	Tooele	

Table 5: Rural/Urban Divide — Primary Care vs. Specialists

	Rural Only	Rural Primary Urban Secondary	Urban Primary Rural Secondary	Urban Only	Any Rural[7]	Any Urban[8]
Primary Care	10.7%	0.8%	1.2%	87.3%	13.5%	88.8%
Specialty Care	4.4%	0.6%	1.4%	93.6%	6.8%	95.3%

MoE: +/- 2%

Table 6: Rural/Urban Divide — Age

	Rural Only	Rural Primary Urban Secondary	Urban Primary Rural Secondary	Urban Only	Any Rural[7]	Any Urban[8]
Under 35	4.5%	0%	1.3%	94.2%	5.9%	95.3%
35-44	5.9%	0.5%	1.4%	92.2%	7.8%	94.1%
45-54	7.2%	1%	1.0%	90.9%	9.1%	92.8%
55-64	7.6%	0.8%	1.5%	90.1%	9.9%	92.4%
65 and Older	7.8%	0.9%	1.7%	89.6%	10.4%	92.2%

MoE: +/- 2%

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[7] Rural practice only, rural primary site with an urban secondary site, or a rural secondary site
[8] Urban practice only, urban primary site with a rural secondary site, or an urban secondary site

DEMOGRAPHICS

The information in this section reflects physician demographics in the aggregate. For specialty-specific information, see "Specialty Profiles" on page 57.

AGE

The median age of Utah physicians is 48, lower than reported in the previous report, but this is likely due to the inclusion of first-year residents (see note under *Figure 8*). AAMC (2019a) reports that Utah has the lowest share of active physicians over the age of 60 (26.5%) in the country. The median share nationwide is 31.4%.

Figure 8: *Age Distribution of Utah Physicians (2010-2020)*
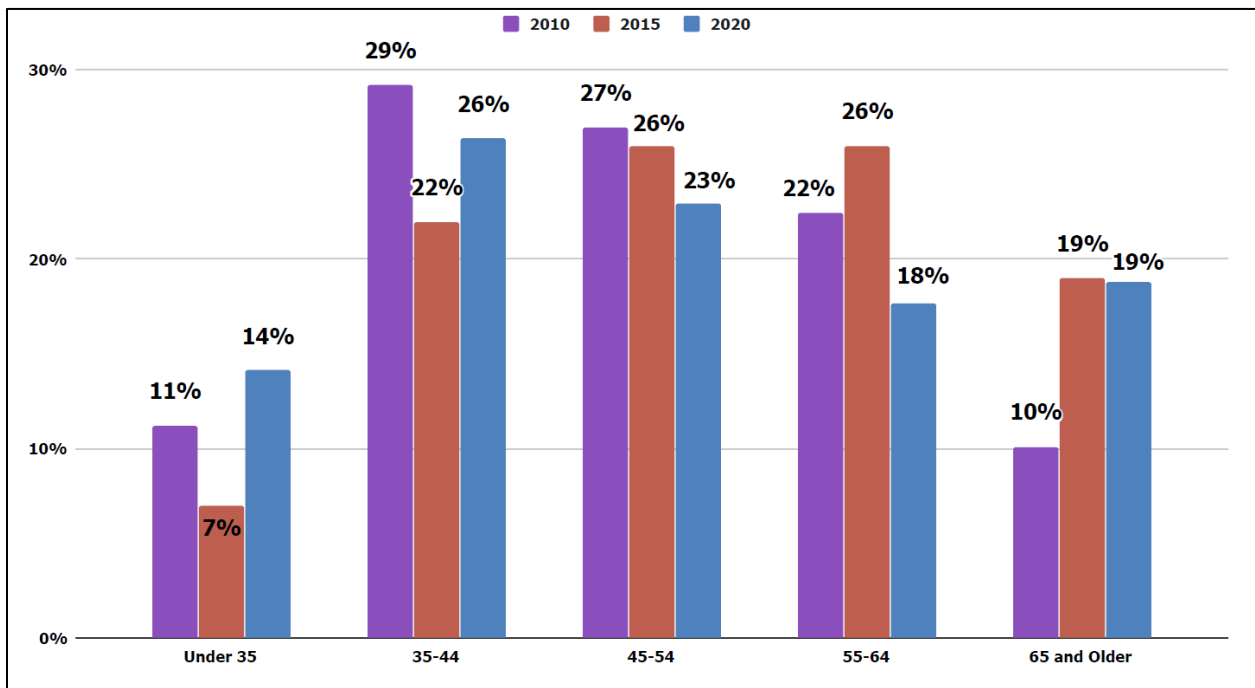
Note: *2020 data are from licensing data rather than survey data. In addition, data from the University of Utah were added to the 2020 numbers to include first-year residents who are physicians but have not yet shown up in DOPL licensing data – 150 residents thus had their ages imputed and were assumed to fit into the Under 35 category.*

RACE AND ETHNICITY

Utah physicians remain disproportionately non-Hispanic white (89.6% vs. 78% of the overall Utah population), but the younger cohorts are more diverse. The under 35 cohort is 80.7% non-Hispanic white, compared to 95.3% of the over 65 cohort.

Figure 9: *Racial/Ethnic Makeup of Physician Workforce*
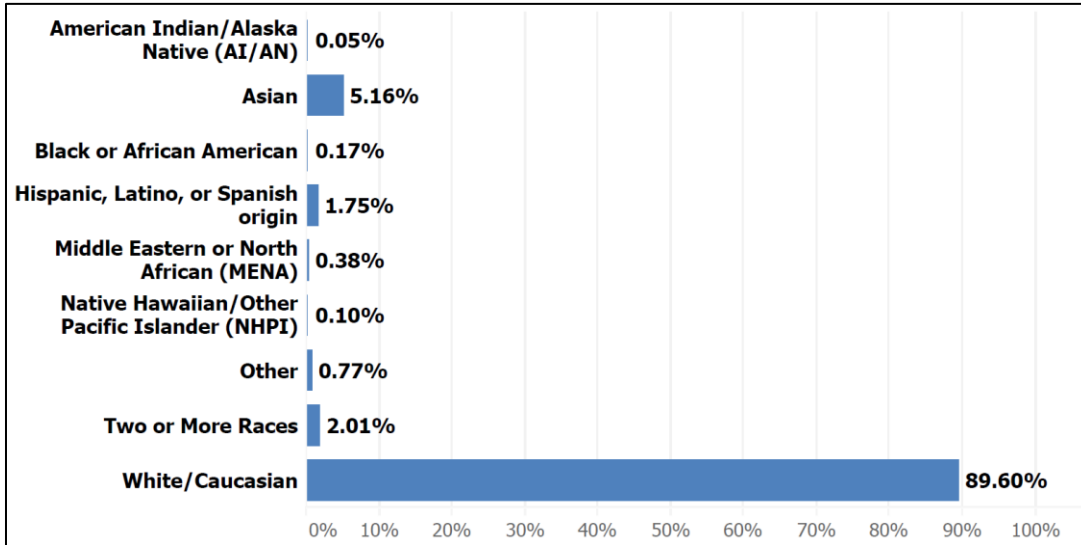
MoE: +/- 2%

Figure 10: *Minority Status by Age Cohort*
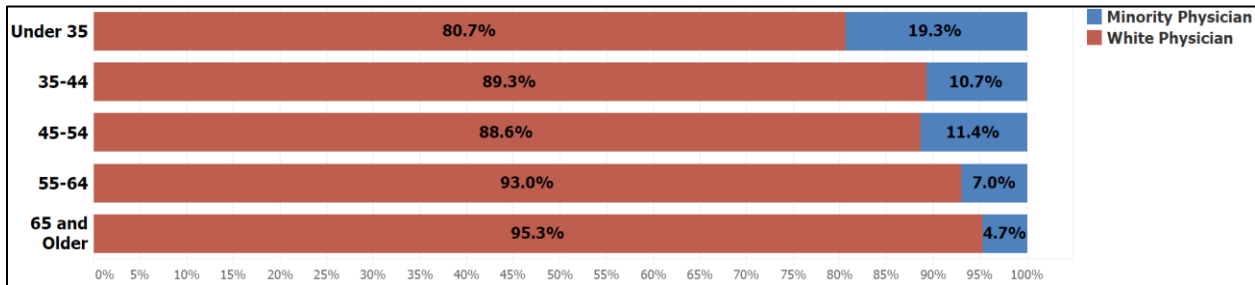
MoE: +/- 2%

Figure 11 shows that the racial diversity of the workforce has grown over time, though it has stagnated[9] since 2015. As younger, more diverse cohorts become a larger share of the workforce, Utah should expect to see the minority share of the workforce grow. Still, efforts must be made to attract minority students to the profession. Of particular importance is the large and growing share of Hispanic Utahns, who are dramatically underrepresented in the physician workforce.

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[9] The apparent decline is within the margin of error

Figure 11: *Workforce Diversity (1998-2020)*
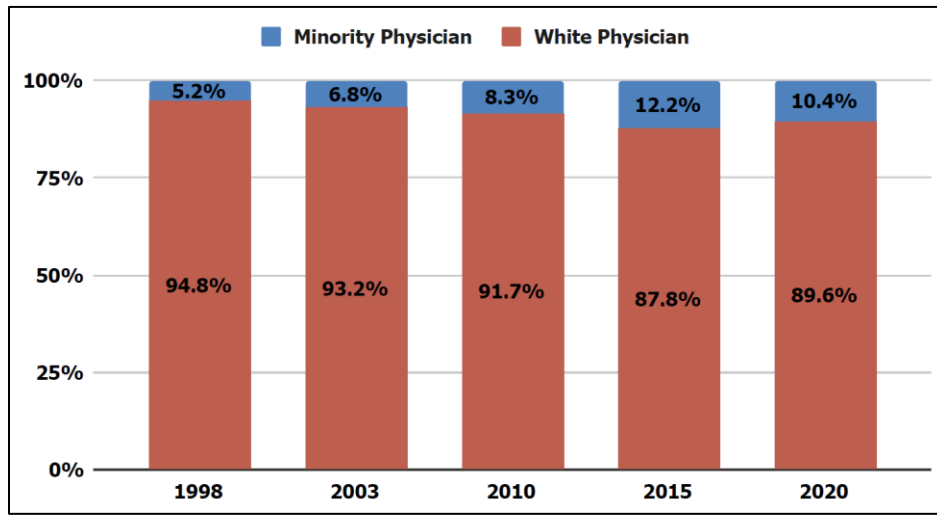
MoE: +/- 2%

Figure 12 details a "representation factor." This is a tool for quickly seeing how over- or under-represented various groups are. A factor of 1 means that the share of physicians reflects the share in the population at large (e.g., group X makes up 10% of the Utah population and 10% of the physician workforce). Asian Utahns are highly over-represented, while white Utahns are slightly over-represented, mixed-race Utahns are somewhat under-represented, and all other groups are dramatically under-represented.

Figure 12: *Representation Factor*
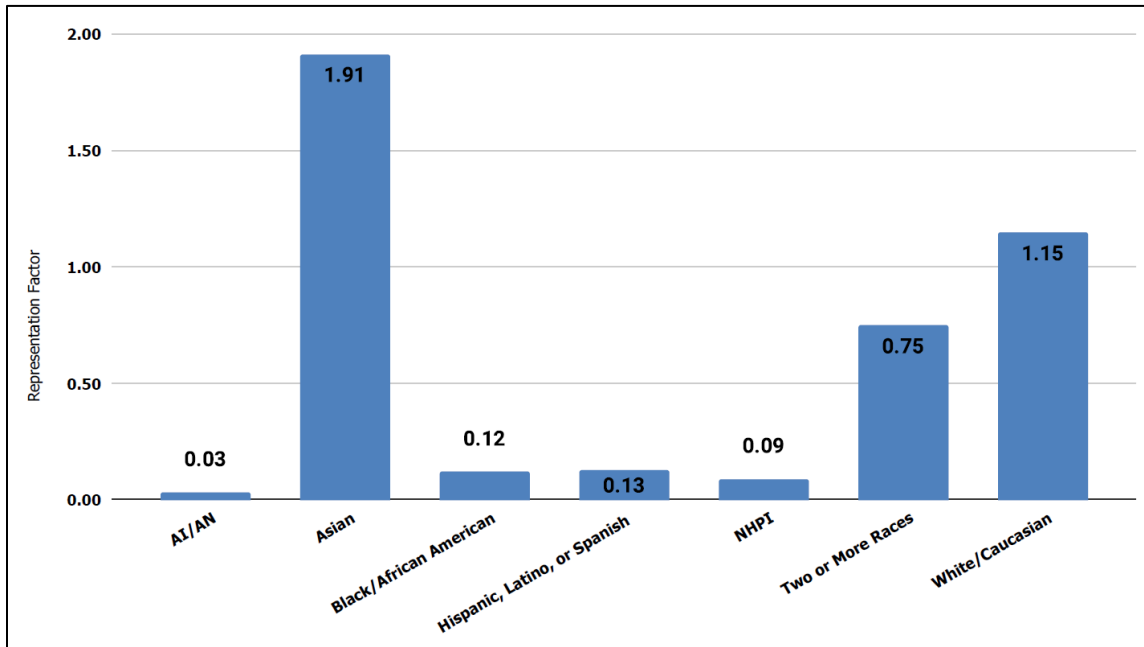
GENDER

Figure 13: Gender (Overall)

Male **5,894** 72.8%

Female **2,207** 27.2%
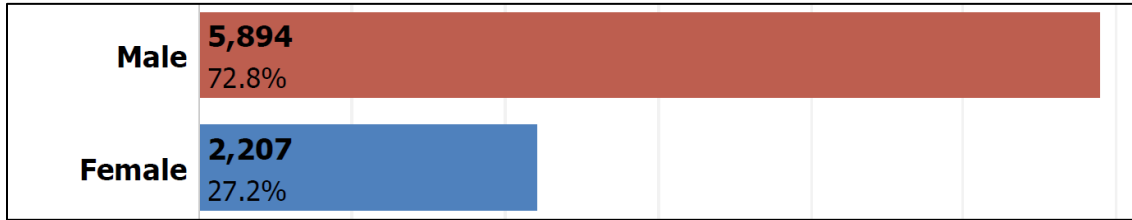
Figure 14: Gender (Age Groups)
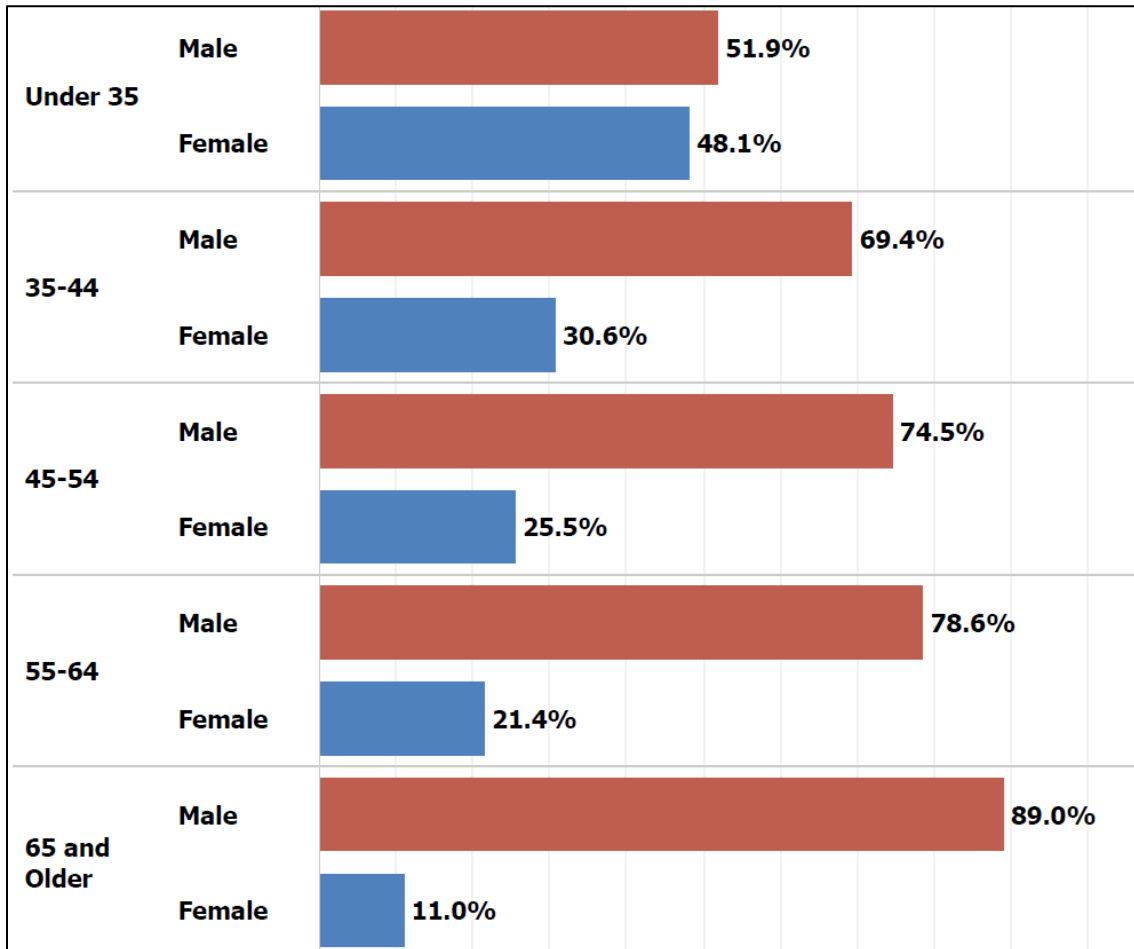
Age Group		
Under 35	Male	51.9%
	Female	48.1%
35-44	Male	69.4%
	Female	30.6%
45-54	Male	74.5%
	Female	25.5%
55-64	Male	78.6%
	Female	21.4%
65 and Older	Male	89.0%
	Female	11.0%

Women now represent 27% of Utah's physician workforce, continuing the trend toward gender parity seen both in the state and in the nation. As evidenced by *Figure 14*, the younger the physician cohort, the closer to gender parity, with the youngest cohort nearly achieving that status.

Figure 15: *Growth in Female Share of Utah Workforce*
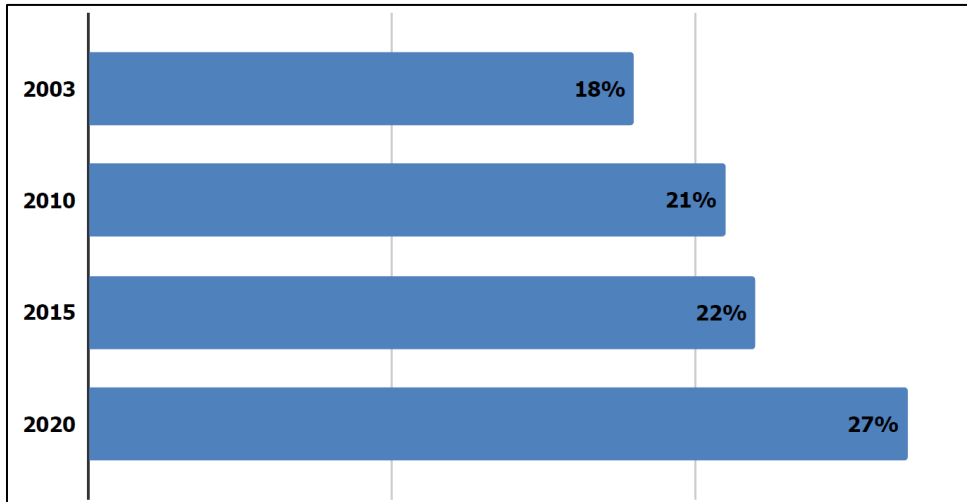
Figure 16: *Gender — Utah vs. U.S.*
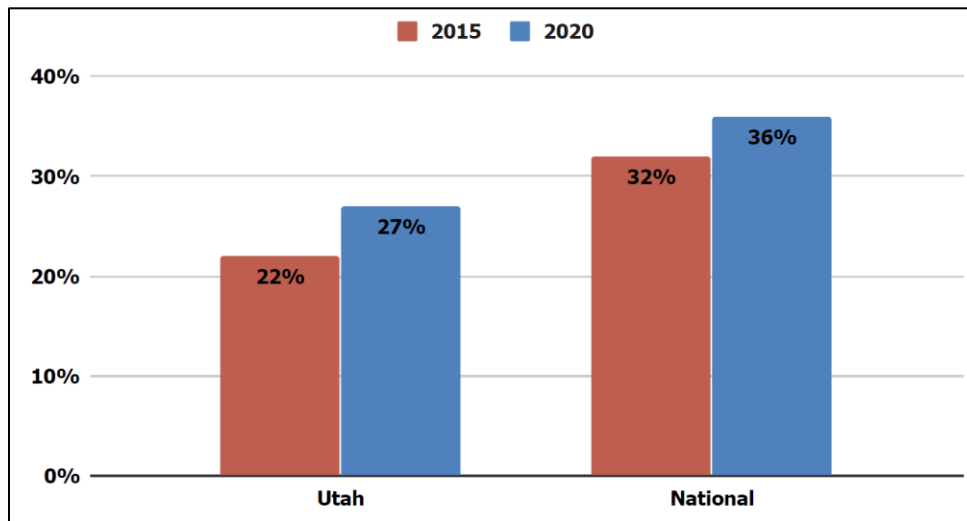
The growth in the female share of the workforce has been a long-term trend, rising from 18% in 2003 to 27% in 2020, representing an average yearly increase of roughly half a percentage point per year. This diversification mirrors the trend seen across the nation, with Utah diversifying its workforce at roughly the same pace as the nation. However, Utah remains well behind the country in terms of gender diversity. The only state with a lower share of women in the physician workforce is Idaho (25%). Utah shares the second to last position with Mississippi and Wyoming (Kaiser Family Foundation, 2020).

FINANCIAL DATA

The information in this section reflects physician income and debt in the aggregate. For specialty-specific information, see "Specialty Profiles" on page 57.

INCOME

A primary care physician's median income, adjusting to a standard 40-hour workweek, is $194,415 ($244,533 unadjusted). A specialist, on the other hand, makes an adjusted $262,436 ($325,362 unadjusted). These figures and the absolute increase since 2015 can be seen in *Table 7*. The median incomes Utah physicians report remain below the most recent national median reported data UMEC was able to gain access to from five years ago ($263,207 for primary care physicians, $360,367 for specialists) (MGMA, 2016). As will be discussed in more detail under *Figure 36* on page 47, the nationwide landscape for recruiting physicians may become more competitive over the next 15 years and pay can be a significant factor in attracting physician talent.

Table 7: *Physician Income*

	Primary Care	Specialty Care
Median Unadjusted	$244,533	$325,362
Absolute increase since 2015	$47,783	$60,931
Median FTE Adjusted	$194,415	$262,436
Absolute increase since 2015	$18,812	$40,879

Figure 17: Physician Income Distribution
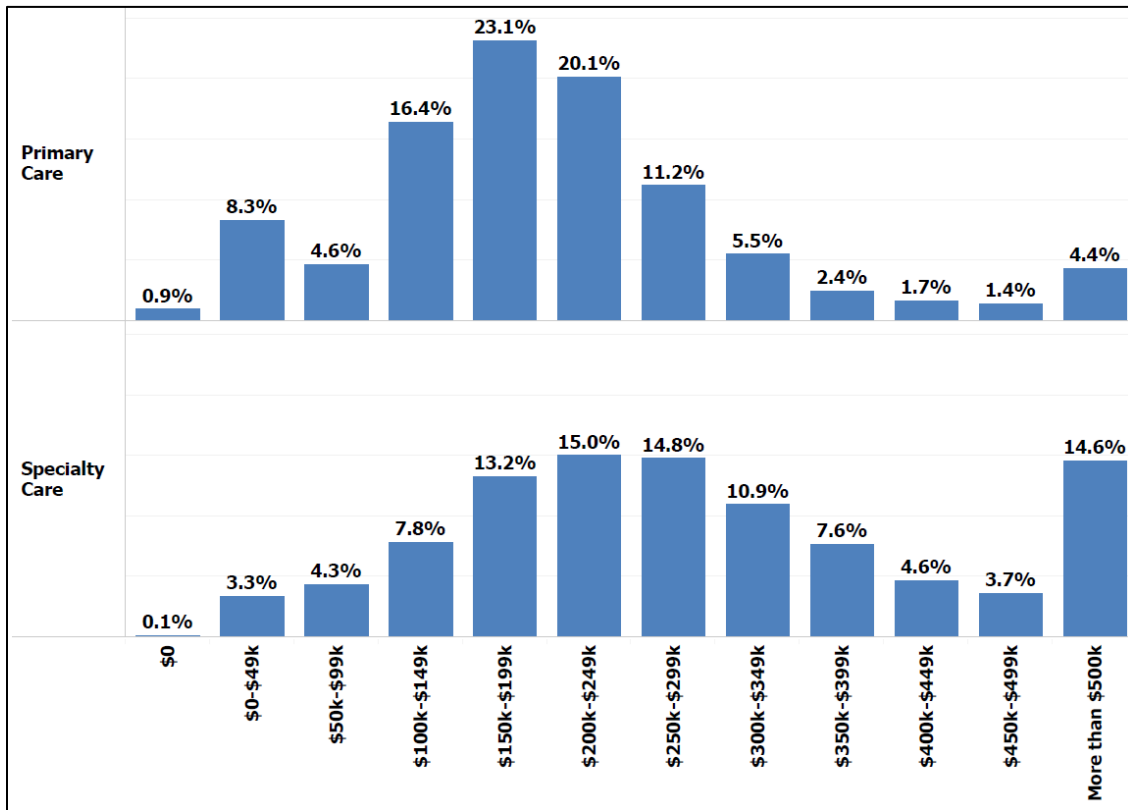
Figure 18: Divergence in Income Growth
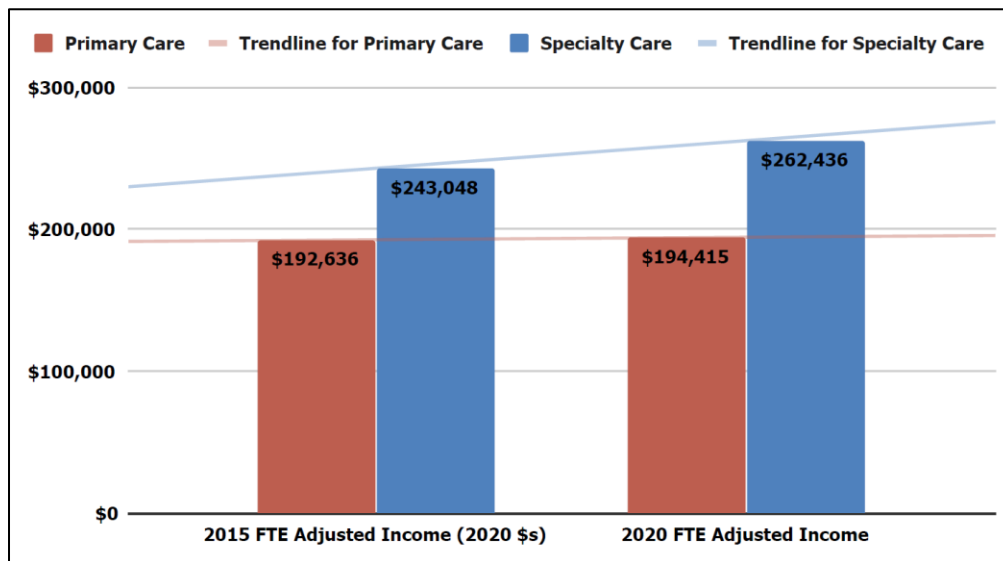
The absolute increases in compensation in *Table 7* appear compelling, but they are a bit misleading. A proper comparison should look at changes in income adjusted for inflation. *Figure 18* does just that with FTE-adjusted *and* inflation-adjusted median income. Under this apples-to-apples comparison, primary care saw a *real* increase of only $1,779 over five years (0.18% increase per year) versus a specialty care

increase of $19,388 over five years (1.6% increase per year). Income growth for specialists increased at nearly eight times the pace of primary care physicians.

The Centers for Medicare and Medicaid Services (CMS) is aware of the disparity between the pay for primary care physicians and specialists and has proposed that the 2021 Medicare Physician Fee Schedule (MPFS) "reallocate Medicare dollars, benefiting general medicine at the expense of some specialists" (Pifer 2020). As research indicates, private payers will likely follow CMS's lead (Clemens & Gottlieb, 2017).

DEBT

The burden of student debt continues to climb and is a frequently mentioned issue by physicians who would not recommend that a young person pursue medicine (see "Recommendations on Pursuing Medicine as a Career" on page 27). The most recent AAMC numbers for the graduating class of 2019 indicate that of the 73% of students who graduate with debt, the median stands at $200,000 (AAMC, 2019b). Even when not adjusted for inflation, as the numbers in *Table 8* do, the median debt at graduation for Utah graduates with debt from the past decade is higher ($215,819) and fewer Utah graduates report having graduated with no medical debt (11.3%).

AAMC also reports that the cost of medical training continues to grow: the 4-year cost of attendance has risen to $255,517 for public institutions and $337,584 for private institutions (AAMC, 2019b). That gap is reflected in the data collected by UMEC. The median inflation-adjusted debt for Utah physicians graduating from a public institution is $108,254, while physicians graduating from a private institution report a median of $215,756, nearly double that of public institution graduates.

Table 8: *Physician Debt*

		All Physicians	Physicians with Debt at Time of Graduation
Median Debt at Graduation*	All Physician Experience Cohorts	$135,474	$175,889
	Physicians Graduating in Past 10 Years	$228,763	$239,879
Median Current Debt	All Physicians Experience Cohorts	$0	$0
	Physicians Graduating in Past 10 Years	$138,056	$164,371

*adjusted to 2020 dollars

The debt burden faced by physicians continues to grow, as evidenced by *Figure 19* and *Figure 20*. Only a tenth of physicians graduating in the past 20 years report no debt at graduation while over half of physicians graduating 50 years ago do.

Figure 19: *Inflation-Adjusted Debt at Graduation, by Years Since Graduation Cohort*
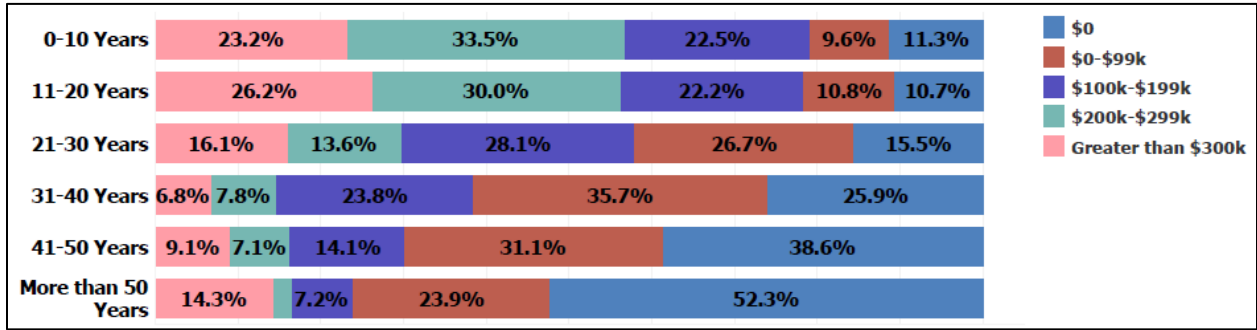
MoE: +/- 2%

Figure 20: *Current Debt, by Years Since Graduation Cohort*
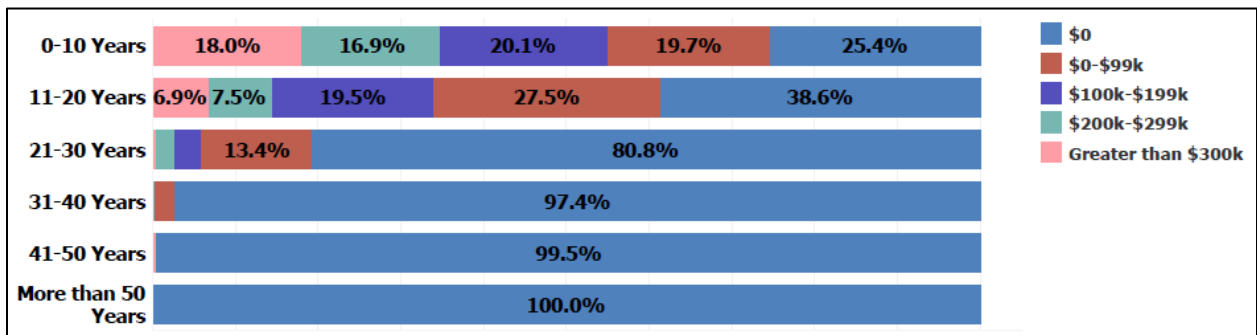
MoE: +/- 2%

Primary care physicians continue to report higher median debt at graduation than specialists — $147,935 compared to $129,021 or $186,878 compared to $171,654 when only looking at physicians who report having debt. Both, however, report a current median debt of $0.

Figure 21: *Inflation-Adjusted Debt at Graduation — Primary Care vs. Specialist*
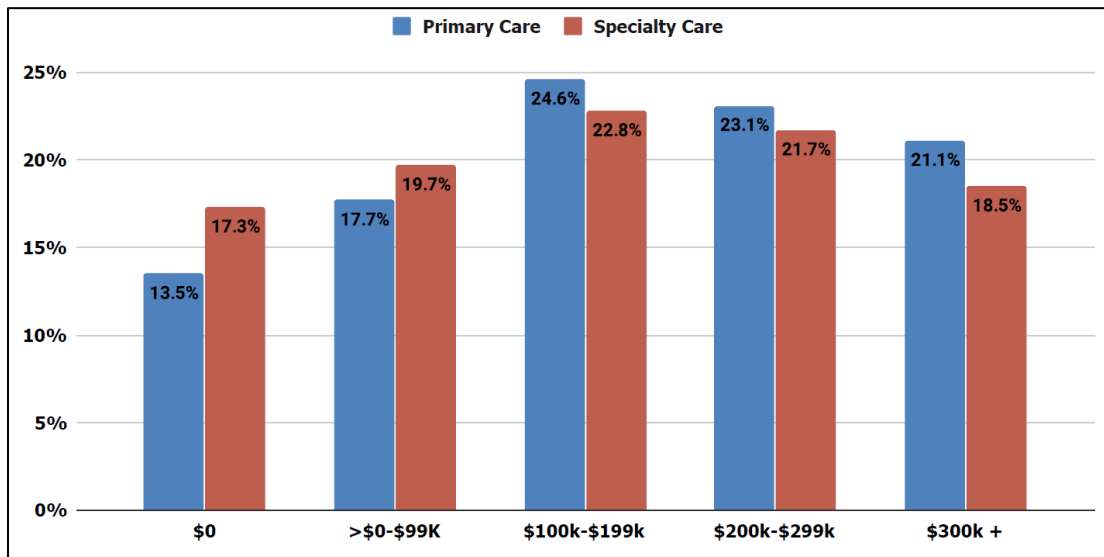
MoE: +/- 2%

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Figure 22: *Current Debt — Primary Care vs. Specialist*
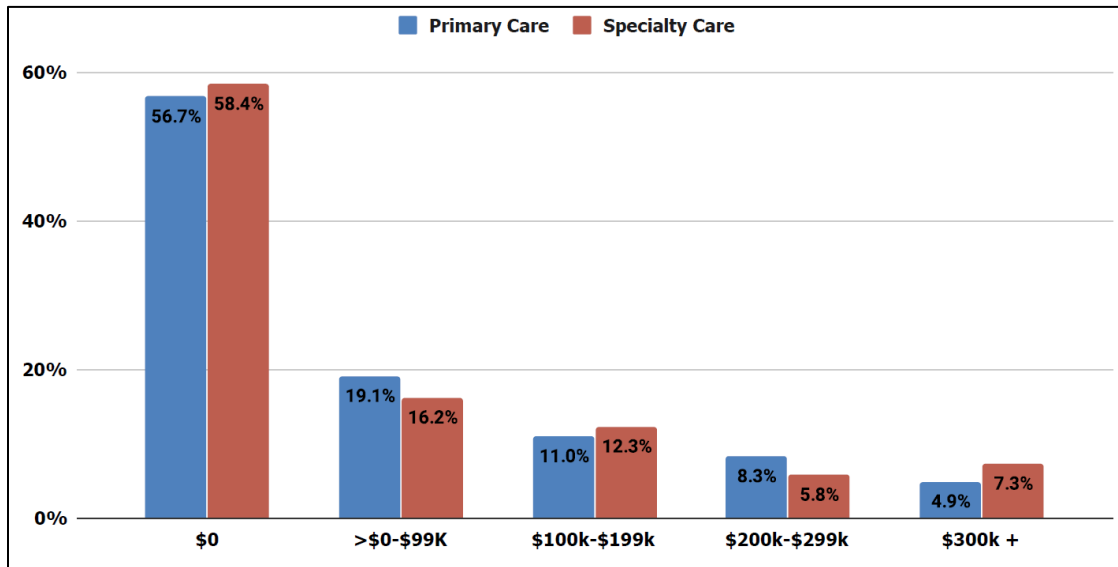
MoE: +/- 2%

CAREER SATISFACTION AND BURNOUT

CAREER SATISFACTION

The vast majority (88.7%) of physicians report feeling satisfied or very satisfied with their careers overall, but a smaller majority (80.6%) say the same of the last 12 months.

Figure 23: *Career Satisfaction*
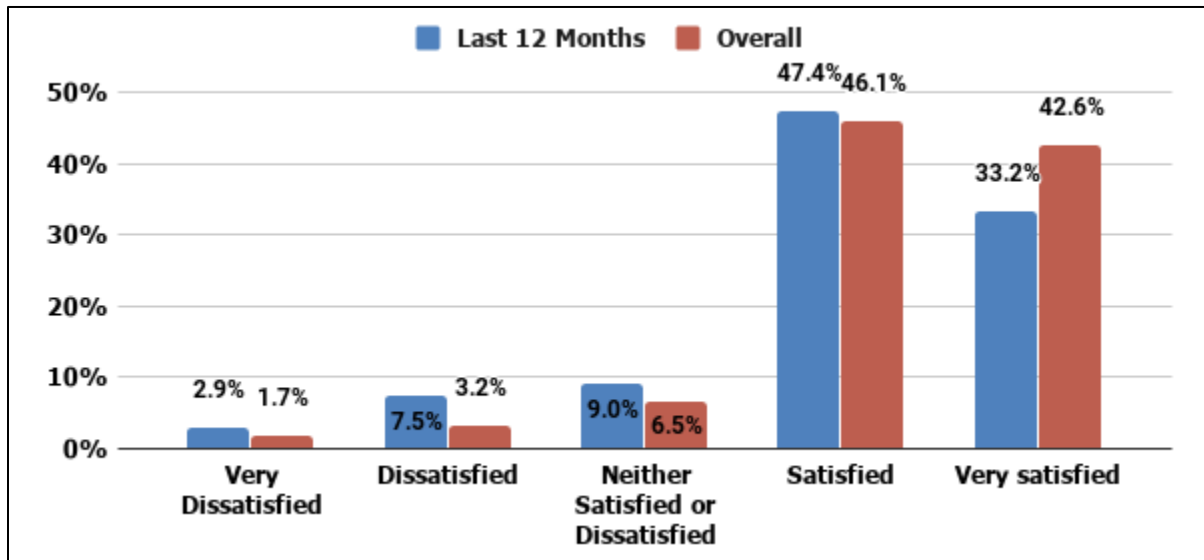
MoE: +/- 2%

When looking at 12-month satisfaction for the seven[10] most frequent work settings, only two settings were statistically different than the average. Physicians working at academic institutions reported higher satisfaction (83.4% satisfied or very satisfied) and physicians working at a single-specialty office/clinic reported lower satisfaction (77.9%). However, when looking at either satisfied or very satisfied in isolation, there are a few more significant differences.

Table 9: *Satisfaction in Top 7 Settings, Past 12 Months*

Setting	Very Satisfied	Satisfied	Total
Academic Institution	36.7%*↑	46.7%	83.4%*↑
Emergency Department	33.6%	47.5%	81.1%
Inpatient Hospital	35.3%*↑	47.3%	82.6%
Outpatient Hospital	28.9%*↓	50.5%*↑	79.4%
Multi-Specialty Office/Clinic	25.8%*↓	53.2%*↑	79%
Single-Specialty Office/Clinic	31%*↓	46.9%	77.9%*↓
Solo Practice	35.8%*↑	44.4%*↓	80.2%

MoE: +/- 2%

* Significant at .05 level; arrow indicates whether the percentage is higher (↑) or lower (↓) than the overall average

RECOMMENDATIONS ON PURSUING MEDICINE AS A CAREER

Most physicians (62.6%) would recommend pursuing medicine as a career, while another 15.6% said no, and the remainder were unsure. If a physician responded with "no" or "unsure," they could leave a response on their reason(s) for the lack of recommendation. These responses were then coded into themes, which are presented in *Figure 25* on page 29.

Data on whether or not physicians would recommend their specialty can be found in the "Specialty Profiles" beginning on page 57.

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[10] Academic institution, emergency department, inpatient hospital, outpatient hospital, solo practice, multi-specialty office/clinic, and single-specialty office/clinic. These seven had at least 5% of the workforce present in either a primary or secondary capacity.

Figure 24: *Recommendation of Medical Career*
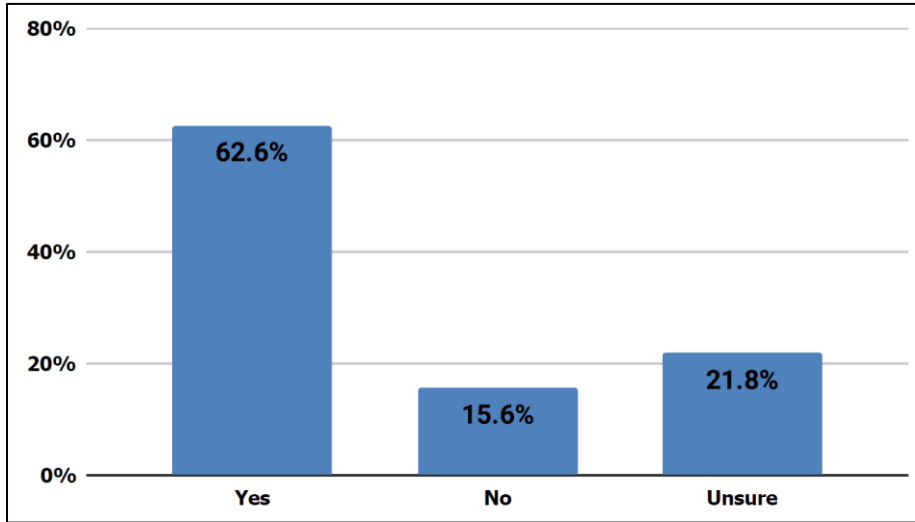
MoE: +/- 2%

Table 10: *Recommendation of Medical Career, by Top 7 Settings*

Setting	Would Recommend Medicine
Academic Institution	67.2%* ↑
Emergency Department	59.3%* ↓
Inpatient Hospital	61%
Outpatient Hospital	58.8%* ↓
Multi-Specialty Office/Clinic	63.3%
Single-Specialty Office/Clinic	64.9%* ↑
Solo Practice	52.7%* ↓

MoE: +/- 2%

* Significant at .05 level; arrow indicates whether the percentage is higher (↑) or lower (↓) than the overall average

Physicians working in an academic institution or a single-specialty office/clinic are more likely to recommend medicine. In contrast, physicians in an emergency department or outpatient hospital are less likely to. Only about half of physicians working in a solo practice would recommend the pursuit of medicine.

Figure 25: *Reasons for Not Recommending Medicine*

Reason	Percentage
Regulations/Administration/Paperwork/Billing	30.4%
Pay	24.0%
Demands of Position (Hours, Work-life balance, Stress etc.)	22.8%
Debt/Cost of Training	17.4%
Loss of Autonomy	12.4%
Uncertain/Changing Future of Health Care	10.8%
Decrease in Patient Time/too much Non-medical Work	7.9%
Lack of Respect/Appreciation for Physicians	7.4%
Technology	7.2%
Payers	7.2%
Training Time Required	6.2%
Malpractice/Liability	6.0%
Too much Government	5.9%
Midlevels	5.6%
Too much Business/too Profit-focused	5.2%
Burnout	4.8%
Money (unspecified)	3.1%
Dysfunctional Healthcare System	2.1%
Culture of Medicine	1.7%
IHC/Select Health	1.2%
AI	1.2%
Too much Focus on/Pay for Specialists	0.9%

The data presented above are the result of UMEC coding of free response data and should not be interpreted as if respondents were presented with the list above and able to mark all that applied. For example, 22.8% of respondents mentioning the demands of the job does not mean that the rest of the potential respondents don't share those concerns, but simply that the issue was salient enough to 22.8% of respondents to offer as a reason for not recommending medicine. This data should instead be interpreted only as insight into the relative importance and salience of these issues.

Administrative work and regulations are the most frequently mentioned reasons for not recommending medicine as a career. However, if all the financial responses (pay, debt/cost of training, other unspecified monetary concerns) were to be combined, it would overtake administrative work as the most frequently mentioned response. Other top issues include the demanding nature of the profession, the loss of autonomy in clinical decision making, and the uncertain and/or changing future of health care. Differences between primary and specialty care are slight. Frequencies remain largely the same, but primary care physicians report relatively more concern with pay and the demands of their position while specialists report relatively more concern with debt.

One final note on data interpretation: there are a few categories that might better fit within other categories (e.g., payers might fit under administrative work), but when the language used was not confirmatory, coding was done without any assumption of intent to remain conservative.

BURNOUT

A majority of physicians (60.6%) report that they have experienced burnout, and of that share, 51.2% say their burnout has led them to either reduce the number of hours worked or years until retirement. Administrative burden, work-life balance issues, and health information technology are the top contributors to feelings of burnout. Physicians over the age of 65 are significantly less likely to experience burnout than their younger peers; only 35.3% of this cohort report experiencing burnout.

Table 11: *Burnout by Top 7 Settings*

Setting	Share Having Experienced Burnout
Academic Institution	57.7%* ↓
Emergency Department	67.6%* ↑
Inpatient Hospital	62.8%* ↑
Outpatient Hospital	64%* ↑
Multi-Specialty Office/Clinic	68%* ↑
Single-Specialty Office/Clinic	58.8%* ↓
Solo Practice	52%* ↓

MoE: +/- 2%

* Significant at .05 level; arrow indicates whether the percentage is higher (↑) or lower (↓) than the overall average

**Figure 26:** *Contributions to Feelings of Burnout*

	Not at All	A Little Bit	A Fair Amount	A Great Deal
Administrative Burden	10.7%	23.6%	29.0%	36.7%
Decision Making Autonomy	25.7%	28.6%	26.9%	18.9%
Health Information Technology	16.6%	25.6%	26.7%	31.0%
Inadequate Number of Professionals	36.2%	31.0%	18.4%	14.3%
Leadership Relationships/Expectations	22.1%	32.1%	26.1%	19.8%
Patient Relationships/Expectations	23.1%	39.4%	23.7%	13.8%
Work Hours/Poor Work-Life Balance	7.6%	28.4%	34.1%	30.0%

MoE: +/- 2%

An interactive dashboard on burnout, classifiable by specialty, setting, urban or rural location, and age can be found on the UMEC website (umec.utah.gov).

UTAH TIES: MEDICAL EDUCATION AND UPBRINGING

Utah ties are used as a measure of how "attached" a physician is to the state. A physician with ties to Utah is easier to retain than one who does not. UMEC looks at the following three ties:

1. Was the physician brought up in Utah?
2. Did the physician attend medical school in Utah?
3. Was the physician a resident or fellow in Utah?

Over the three most recent iterations of this report, an average of 76% of physicians reported at least one tie to Utah, 37% reported two, and 8% reported all three.[11] The most common ties reported, again averaged across the past three reports, are upbringing (46%), residency (42%), and medical school (27%).

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[11] Total does not add up to 100% due to missing data and rounding

Figure 27: Number and Type of Utah Ties
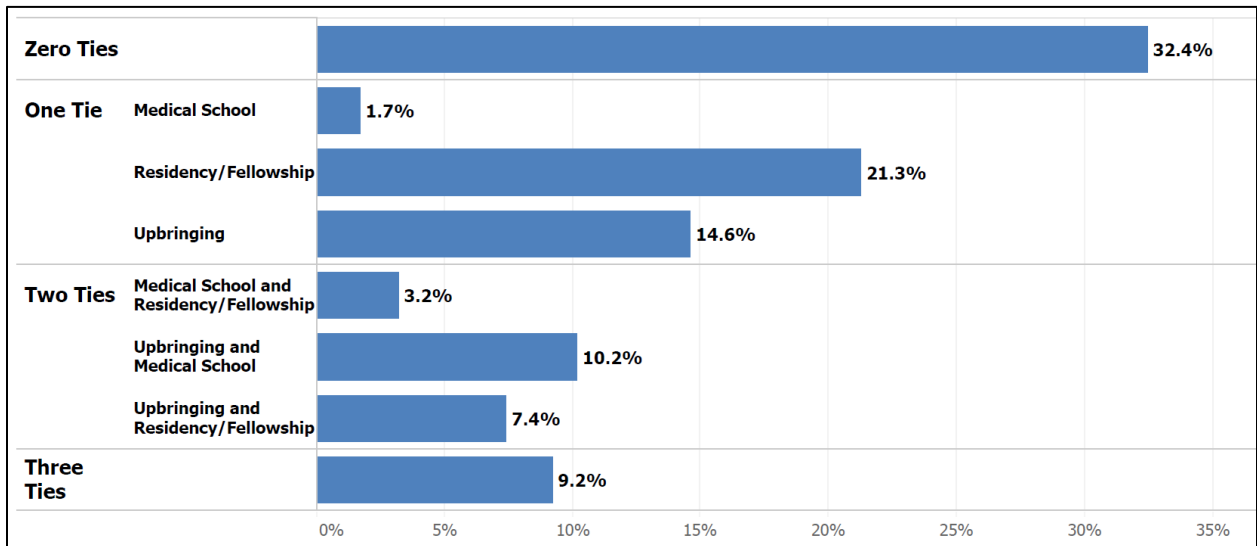
Figure 28: Number of Utah Ties Since 2010
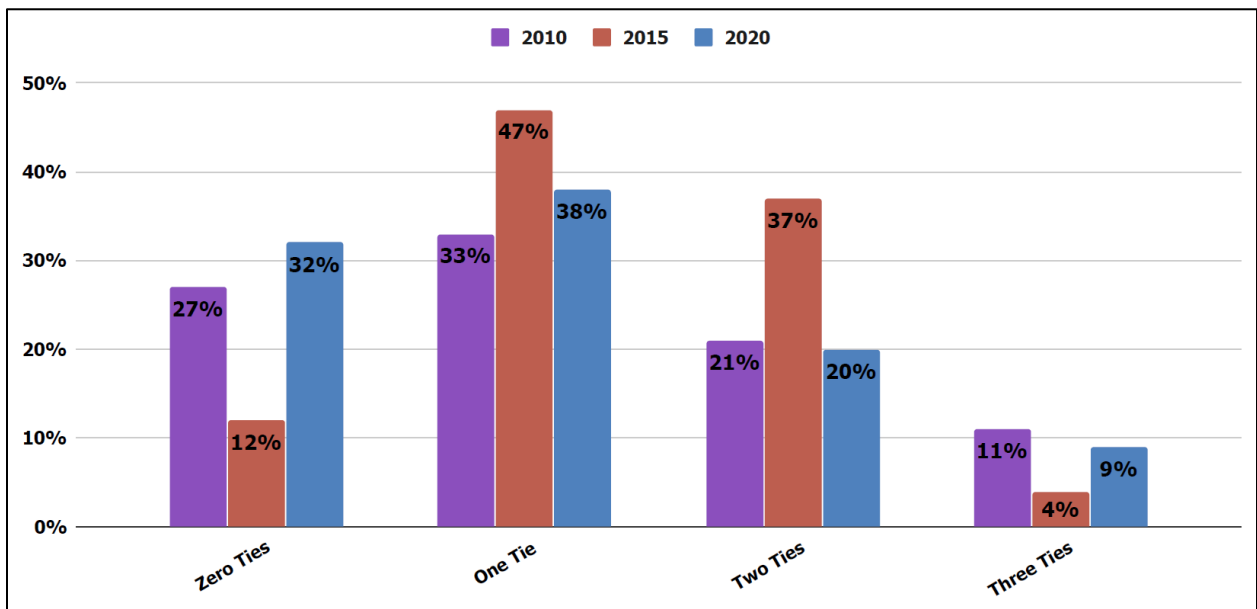
Note: *UMEC has noted the disparity of these results across the prior reports and further analysis is planned. Ultimately, the impact of these deviations changes the share attributable to each component of supply in the UMEC Projection Model, but the overall measure of surplus/shortfall remains the same. See Figure 38 on page 50.*

PRACTICE CHARACTERISTICS

PRACTICE SETTING

The following tables detail how Utah's physician workforce is distributed. Four new settings were added to the 2020 survey: Non-Clinical Setting, Psychiatric/Mental Health Facility, Substance Abuse Facility, and standalone telemedicine (i.e., not associated with another setting).

Table 12: *Workforce Setting Distribution by Care Type*

Setting Type	Primary Setting		Secondary Setting	
	Primary Care	Specialty Care	Primary Care	Specialty Care
Academic Institution	5.75%	11.01%	2.42%	3.40%
Ambulatory Care Center	1.44%	1.85%	2.22%	5.43%
Correctional Facility	0.17%	0.09%	0.41%	0.14%
Federal Hospital (VA)	1.35%	0.04%	2.67%	6.94%
Federally Qualified Health Center	2.93%	0.20%	1.91%	
Home Health Setting		0.04%		0.35%
Hospice Care	0.61%	0.20%	7.58%	0.23%
Hospital - Emergency Department	0.26%	8.64%	9.29%	1.78%
Hospital - Inpatient	5.65%	23.67%	45.59%	25.74%
Hospital - Outpatient	4.28%	7.95%	2.72%	27.52%
Medical School	1.81%	2.62%	2.30%	3.33%
Non-Clinical Setting	1.17%	0.80%	3.00%	2.43%
Nursing Home/Skilled Nursing Facility	1.08%	0.33%	1.49%	0.55%
Office/Clinic - Multi Specialty Group	30.08%	15.56%	4.66%	5.58%
Office/Clinic - Single Specialty Group	31.21%	13.03%	4.58%	6.49%
Office/Clinic - Solo Practice	7.92%	7.90%	0.89%	2.30%
Other Setting	0.17%	1.61%	3.03%	1.84%
Psychiatric/Mental Health Facility	0.26%	1.09%	0.46%	1.27%
Research Laboratory	0.22%	0.09%	0.35%	0.66%
State or Local Health Department	0.20%	0.47%		
Substance Abuse Facility	0.07%	0.15%	0.28%	0.21%
Telemedicine	0.41%	0.24%	1.28%	2.14%
University/College Student Health Facility	0.24%	0.44%	0.93%	1.05%
Volunteer in a Free Clinic	1.20%	0.34%	1.95%	0.62%

MoE: +/- 2%

Note: *Federal Hospital (VA) includes other military settings, Volunteer in a Free Clinic includes other volunteer settings, and telemedicine only refers to telemedicine which is NOT associated with another setting*

Primary care physicians (PCPs) predominantly work in an office/clinic setting (69.2% of PCPs have an office/clinic listed as their primary site), while specialists are more heavily represented in hospital settings (40.3% of specialists report hospital settings for their primary site). A significant number of specialists still practice in offices/clinics. Hospital settings are especially common as a secondary setting, with over

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half of primary care providers reporting a hospital setting as a secondary site. Similar shares of PCPs and specialists report secondary settings: 26.3% PCPs report a secondary setting compared to 29.1% of specialists.

Table 13: *Workforce Setting Distribution by Care Type – Combined Settings*

Setting Type	Combined Setting	
	Primary Care	*Specialty Care*
Academic Institution	4.7%	11.2%
Ambulatory Care Center	2.2%	3.7%
Correctional Facility	0.4%	0.2%
Federal Hospital (VA)	2.3%	4.4%
Federally Qualified Health Center	3.3%	0.1%
Home Health Setting	0.0%	0.2%
Hospice Care	3.7%	0.5%
Hospital - Emergency Department	3.5%	8.0%
Hospital - Inpatient	18.5%	30.0%
Hospital - Outpatient	4.2%	17.0%
Medical School	3.3%	4.5%
Non-Clinical Setting	2.7%	1.9%
Nursing Home/Skilled Nursing Facility	2.0%	0.6%
Office/Clinic - Multi Specialty Group	30.8%	16.7%
Office/Clinic - Single Specialty Group	30.8%	16.4%
Office/Clinic - Solo Practice	10.4%	10.0%
Other Setting	3.7%	2.5%
Psychiatric/Mental Health Facility	0.5%	1.6%
Research Laboratory	0.5%	0.6%
State or Local Health Department	0.4%	0.5%
Substance Abuse Facility	0.3%	0.3%
Telemedicine	0.9%	1.1%
University/College Student Health Facility	0.7%	0.8%
Volunteer in a Free Clinic	3.0%	1.1%

MoE: +/- 2%

Note: *Federal Hospital (VA) includes other military settings, Volunteer in a Free Clinic includes other volunteer settings, and telemedicine only refers to telemedicine which is NOT associated with another setting*

Table 13 combines primary and secondary settings to show the share of physicians who spend any amount of time in each setting. For example, 18.5% of primary care physicians spend some time in an inpatient hospital, either a primary or secondary setting capacity or both.

Table 14: *Workforce Setting Distribution by Location*

Setting Type	Primary Setting		Secondary Setting	
	Rural	Urban	Rural	Urban
Academic Institution	1.59%	9.74%		4.18%
Ambulatory Care Center	1.45%	1.72%	2.37%	5.07%
Correctional Facility	0.32%	0.10%		0.26%
Federal Hospital (VA)		1.74%		8.83%
Federally Qualified Health Center	2.90%	1.01%		1.20%
Home Health Setting		0.03%		0.18%
Hospice Care		0.37%	4.08%	3.51%
Hospital - Emergency Department	9.73%	5.48%	28.44%	0.58%
Hospital - Inpatient	3.43%	18.33%	33.96%	27.62%
Hospital - Outpatient	12.19%	6.18%	5.25%	18.44%
Medical School		2.51%		2.59%
Non-Clinical Setting	2.09%	0.84%	2.29%	3.17%
Nursing Home/Skilled Nursing Facility	0.50%	0.60%	3.83%	0.87%
Office/Clinic - Multi Specialty Group	24.51%	20.24%	8.70%	5.83%
Office/Clinic - Single Specialty Group	21.89%	19.37%	2.80%	5.61%
Office/Clinic - Solo Practice	15.67%	7.31%	4.59%	2.31%
Other Setting	1.96%	1.61%	0.89%	3.33%
Psychiatric/Mental Health Facility		0.86%	1.40%	1.21%
Research Laboratory		0.15%		0.69%
State or Local Health Department	0.32%	0.38%		
Substance Abuse Facility	0.32%	0.11%		0.43%
Telemedicine	0.29%	0.29%		1.69%
University/College Student Health Facility		0.40%		1.59%
Volunteer in a Free Clinic	0.84%	0.65%	1.40%	0.81%

MoE: +/- 2%

Note: *Federal Hospital (VA) includes other military settings, Volunteer in a Free Clinic includes other volunteer settings, and telemedicine only refers to telemedicine which is NOT associated with another setting*

Again, when looking at setting by location, hospitals are more common as a secondary site while the office/clinic setting is more common as a primary. Solo practices are also much more common in rural locations than in urban areas.

Physicians with a rural primary site are much more likely to report work in a secondary setting; 41.4% of primarily rural physicians have a secondary setting compared to 27% of primarily urban physicians. Generally, the secondary site is in the same type of location as the primary site. However, the secondary site of primarily rural physicians is more likely to be in an urban setting (23.2%) than vice versa (5.2% of primarily urban physicians have a secondary rural setting).

Table 15: *Workforce Setting Distribution by Care Type and Location — Share of FTEs*

Setting Type	Primary Care		Specialty Care	
	Rural	*Urban*	*Rural*	*Urban*
Academic Institution		7.15%	4.09%	11.81%
Ambulatory Care Center	1.19%	1.02%	0.42%	1.89%
Correctional Facility	0.04%	0.16%		0.06%
Federal Hospital (VA)	0.71%	1.53%		2.31%
Federally Qualified Health Center	3.99%	2.58%		0.07%
Home Health Setting				0.03%
Hospice Care	0.10%	0.86%		0.15%
Hospital - Emergency Department	7.32%	0.37%	17.50%	5.97%
Hospital - Inpatient	2.23%	9.14%	12.29%	26.78%
Hospital - Outpatient	8.45%	4.25%	13.32%	9.61%
Medical School		2.01%		3.17%
Non-Clinical Setting	1.29%	1.22%	3.39%	0.64%
Nursing Home/Skilled Nursing Facility	1.16%	0.52%	0.24%	0.37%
Office/Clinic - Multi Specialty Group	25.96%	30.10%	22.98%	14.48%
Office/Clinic - Single Specialty Group	28.31%	29.87%	12.24%	11.95%
Office/Clinic - Solo Practice	17.06%	6.25%	12.65%	6.73%
Other Setting	1.26%	1.18%	0.56%	1.40%
Psychiatric/Mental Health Facility	0.16%	0.11%		0.86%
Research Laboratory		0.25%		0.19%
State or Local Health Department		0.10%	0.06%	0.40%
Substance Abuse Facility		0.23%	0.26%	0.11%
Telemedicine	0.63%	0.53%		0.25%
University/College Student Health Facility		0.33%		0.68%
Volunteer in a Free Clinic	0.14%	0.23%		0.13%

MoE: +/- 2%

Note: *Federal Hospital (VA) includes other military settings, Volunteer in a Free Clinic includes other volunteer settings, and telemedicine only refers to telemedicine which is NOT associated with another setting*

The previous tables show only counts of physicians reporting work in each setting. *Table 15* accounts for hours worked and shows the share of time spent by each group (rural PCPs, rural specialists, urban PCPs, and urban specialists) in each setting. For example, rural PCPs spend 17.1% of total FTE time in a solo practice, compared to 12.7% of total FTE time produced by rural specialists.

A minority (9.2%) of physicians reported changing settings within the past two years. These moves largely take place within the same setting type (e.g., inpatient hospital to another inpatient hospital). The most common reasons for changing settings include a desire for change, finding a better work or education fit, and personal or family reasons.

Figure 29: Reasons for Setting Move
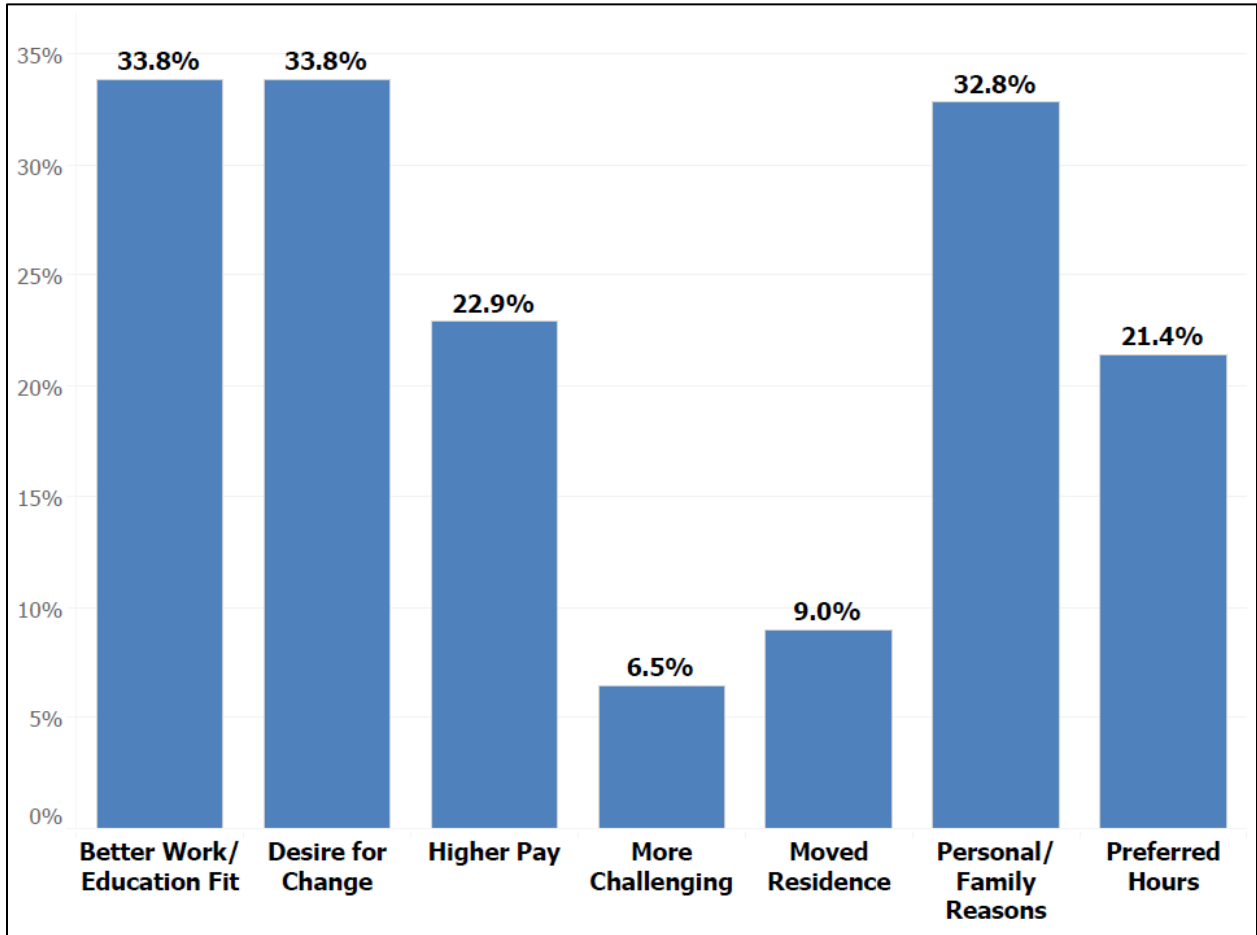
Note: *Totals add up to more than 100% since respondents could select more than one option*

WORK HOURS

Work hours by specialty can be found in "Specialty Profiles" beginning on page 57.

Physicians under 35 work more than other age groups, largely because this cohort is filled with residents and fellows. Work hours are then stable between the ages of 35 and 64 before dropping in the oldest cohort.

Figure 30: *Average Hours Worked by Age Group*
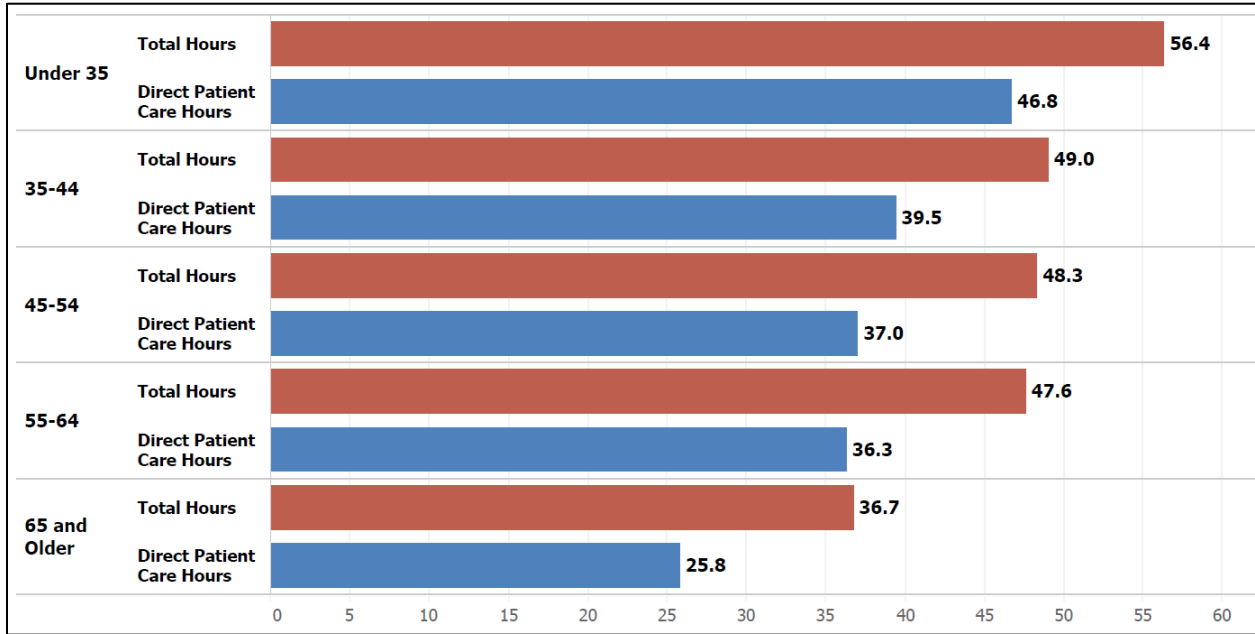
71.1% of female physicians work full-time, while 85% of male physicians do, contributing to a weekly gap of 6.7 hours. However, male and female physicians in younger cohorts are more likely to work similar hours. In the under 35 and 35-44 cohorts, the number of hours worked is statistically equivalent[12], while in the 45-54 and 55-64 cohorts, women work fewer hours than men. Attention should be paid to whether these hour differences reemerge as the currently younger cohorts age or whether they are reflective of new dynamics of more gender parity.

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[12] Significant at the .05 level

Figure 31: *Average Hours Worked in Non-Patient Care Activities*
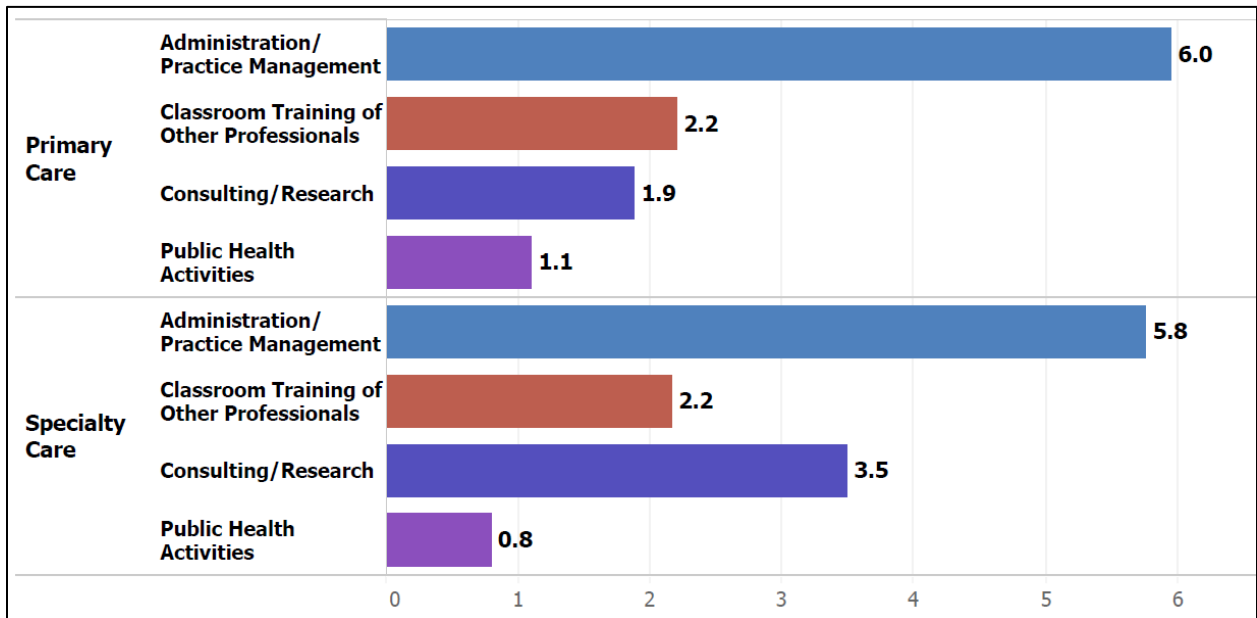
The number of hours devoted to non-patient care activities is similar between primary care providers and specialists, apart from consulting. Because many physicians report zero hours for these activities, looking at averages can hide a lot of information. *Figure 32* details how many hours physicians spend on these activities in more detail.

Figure 32: *Hours Spent in Non-Patient Care Activities*
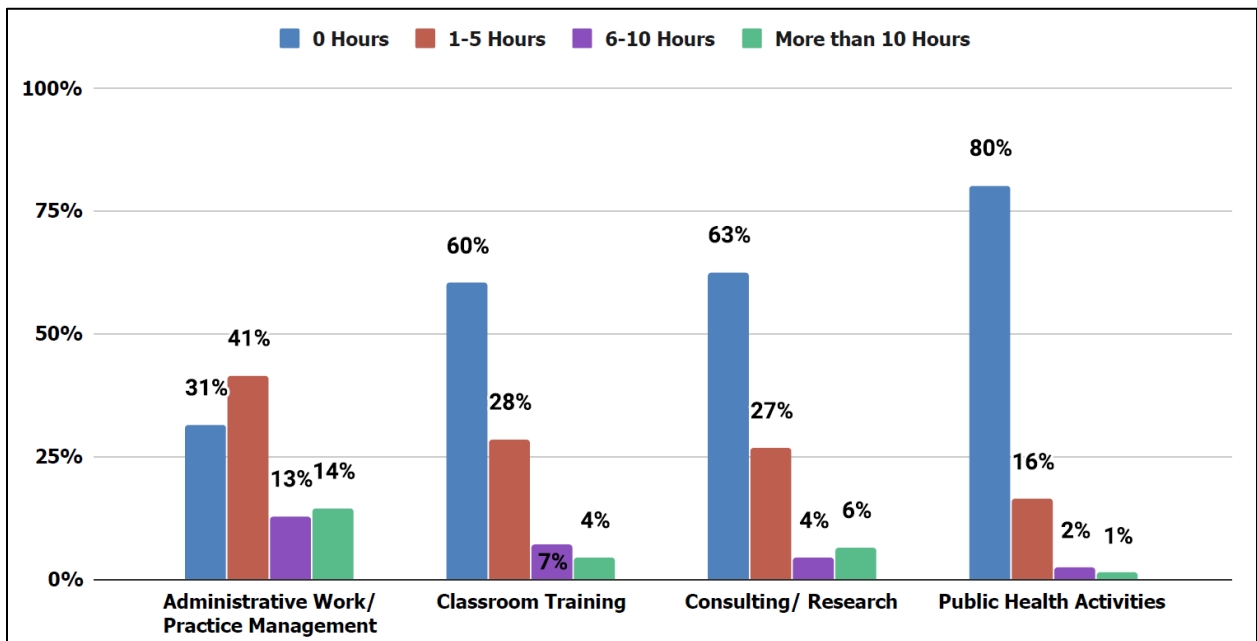
PRACTICE STATUS

Physicians were asked to identify their practice(s) as falling into one of four categories:

1. Full: The practice cannot accept any additional patients
2. Nearly full: The practice can accept a limited number of patients
3. Unfilled: The practice can accept many new patients
4. N/A: This category would include situations where no patient care is provided or where there is no "filling up" a patient panel (e.g., VA, Emergency Department)

Responses were weighted to remove missing data and N/A sites to allow for equivalent comparisons between years. Ultimately, self-identified practice status did not change between 2015 and 2020.

Figure 33: *Practice Status 2003-2020*
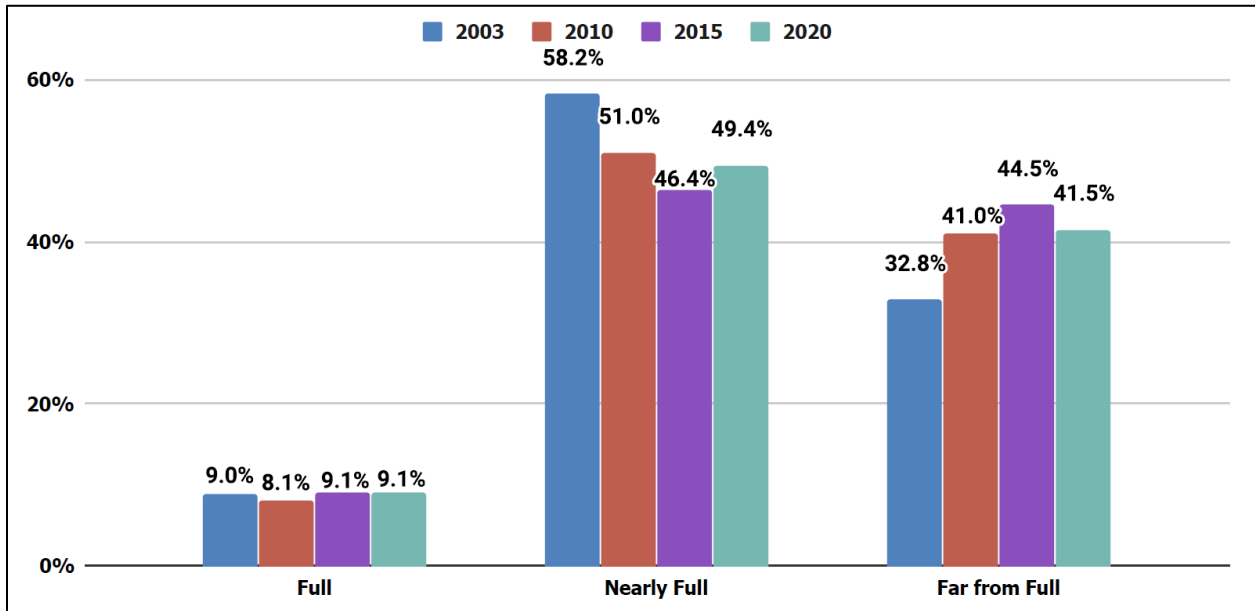
MoE: +/-2.2%

When looking at the four primary care specialties and general surgery, the share of practice reporting as full showed little change over the past five years. However, there are differences in the numbers identifying as "nearly full" and "far from full." Family and internal medicine are far more likely to report being full than the average across all specialties (9.1%) or general surgery.

Table 16: *Practice Status — Primary Care and General Surgery*

	Family Medicine		Internal Medicine		OB/GYN		Pediatrics		General Surgery	
	2015	*2020*	*2015*	*2020*	*2015*	*2020*	*2015*	*2020*	*2015*	*2020*
Full	18%	16.6%	20.7%	21.3%	3.9%	3%	5.7%	4.4%	2.8%	0%
Nearly Full	48%	39.4%	57.5%	45.8%	53.8%	57.8%	49.4%	41%	33.8%	32.8%
Far from Full	34%	43.9%	21.8%	32.8%	42.3%	39.2%	44.9%	54.6%	63.4%	67.2%

MoE: +/- 2.2%

As mentioned before, primary care sites are more likely than specialty care sites to report being full.

Table 17: *Practice Status — Urban/Rural*

	2015			2020			Absolute Change 2015-2020		
	Urban	**Rural**	**Overall**	**Urban**	**Rural**	**Overall**	**Urban**	**Rural**	**Overall**
				Primary Care					
Full	14.8%	12%	14.5%	14.1%	7.5%	13.1%	-0.7%	-4.5%	-1.4%
Nearly Full	49.4%	57%	50.4%	42.7%	47.2%	42.9%	-6.7%	-9.8%	-7.4%
Far From Full	35.8%	35.1	32.3%	43.2%	45.4%	44%	+7.4%	+14.3%	8.8%
				Specialty Care					
Full	5.1%	1.9%	5%	4.6%	3.6%	4.5%	-0.5%	+1.7%	-0.5%
Nearly Full	44.2%	41.5%	44.1%	41.2%	38%	40.8%	-3%	-3.5%	-3.2%
Far From Full	50.7%	56.6%	51%	54.2%	58.4%	54.7%	+3.5%	+1.8%	+3.7%

MoE: +/- 2.2%

Beyond any indication of being "full," "nearly full," or "unfilled," practices may choose to limit certain types of new patients. Statewide, 15.1% of practices limit new Medicaid patients, 8.6% limit new Medicare patients, 6.3% limit new self-pay or uninsured patients, and 4.3% limit any other new insured patients. However, differences exist when comparing rural and urban settings and between primary and specialty care. Overall, the share of urban sites limiting new patients is higher than the share of rural sites. Across both rural and urban settings, primary care physicians are more likely to be limiting new patients.

Table 18: *Share of Practices Limiting New Patients*

Type of Coverage	Rural			Urban		
	Primary Care	Specialty Care	Total	Primary Care	Specialty Care	Total
Medicaid	12.7%	6.7%	9.9%	21.7%	12.1%	15.5%
Medicare	8.5%	5.0%	6.9%	15.7%	5.0%	8.7%
Self-Pay/Uninsured	4.2%	5.0%	4.6%	9.4%	4.8%	6.4%
Other New Insured	4.2%	1.7%	3.1%	7.5%	2.7%	4.4%

MoE: +/- 2.2%

PATIENT WAIT TIMES

Wait times have largely stayed the same since 2015, but the statistically significant changes were all in a positive direction. Wait times for both new and established primary care patients in urban areas declined, which drove down overall primary care wait times and new patient urban wait times.

Table 19: *Patient Wait Times*

			Average	Low Est.	High Est.	2015 Average
Rural	Primary Care	New Patient	7	4.9	9.2	9
		Est. Patient	3.8	2.7	4.9	4
	Specialty Care	New Patient	11.6	8.2	15.1	9
		Est. Patient	8.6	5.6	11.5	6
	Total	New Patient	9	7.1	11	9
		Est. Patient	5.8	4.3	7.2	5
Urban	Primary Care	New Patient	12.7*↓	10.9	14.5	16
		Est. Patient	4.6*↓	3.9	5.3	6
	Specialty Care	New Patient	15.7	14.1	17.3	16
		Est. Patient	11	9.5	12.6	10
	Total	New Patient	14.6*↓	13.4	15.8	16
		Est. Patient	8.7	7.7	9.7	9
All Locations	Primary Care	New Patient	11.7*↓	10.2	13.3	15
		Est. Patient	4.5*↓	3.8	5.1	6
	Specialty Care	New Patient	15.3	13.8	16.8	16
		Est. Patient	10.8	9.4	12.2	10
	Total	New Patient	13.9	12.9	15.1	15
		Est. Patient	8.3	7.4	9.2	8

The difference is statistically significant at the .05 level; the arrow indicates the direction of the change

TECHNOLOGY UTILIZATION

Overall, the most reported technology in use continues to be an electronic medical record. Uptake of electronic medical records has increased from 76.9% of providers in 2015 to 95.3% in 2020. As was the case in 2015, the least commonly reported technology in use is telemedicine. Although there have been significant increases in telemedicine use since 2015 (13.1% of providers reporting its use then and 50.2% in 2020), this growth is likely understated as most survey responses were collected before the COVID-19 pandemic led to the rapid uptake of this technology. In 2015, there appeared to be a pattern of specialists in urban practice settings using technology in their practice at a higher rate than primary care providers. In contrast, in rural areas, primary care providers reported higher rates of technology utilization. These differences appear to have stabilized over time. There no longer appears to be any difference between urban and rural technology use except perhaps in the category of e-prescribing.

An interactive dashboard on technology, classifiable by specialty, setting, urban or rural location, and age can be found on the UMEC website (umec.utah.gov).

Table 20: Technology Use — Change Since 2015 by Care Type and Location

Technology	Urban		Rural		Overall	Increase Since 2015 (Overall)
	Specialist	*Primary Care*	*Specialist*	*Primary Care*		
Electronic Health/Medical Record	95.2%	96.1%	91.1%	97%	95.3%	18.4%
E-Prescribing System	80.4%	94.2%	75.3%	94.3%	85%	27.1%
Clinical Health Information Exchange	52.6%	58.6%	46.3%	46.3%	54.2%	39.2%
Telehealth/Telemedicine	50.2%	48.3%	56.3%	51.0%	50.2%	37.1%

MoE: +/- 2%

Figure 34: *Technology Use — Change Since 2015*
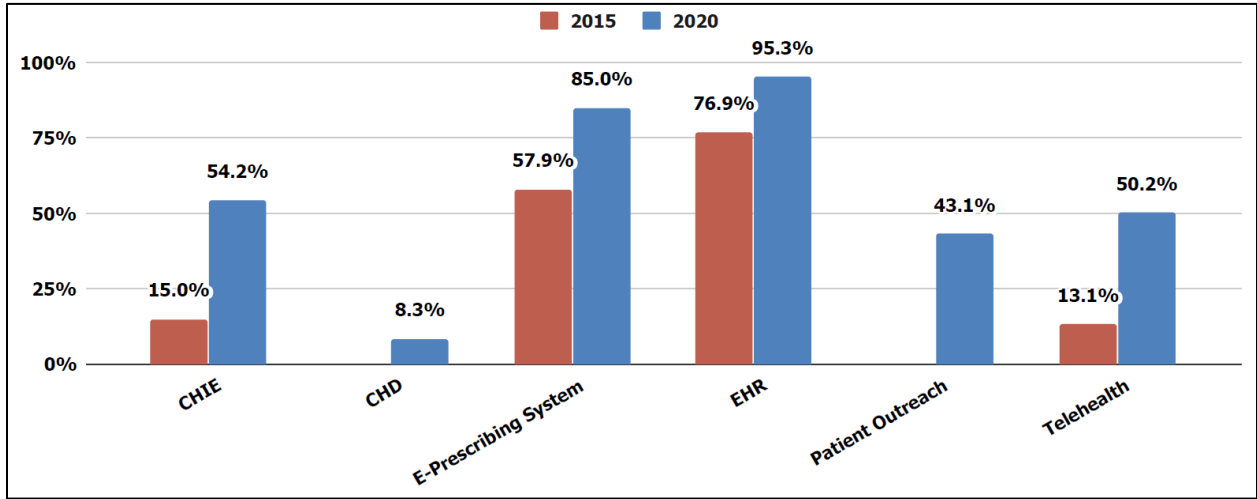
MoE: +/- 2%

Additional technologies were added to the 2020 survey to ask about consumer health device data utilization and technology-mediated patient contact/outreach, as well as adoption categories of "plan to use" and "do not plan to use" in addition to the "currently use" category. These additional categories show that large percentages of providers have plans to use telemedicine, technology-mediated patient contact/outreach, and clinical health information exchanges (19.5%, 13.5%, and 12.6%, respectively). A large majority (80.8% overall) reported that they do not plan to use consumer health device data. Considering the proliferation of these devices in recent years, it is likely that providers will integrate their use in the future if device manufacturers can enable easy access to data and EHR interoperability.

Figure 35: *Technology Use — Current and Future Use*
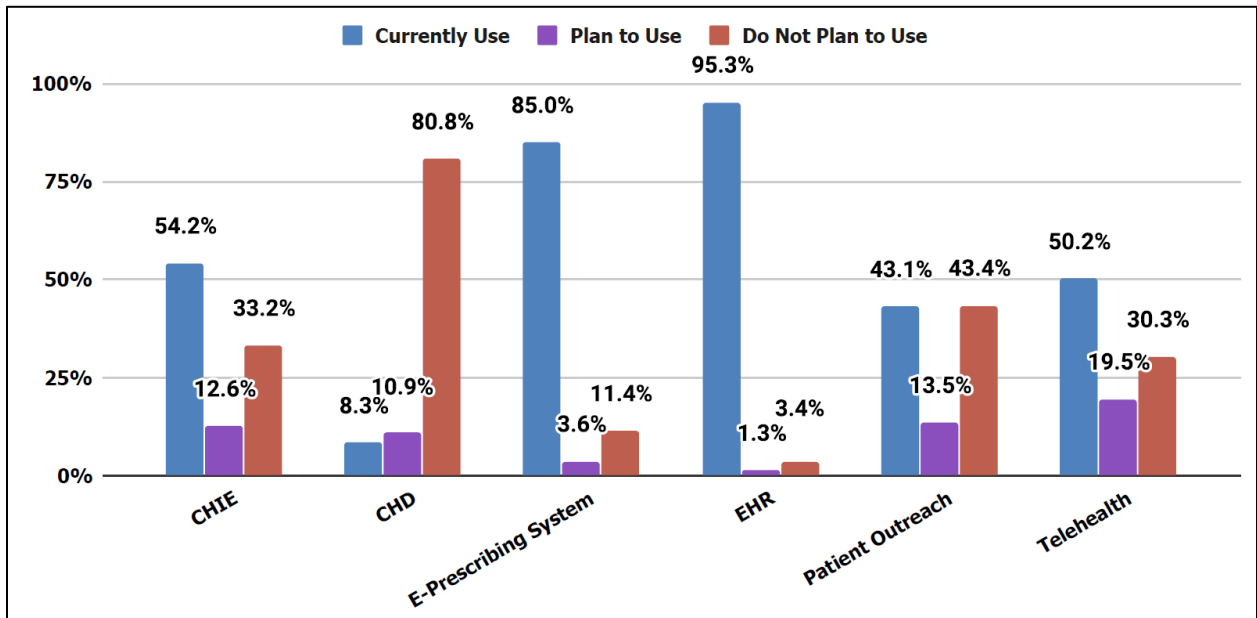
MoE: +/- 2%

PROJECTIONS

Two sets of projections are included in this section. While they are not directly comparable, there is a simple way to understand the difference between them:

- The Physician-to-Population Ratio (PPR) Projections are based on a simple count of physicians from license data. They do not use the detail provided by the workforce survey, meaning these projections are *less nuanced*. PPR Projections project the historical growth in the number of physicians active in the state of Utah forward, meaning they are ***backward-looking***.
- The UMEC Supply and Demand Projections are based on survey data and allow for more detailed FTE measurements and insight into the various components which drive the demand for and the supply of physicians, making them ***more nuanced***. The survey data also allows for predicting future behavior, which impacts the state's physician capacity, making this projection ***forward-looking***.

For all relevant data in this section, population estimates are derived from population projection data files available from the demographic team at Kem C. Gardner Policy Institute (2017).

PHYSICIAN-TO-POPULATION RATIO PROJECTIONS

The first set of projections (*Figure 36: Physician-to-Population Ratio Projections* and *Figure 37: Primary Care Physician-to-Population Ratio Projections*) model the number of physicians per 100,000 population based on the historical growth of the number of licensed physicians actively practicing in Utah. Three scenarios are modeled:

- **High Growth Scenario:** Net increase of 413 physicians per year — based on historical growth between 2015 and 2020
- **Average Growth Scenario:** Net increase of 216 physicians per year — based on historical growth between 2010 and 2020
- **Low Growth Scenario:** Net increase of 8 physicians per year — based on historical growth between 2010 and 2015

These scenarios are plotted against a national estimate from the American Association of Medical Colleges (AAMC), who estimate a 4% decline in the physician-to-population ratio over the next 15 years (Chakrabarti et al., 2020).

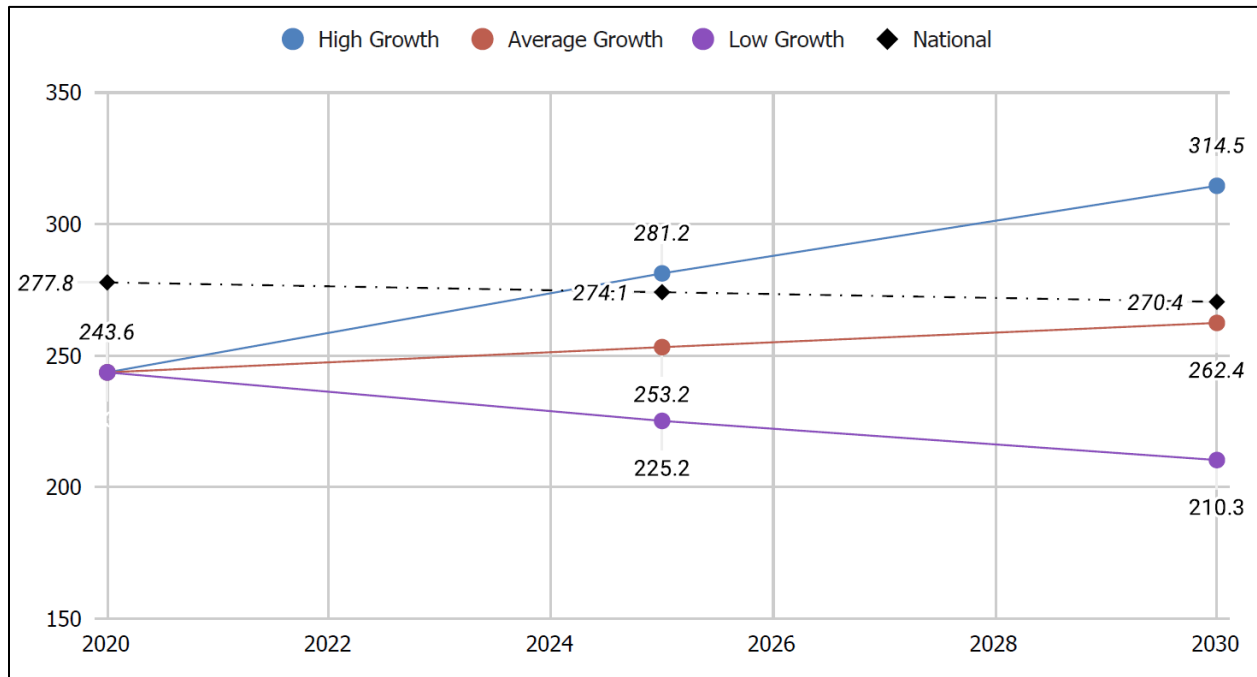*Figure 36*: *Physician-to-Population Ratio Projections*

Figure 36 shows the overall number of physicians per 100,000 Utah residents. To maintain the current ratio of 243.6 physicians per 100,000 population, Utah needs to add 137 physicians to the workforce per year. Currently, Utah sits below the national average, but would nearly catch up by 2030 if the average growth scenario holds true and would surpass the nation if the high growth scenario occurs. UMEC believes that the high or average growth scenarios are more likely for two reasons:

- The high growth scenario is based on what has occurred in the most recent five-year period
- Two new medical schools (Rocky Vista University and Noorda College of Osteopathic Medicine) should start to influence what is seen on the tail end of these projections later in the decade after they complete residency and settle on a place to practice, possibly in a location where they already have some established ties

Despite those reasons, the low-growth scenario is still included since the national numbers show a projected decline. If other states experience declines, it may increase competition among states in retaining and attracting physicians. This competition could make it more difficult and expensive for Utah-based healthcare systems to do so, driving down what may otherwise be a period of ratio growth for the state.

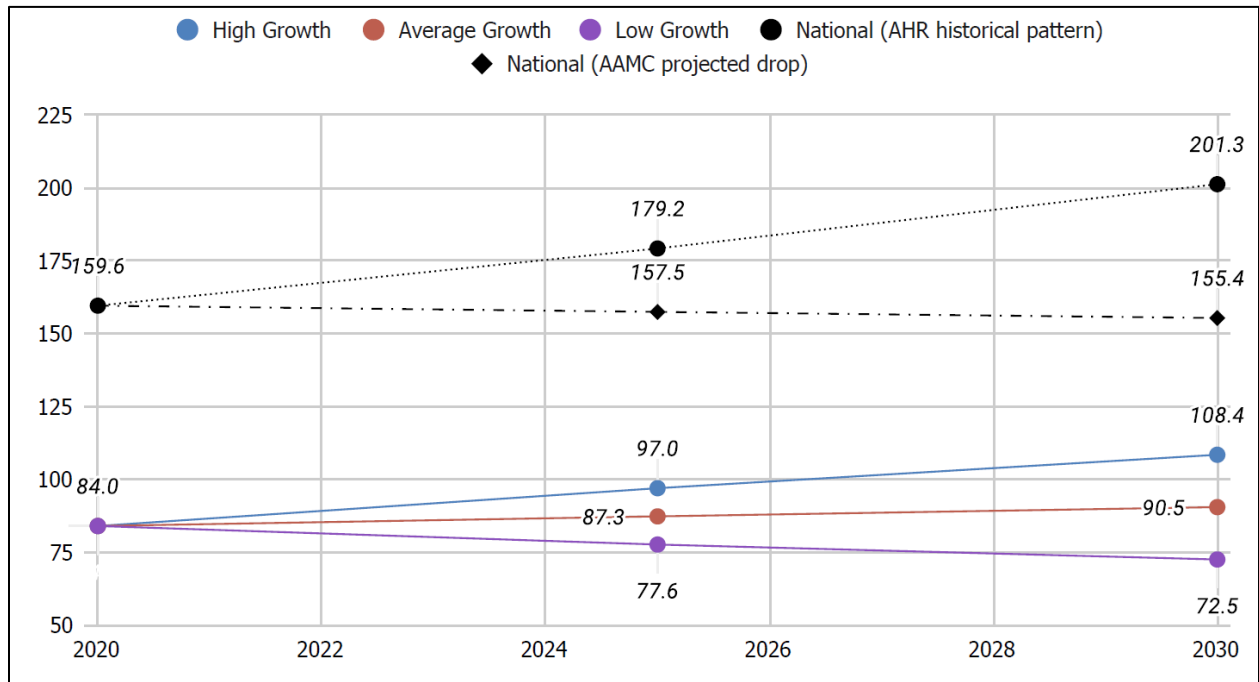**Figure 37:** *Primary Care Physician-to-Population Ratio Projections*

Figure 37 is the same measure as *Figure 36* but only counts primary care physicians. Because AAMC does not include general OB/GYN in its primary care calculation, an alternative source was used. *America's Health Rankings Annual Report (2019)*, published by UnitedHealth in partnership with the American Public Health Association (APHA), does include general OB/GYN as a primary care specialty. The America's Health Rankings (AHR) historical pattern projection (black dot) assumes that the most recent four years of growth in the ratio (2.5% per year) will continue. The AAMC projection (black diamond) starts from the 2020 AHR ratio and assumes the same drop in the ratio, as shown in *Figure 36*.

Regardless of the national projection chosen or the growth scenario assumed in Utah, the state is still projected to be well below the national average primary care physician-to-population ratio by 2030. However, it is possible that the two new osteopathic schools potentially contribute to an increase in Utah-trained physicians entering the Utah workforce after completing residency by the end of the decade. The fact that DO physicians are disproportionately likely to enter primary care (see *Figure 7* on page 10) could lead to faster growth in the primary care physician-to-population ratio.

UMEC SUPPLY AND DEMAND PROJECTIONS

The UMEC Supply and Demand Model plots the annual supply of physician FTEs against the annual demand (need) for physician FTEs, which results in an estimate of a surplus or shortfall in FTEs compared to the previous year. See *Figure 38* on page 50 for the current model.

The components that make up demand include:

1. **Pre-retirement reduction in hours:** FTEs lost when physicians reduce the number of hours worked prior to fully retiring from practice
2. **Retirement losses:** FTEs lost when physicians retire
3. **Increased need from population growth:** FTEs needed to account for an increase in population
4. **Increased need from age polarization:** FTEs needed to account for increased visit rates among older populations

See "Projected Demand for Physicians" on page 51 for more detail on how the 2020 numbers were calculated.

The components which build supply include:

1. **Retained fellows:** FTEs gained from Utah-trained fellows
2. **Retained residents:** FTEs gained from Utah-trained residents
3. **Retained physicians with other Utah ties:** FTEs gained from physicians who either were brought up in Utah or went to medical school in Utah
4. **Recruitment from the national pool of physicians:** FTEs gained from physicians with no Utah ties

See "Projected Supply of Physicians" on page 52 for more detail on how the 2020 numbers were calculated.
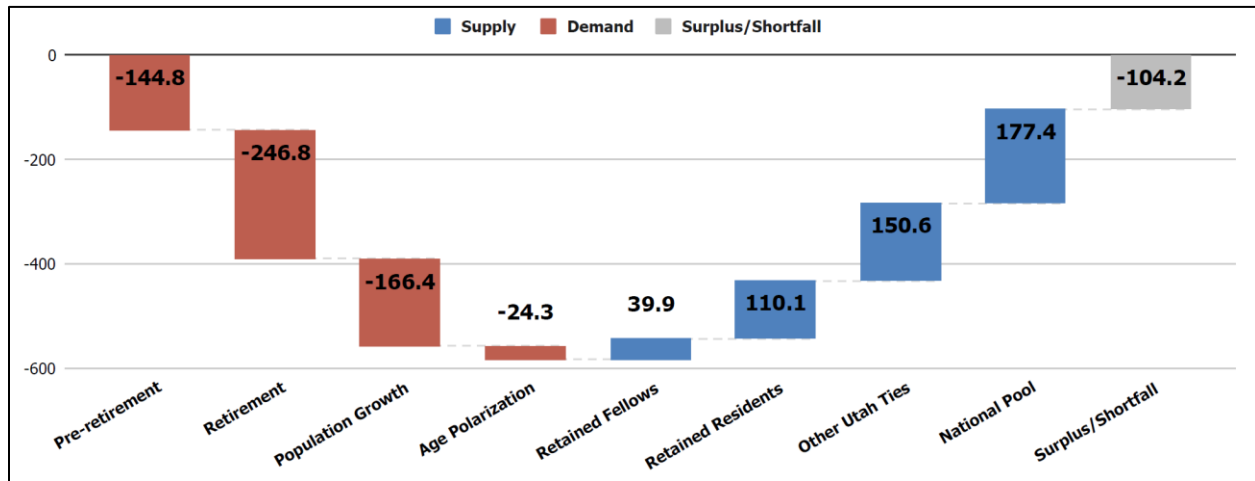
Figure 38: UMEC Projection Model, 2020

Figure 38 identifies a shortfall in the annual "production" of physicians. To be clear, a shortfall is **not** the same as a shortage. Shortfall, as used here, means that to maintain the same level of FTEs, more physicians need to be recruited from the national pool of physicians.

This is the first time UMEC is projecting this shortfall. In 2010 and 2015, small surpluses were projected (shown in *Figure 39* and *Figure 40* on page 145). The primary reasons this changed in 2020 include:

- **A significant increase in pre-retirement hour reduction** — the number of active physicians in Utah increased roughly 34% since the previous iteration of the physician workforce survey, but the FTE losses from this component of demand increased 116%. If the 2016 report numbers are applied, the shortfall shrinks by 54.9 FTEs. Addressing burnout could be vital in reducing the FTE loss from hour reduction (as well as in retirement FTE losses) as 60.6% of physicians report experiencing burnout, and of that share, 51.2% report they have reduced hours or are planning an earlier retirement. See "Burnout" on page 30 for more information.

  It is possible that the numbers reported by physicians reflect a desired reduction in hours, but the numbers are much steeper than other data would suggest. For more discussion, see "Pre-Retirement Reduction in Hours" on page 51.

- **Lower retention of residents and fellows** — according to the most recent UMEC retention report (Salt, 2019), Utah is retaining 35% of fellows and 47% of residents. In 2016, 45% of fellows and 55% of residents were retained. If the 2016 retention rates are applied, the shortfall shrinks by 31.1 FTEs (19.1 residents, 12 fellows).

Had these two components stayed consistent from 2016, the shortfall would be nearly eliminated.

• • •

PROJECTED DEMAND FOR PHYSICIANS

The demand for physicians falls into two broad categories: the need generated from the loss of physicians and the need generated by increased healthcare provision requirements.

Pre-Retirement Reduction in Hours

This first component of demand describes the number of FTEs lost per year to physicians reducing the number of hours they practice prior to fully retiring. In the next five years, 1,688 physicians (20.9% of the physician workforce) report plans to reduce hours. The average number of hours worked by this group is 46.58, and the reported number of work hours after reduction is 63.2% of previous hours, resulting in an average loss per physician of 0.429 FTEs. If 338 physicians reduce their FTEs by 0.429 each year, 144.8 physician FTEs are lost from the workforce.

However, this reduction would take physicians to an average of 29.4 hours per week, which is well below what would be expected and what survey data suggest. The physicians in the group that plan to reduce their hours in the next five years are part of an older cohort (median age of 61), but 29.4 hours is below what even the 65 and older age cohort currently report (median of 40, average of 36.7). A more conservative estimate of pre-retirement FTE loss might instead assume that these physicians will either reduce to 40 hours a week, resulting in an annual FTE loss of only 54 (0.16 per physician) or to 36.7 hours per week, resulting in an annual FTE loss of 83.4 (0.25 per physician). The planned hour reductions reported by physicians may be more aspirational than realistic.

Retirement Losses

The average reported planned retirement age is 66 +/- 0.23, an increase from 65.7 reported in 2015. The median remains at 65.

15% of Utah physicians report plans to retire in the next five years. Each year, Utah will lose 3% of physicians, each representing an average of 1.02 FTEs, resulting in a yearly FTE loss of 246.8 FTEs.

Increased Need from Population Growth and Age Polarization

The Kem C. Gardner Policy Institute (2017) projects that Utah's population will reach 4 million by 2030, an increase of 17.75% or an average yearly increase of 1.78% per year. The number of physicians will need to increase by 143.8 per year, or 166.4 FTEs at the current average of 1.157, to match this expected growth.

In addition to simple numerical growth, the population of Utah, like the rest of the country, is experiencing something called "age polarization," which simply means that the older share of the population is growing faster than other age segments. Because health issues increase with age, the visit rate for older populations increases, as reported by the Centers for Disease Control and Prevention (CDC) (2014), (2016), (2017) and shown in *Table 21*.

Table 21: CDC Visit Rates by Age Group

Age Group	Visit Rate
Under 15	3.235
15-24	2.171
25-44	2.707
45-64	3.594
65-74	5.132
75 and Older	6.163

The visit rate for Utah is projected to increase from the current 3.23 visits per year to 3.32 visits per year by 2030, a 10-year increase of 2.63% or an average yearly increase of 0.26%. To account for this increase, Utah will require 21 physicians, or 24.3 FTEs, each year.

To read more about the impacts of these two components at a more granular level, see "Utah Hot Spots" on page 54.

PROJECTED SUPPLY OF PHYSICIANS

An average of 413.2 physicians are added to the Utah workforce each year, equivalent to 478.1 FTEs at the average FTE of 1.157. These physicians are classified into one of the groups that follow.

Retained Fellows and Residents

As mentioned on page 50, the 10-year retention rate of residents and fellows has declined since the previous iteration of this report. An average of 34.5 fellows (39.9 FTEs) and 95.2 residents (110.1 FTEs) are added to the workforce each year.

Retained Physicians with Other Utah Ties

Beyond accounting for graduate medical education, physicians may have either been raised in the state or gone to medical school in Utah. To determine the number of physicians with one or both of these ties, data from the last three iterations of this report were averaged due to significant variability on this measure across the reports. An average of 31.5% of physicians fall into this category, equivalent to 150.6 FTEs per year. However, if only data from the most recent survey is used, 26.5% of physicians (126.7 FTEs) would be classified here, leaving a greater share of physicians coming from the national pool.

Recruitment from National Pool of Physicians

If physicians do not fall into one of the categories mentioned previously, they, by necessity, come from the national pool of physicians who have no ties to Utah. FTEs gained from physicians with no Utah ties stand at 177.4, making it the largest single component of supply. Without any Utah ties, this group of physicians may be harder to retain long-term.

IMPACT OF ADVANCED PRACTICE PROVIDERS

AAMC's most recent report on national physician supply and demand modeled scenarios that would change the baseline physician demand projections (Chakrabarti et al., 2020). The most significant impact, based on their modeling, was the impact of mid-levels or Advanced Practice Providers (APPs) like physician assistants (PAs) and nurse practitioners (APRNs). Depending on the assumptions made about how much care APPs offset, AAMC estimates that under a "high" mid-level use scenario, the annual demand for new physicians could be reduced by 97%. For primary care, it would jump to 124%, more than offsetting annual demand. Under a "moderate" use scenario, these numbers would be halved to 48% and 62%, respectively.

> **In Plain Language**
>
> In the AAMC report, they project that an additional 9,523 physicians need to be added per year to keep up with demand in the U.S. Based on assumptions about how much a mid-level can offset physician-provided care, they project only needing 313 new physicians per year in the "high" use scenario and 4,933 in the "moderate" use scenario.

To be clear, these numbers refer to *annual* demand, not total. The need for primary care physicians does not disappear under the high-use scenario. It should also be strongly emphasized that the AAMC report itself points out that more research into the accuracy of the assumptions is needed. In other words, they do not know the extent to which APPs will offset physicians. This is a decision dependent on multiple factors, including state and federal legislative policies surrounding the scope of practice and payment models and decisions at the level of the healthcare system regarding the roles of specific provider types.

Additionally, state-specific research would be necessary, since the scope of practice for APPs varies by state and would necessarily impact the amount of care they could offset. With these caveats in mind, if these assumptions of increased mid-level offset of physician care were to hold in Utah, either scenario would eliminate the shortfall identified in *Figure 38* on page 50. The most recent UMEC workforce reports on PAs (Bounsanga, 2019) and APRNs (Harris & Ruttinger, 2017) indicate that Utah faces an oversupply of these professionals; if there is, as UMEC projects, a shortfall of physician-provided care, this "oversupply" of APPs may be effectively used.

UTAH HOT SPOTS

Two components of demand are population growth and age polarization (see "Increased Need from Population Growth and Age Polarization" on page 51). The statewide numbers are used in the UMEC Projection Model, but data at the county level can be insightful. *Table 22* shows the variation across the state in growth by age group, in percentage and absolute terms, over the next ten years. This data can provide insight into the adequate future distribution of physicians and healthcare facilities.

The under 18 age group will be the slowest growing age cohort, with a 6.6% increase over the next ten years, but there are some hot spots for pediatricians — Cache, Daggett, Garfield, Juab, Morgan, Utah, Wasatch, and Washington Counties will all see double-digit growth over the next decade. The oldest cohort of Utahns (75 and over) will see a massive 71% increase, led by Summit County at 148.2%.

Table 22: *10-Year Population Growth by County and Age Group*

County	Age Group									
	Under 18		18-44		45-64		65-74		75 and Over	
Beaver	-3.2%	-72	7.7%	178	12.2%	182	16.0%	97	49.3%	220
Box Elder	-0.1%	-12	7.3%	1420	18.4%	2206	31.6%	1407	50.9%	1766
Cache	12.4%	4989	21.9%	12741	7.5%	1604	23.3%	1924	71.1%	3956
Carbon	4.6%	283	5.9%	461	18.4%	903	8.7%	205	64.1%	968
Daggett	15.5%	42	9.6%	33	10.6%	28	-11.7%	-19	46.7%	57
Davis	-3.1%	-3587	6.9%	9270	24.1%	17621	25.3%	6187	74.8%	11742
Duchesne	3.5%	284	5.4%	410	22.2%	959	31.8%	498	57.5%	618
Emery	-7.8%	-250	9.2%	334	13.0%	302	6.6%	75	57.4%	445
Garfield	11.1%	159	12.5%	211	2.4%	30	-8.4%	-60	64.5%	291
Grand	-9.1%	-209	1.4%	46	18.7%	550	8.5%	113	93.4%	642
Iron	4.2%	624	18.9%	4414	10.8%	985	8.8%	388	73.3%	2431
Juab	17.2%	772	35.4%	1657	42.8%	1190	44.9%	418	62.0%	377
Kane	6.0%	113	11.3%	259	7.8%	146	-15.3%	-188	75.2%	656
Millard	-0.1%	-3	10.1%	449	4.3%	127	14.3%	191	48.0%	473
Morgan	15.9%	645	38.3%	1758	21.8%	687	61.6%	625	73.0%	452
Piute	4.4%	19	16.5%	77	1.1%	4	-5.5%	-11	25.4%	48
Rich	-6.6%	-49	11.8%	88	13.9%	70	-6.4%	-17	46.3%	93
Salt Lake	-0.2%	-641	3.0%	14509	22.7%	55405	22.2%	18727	73.6%	36943
San Juan	-12.0%	-601	13.0%	796	8.7%	325	30.8%	420	63.4%	564
Sanpete	7.6%	580	23.7%	3196	-2.0%	-107	-0.6%	-17	57.7%	1209
Sevier	0.8%	56	6.4%	490	19.6%	913	11.5%	251	48.3%	912
Summit	13.6%	1319	8.6%	1163	4.3%	584	47.5%	2094	148.2%	2570
Tooele	7.6%	1723	17.6%	4782	44.2%	7306	48.2%	2389	99.6%	2765
Uintah	-3.6%	-486	1.3%	190	30.5%	2387	33.3%	909	78.8%	1241
Utah	19.3%	43569	25.3%	73588	32.6%	34545	36.8%	12647	81.7%	18314
Wasatch	15.0%	1593	30.9%	3879	47.4%	3959	54.6%	1466	103.6%	1558
Washington	24.4%	11320	34.2%	20992	44.9%	16599	25.6%	5534	52.2%	10574
Wayne	7.7%	56	13.6%	117	8.6%	56	-2.1%	-7	48.6%	121
Weber	2.8%	2065	8.0%	8237	19.9%	11069	32.4%	6479	63.3%	8474
State of Utah	6.6%	64302	12.7%	165742	24.8%	160634	26.6%	62729	71.0%	110478

CONCLUSION

The need for a robust healthcare workforce is more apparent than ever as Utah and the nation are in the midst of the COVID-19 public health emergency — the worst pandemic in a century. Maintaining an adequate workforce requires that decision-makers have the necessary data to move forward. As the physician workforce and the state of Utah change, it is essential to continue collecting and summarizing the data that provides a complete picture of where we are and where we are headed. In addition, as the landscape of care delivery changes, it is crucial to collect data on the changing ways in which the healthcare needs of Utahns are met. This UMEC report and others aim to provide the resources needed to achieve these goals.

APPENDICES

PREVIOUS UMEC PROJECTION MODELS

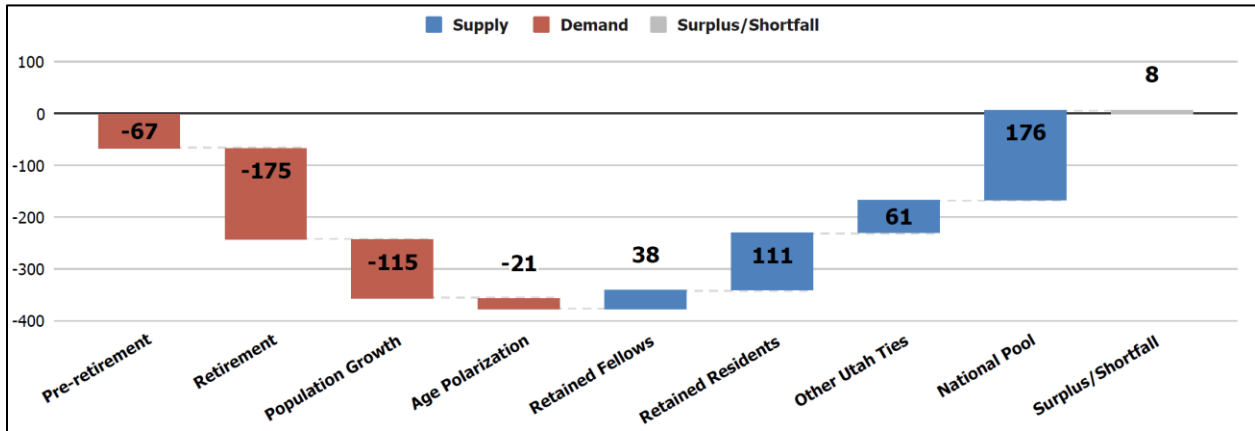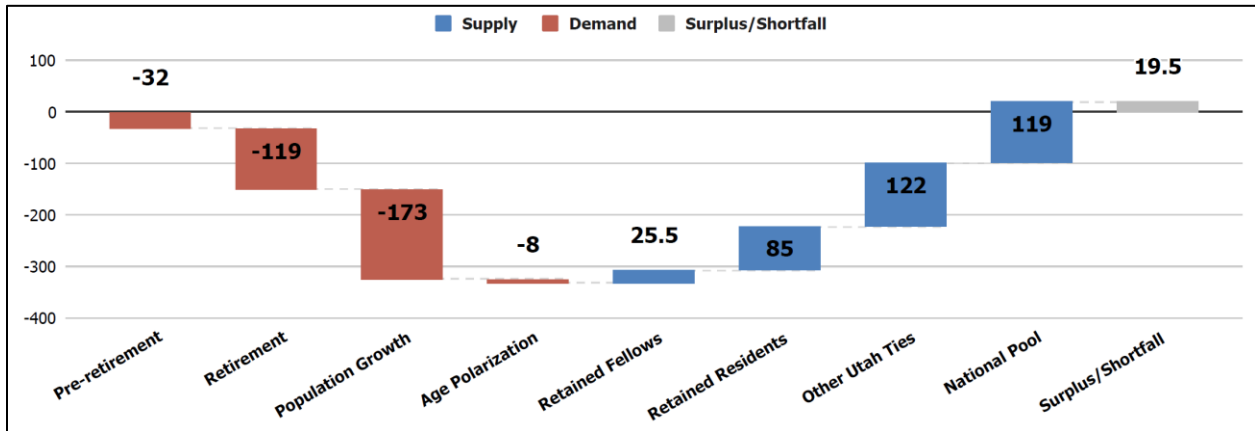*Figure 39:* UMEC Projection Model, 2015

Figure 40: UMEC Projection Model, 2010

METHODOLOGY

DATA COLLECTION

The 2019 Utah Physician Workforce Survey (see "Survey Instrument" on page 146) was sent to 12,318 physicians licensed in the state of Utah with a domestic address as of September 2019. This data was provided through a memorandum of understanding the UMEC has with the Utah Department of Occupational and Professional Licensing (DOPL). Over the course of three mailings between November 2019 and May 2020, 3,710 responses were collected, 2,781 from returned paper surveys and 929 from completed online surveys, for a response rate of 30.7%.

DATA VERIFICATION

Reported numbers for the share of value-based payments was checked against more comprehensive data directly from insurers covering 226 million Americans (Health Care Payment Learning & Action Network, 2018). Their data from 2017 shows a higher share of payments tied to value-based care than Utah physicians reported in 2020. This discrepancy led to the decision to not report data collected on this measure and the measure of the share of sliding scale payments, which is assumed to suffer from similar validity issues.

No primary care physicians were reported in UMEC survey data from Emery, Piute, Morgan, or Daggett counties. The Utah Department of Health's data from 2017 (most recently available data) also indicates that no primary care physicians are practicing in Daggett or Piute Counties; however, Morgan and Emery Counties do have primary care physicians on record (UDoH, 2017). No specialists were reported in UMEC survey data from Daggett, Emery, Garfield, Millard, or Wayne Counties. UDoH does not report counts for specialist physicians so a simple google search was performed, which found specialist physicians practicing in Garfield and Millard counties.

Survey data were analyzed to see if weighting was needed for age, gender, and county. Ultimately, weighting for county was unnecessary and weighting was applied to the age and gender cohorts as shown in *Table 23* and a design effect of 1.2 was applied to margin of error estimates.

Table 23: *Age and Gender Weights*

Age and Gender Cohort	Weight
Under 35, Male	2.91
Under 35, Female	2.46
35-44, Male	1.42
35-44, Female	1.49
45-54, Male	1.26
45-54, Female	1.24
55-64, Male	0.86
55-64, Female	0.91
65 and Over, Male	0.55
65 and Over, Female	0.51

This demographic weighting was then weighted by 3.26 to account for overall non-response.

SURVEY INSTRUMENT

Utah Medical Education Council
230 South 500 East, Suite 210
Salt Lake City, Utah 84102

Dr. «First_Name» «Last_Name»
«Addr_Line_1»
«Addr_Line_2»
«City», «State» «ZIP»

Utah Medical Education Council Chair
Wayne M. Samuelson, MD

Members
John Berneike, MD

Gar Elison

C. Gregory Elliot, MD

Douglas D. Gray, MD

Mark Hiatt, MD, MBA, MS

Sue Wilkey, DNP

Mary Williams, Ph.D., RN

Physician Workforce Advisory Committee Members

Members
Marc Babitz, MD

Tim Farrell, MD

David Park, DO

Brad Poss, MD

Utah Medical Education Council 2020 Physician Workforce Survey

Dear Dr. «Last_Name»

The Utah Medical Education Council, in collaboration with the University of Utah and Intermountain Healthcare and with cooperation from the Utah Division of Occupational and Professional Licensing, requests your continued support and partnership in updating the status of Utah's physician workforce by completing the included survey. Your participation in previous surveys has generated critical data for physician workforce development and planning to meet the healthcare needs of Utah. Analysis and information from this work can be found at www.umec.utah.gov.

We recognize that some of the information required is personal in nature and we are committed to maintaining your privacy. **Only de-identified, aggregate data will be published.** For any questions regarding this survey, please contact Clark Ruttinger at (801) 526-4564 or crutting@utah.gov. For any technical issues arising while taking the online survey, please contact Jared Staheli at (801) 526-4552 or jstaheli@utah.gov.

Please return the completed survey to the UMEC within 30 days in the enclosed postage paid envelope **OR** simply take the survey online at **umec.utah.gov/2020-survey** using the following code: «ExternalDataReference»

Sincerely,

Richard Campbell
Executive Director
Utah Medical Education Council

Timothy W. Farrell, MD
Associate Professor of Medicine
University of Utah School of Medicine

Marc E. Babitz, MD
Deputy Director
Utah Department of Health

David J. Park, DO
Vice President and Dean of the Southern Utah Campus
Rocky Vista University

Brad Poss, MD
Associate Dean for Graduate Medical Education
University of Utah Health

2020 Utah Physician Workforce Survey

Q1 Which of the following best describes your **primary work status?** Mark only one:

- ☐ Actively working in (or plan to soon begin/return to) a position that requires a medical license (<u>including</u> semi-retirement/volunteer only) *in Utah* — **Go to Q5**
- ☐ Actively working in (or plan to soon begin/return to) a position that requires a medical license (<u>including</u> semi-retirement/volunteer only) *in another state* — **Go to Q2**
- ☐ Primarily working in a field other than medicine (i.e., still doing some work that requires a medical license) — **Go to Q4**
- ☐ Solely working in a field other than medicine (i.e., doing NO work that requires a medical license) — **Go to Q4**
- ☐ Fully retired

Q2 If you are working in medicine outside of Utah, please specify why you maintain a Utah license:

Q3 If you are working in medicine outside of Utah, please indicate how influential each of the following factors were in your choice to work outside of Utah.

	1 - Least influential	2	3	4	5 - Most influential
Family	☐	☐	☐	☐	☐
Lifestyle	☐	☐	☐	☐	☐
Wage/ Payscale	☐	☐	☐	☐	☐
Work environment	☐	☐	☐	☐	☐
Climate/ Weather	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐

If you indicated "Other" please specify:

Q4 If you are working in a field other than medicine (either solely or primarily), why is that the case? Please also specify if you plan to return to either full- or part-time work in medicine.

IF YOU DO NOT PRACTICE MEDICINE IN THE STATE OF UTAH OR HAVE RETIRED FROM PRACTICING MEDICINE, PLEASE STOP HERE AND RETURN THE SURVEY IN THE INCLUDED PRE-PAID ENVELOPE. THANK YOU FOR YOUR TIME.

Q5 Which of the following describes your race or ethnicity? Mark all that apply:

- ☐ American Indian/Alaska Native
- ☐ Asian
- ☐ Black or African American
- ☐ Hispanic, Latino, or Spanish origin
- ☐ Middle Eastern or North African
- ☐ Native Hawaiian/Other Pacific Islander
- ☐ White/Caucasian
- ☐ Other race or ethnicity

If you marked "Other" please specify:

Q6 Where did you spend the majority of your upbringing?

If there are multiple locations, enter the location where you spent the majority of your time from ages 14-18.

State (if in U.S.)

Country (if not in U.S.)

Q7 Which of the following **best** describe the area(s) where you spent your upbringing (as it was when you grew up there)? Mark all that apply:

- ☐ Rural
- ☐ Suburban
- ☐ Urban

Q8 Where did you complete your medical degree?

State (if in U.S.)

Country (if not in U.S.)

MD or DO?

Year of graduation

Private (enter 01) or public/state (enter 02) school?

For questions 9 through 11, please indicate the specialty and the location of **ALL** the internships, residencies, or fellowships you have completed (or are currently involved in). If there are more than three, be sure to include any Utah-based programs.

Enter a code from LIST A to indicate the specialty (e.g., general family medicine would be represented by code "11"). If indicating an "other" specialty or subspecialty (codes 05, 23, 29, 33, 35, 41, 55, or 58), please specify.

Q9 <u>Program 1</u>

State

Specialty

If "other" please specify:

Q10 <u>Program 2</u>

State

Specialty

If "other" please specify:

Q11 Program 3

State

Specialty

If "other" please specify:

Q12 Please indicate the amount of educational debt you **currently** have from your medical training, as well as the total amount you had for your medical training **at the time you graduated from medical school**:
When responding, **exclude** any pre-medical (e.g., undergraduate loans), tangential (e.g., residency relocation loans), and non-education debt (e.g., car loans, credit card debt)
Enter a code from LIST B to indicate your level of debt (e.g., $120,000 of debt would be represented by code "06").

Current medical education debt

Medical education debt at time of graduation

Q13 What is your average annual gross (before taxes) income, **excluding** benefits?
Enter a code from LIST B to indicate your income (e.g., $240,000 would be represented by code "11").

Q14 Please describe your primary and secondary (if applicable) practice/work setting. *Enter the code from LIST C which best indicates your work setting(s) (e.g., a multi-specialty clinic would be represented by code "03").*

Primary Setting

If you indicated "other" (code 24), please specify:

Secondary Setting

If you indicated "other" (code 24), please specify:

Q15 Excluding residency/fellowship, have you **voluntarily** switched employers/practices within the past **two years**?

☐ Yes Go to Q16   ☐ No   Go to Q18

Q16 If YES, please use the list of settings in LIST C to indicate the work setting you **left** and the work setting you **moved to**.
If you have moved multiple times in the past two years, respond using the most recent instance.

Left

If you indicated "other" (code 24), please specify:

Moved to

If you indicated "other" (code 24), please specify:

Q17 If YES, please indicate the reason(s) for this change of work setting. Mark all that apply:

☐ Better work/education fit   ☐ Personal/family reasons
☐ Desire for change   ☐ Preferred hours
☐ Higher pay   ☐ Professional advancement
☐ More challenging   ☐ Work responsibilities
☐ Moved residence   ☐ Other

If you indicated "other" please specify:

Q18 Please describe your primary and secondary (if applicable) specialty:
Enter the code from LIST A which best indicates your specialty(ies) (e.g., general family medicine would be represented by code "11"). If indicating an "other" specialty or subspecialty (codes 05, 23, 29, 33, 35, 41, 55, or 58), please specify.

Primary Specialty

If "other" please specify:

Board-certified/board-eligible? Enter Y or N

Secondary Specialty

If "other" please specify:

Board-certified/board-eligible? Enter Y or N

Q19 Please indicate how influential each of the following factors were in your choice of **primary** specialty.

	1 - Least influential	2	3	4	5 - Most influential
Income potential	☐	☐	☐	☐	☐
Enjoyment of the specialty	☐	☐	☐	☐	☐
Personal aptitude/skill set	☐	☐	☐	☐	☐
Anticipated work schedule	☐	☐	☐	☐	☐
Enjoyment of teaching, research, and/or scholarship	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐

If you indicated "other" please specify:

*Applies to questions 20 and 21: For your primary and secondary (if applicable) practice sites, please indicate the **ZIP code** of each site. In addition, please estimate the **total hours worked per week** (not including on-call) at each practice location AND the **number of hours you spend in direct patient care** each week (including charting, telemedicine, and direct patient care combined with teaching/training of other medical professionals).*

Make sure the hours reported in direct patient care hours/week is less than or equal to total hours/week.

Q20 **Primary Site**

ZIP code

Total hours/week

Direct patient care hours/week

Q21 **Secondary Site**

ZIP code

Total hours/week

Direct patient care hours/week

Q22 At what age do you plan to retire?

Q23 Prior to retirement, do you plan to reduce the number of hours you practice per week?

☐ Yes Go to Q24   ☐ No   Go to Q25

● ● ●

Q24 If YES, please specify:

How many <u>years from now</u> you plan to reduce your hours ☐☐

How many <u>hours per week</u> you will practice after reducing your hours ☐☐

Applies to questions 25 and 26: If you <u>DO</u> provide direct patient care, please estimate what <u>percent</u> of your direct patient care time is spent in the following types of care.

Q25 **Primary Site** (total should equal 100%)

Preventive Care (%) ☐☐☐

Acute Care (%) ☐☐☐

Chronic Care (%) ☐☐☐

Q26 **Secondary Site** (total should equal 100%)

Preventive Care (%) ☐☐☐

Acute Care (%) ☐☐☐

Chronic Care (%) ☐☐☐

Q27 If you <u>DO NOT</u> provide direct patient care, how many <u>years</u> has it been since you did? ☐☐

For questions 28 through 31, please indicate the <u>average number of hours per week</u> you spend on the following NON-patient care activities.

*The total number of hours spent on non-patient care activities should not exceed total hours/week minus direct patient care hours/week as reported in Questions 20 and 21.

Q28 **Classroom Training of other Professionals** (e.g., clinical and/or classroom teaching of students <u>without</u> patient care)

Primary Site (hrs/wk) ☐☐

Secondary Site (hrs/wk) ☐☐

Q29 **Public Health Activities** (i.e., activities aimed at impacting patient/community health that do <u>NOT</u> include direct pt. care)

Primary Site (hrs/wk) ☐☐

Secondary Site (hrs/wk) ☐☐

Q30 **Administration/Practice Management** (e.g., personnel management, budgeting, activities <u>NOT</u> in support of pt. care)

Primary Site (hrs/wk) ☐☐

Secondary Site (hrs/wk) ☐☐

Q31 **Consulting/Research** (e.g., reports, applications, surveys, <u>NOT</u> in support of patient care)

Primary Site (hrs/wk) ☐☐

Secondary Site (hrs/wk) ☐☐

Q32 On a typical day, how many inpatients do you see per hour (if applicable)? ☐☐

Q33 On a typical day, how many outpatients do you see per hour (if applicable)? ☐☐

For questions 34 - 43, please feel free to consult with your practice admin on responses.

For questions 34 and 35, please estimate the <u>percentage (%)</u> of patients you see (across all practice locations) from each of the following age groups, if applicable.

Q34 The share (%) of <u>inpatients</u> ages:
*Total should equal 100%

0-19 (%) ☐☐☐

20-64 (%) ☐☐☐

65-84 (%) ☐☐☐

85+ (%) ☐☐☐

Q35 The share (%) of <u>outpatients</u> ages:
*Total should equal 100%

0-19 (%) ☐☐☐

20-64 (%) ☐☐☐

65-84 (%) ☐☐☐

85+ (%) ☐☐☐

Q36 Please estimate the <u>share (%)</u> of patients you see from each of the following coverage statuses in your **primary** setting, if applicable.
*Total should equal 100%

Private Insurance/Managed Care (%) ☐☐☐

Medicare, including Medicare Advantage and Dual Eligible patients (%) ☐☐☐

Medicaid (%) ☐☐☐

Self-Pay/Uninsured (%) ☐☐☐

Charity Care (%) ☐☐☐

VA/TRICARE/CHAMPVA (%) ☐☐☐

Q37 Please estimate the <u>share (%)</u> of patients you see paying under a sliding fee scale (i.e., income-adjusted payment scale) in your **primary** setting: ☐☐☐

Q38 Please estimate the <u>share (%)</u> of payments which come from value-based models (i.e., NOT *strictly* fee-for-service, including bundled payments, ACOs, MSSP, MIPS, etc.) in your **primary** setting: ☐☐☐

Q39 In your **primary** setting, do you (or your clinic/facility) limit new patients in the following categories? Mark all that apply:

☐ Medicaid   ☐ Self-Pay/Uninsured

☐ Medicare (including opting out)   ☐ Other New Insured

                    ☐ Not Limiting

Q40 On average, how many <u>days</u> must the following types of patients wait for an appointment?

New patient, Primary site (No. of days) ☐☐☐

Established patient, Primary site (No. of days) ☐☐☐

New patient, Secondary site (No. of days) ☐☐☐

Established patient, Secondary site (No. of days) ☐☐☐

Q41 Please indicate the status of your primary and secondary practice location(s).
Full: Cannot accept additional patients
Nearly full: Can accept a limited number of new patients
Unfilled: Can accept many new patients; far from full
N/A: VA, military, or corrections or no direct pt. care is provided

	Full	Nearly full	Unfilled	N/A
Primary	☐	☐	☐	☐
Secondary	☐	☐	☐	☐

Q42 Please indicate the extent of your use of the following technology(ies) in your **primary setting**:

	Currently use	Plan to use	No plans to use
Electronic Medical/ Health Record (EMR/EHR)	☐	☐	☐
E-Prescribing System	☐	☐	☐
Clinical Health Information Exchange (CHIE/HIE)	☐	☐	☐
Telemedicine/Telehealth	☐	☐	☐
Technology-mediated patient contact/outreach (e.g., social media, texting)	☐	☐	☐
Consumer health device (e.g., Fitbit) data	☐	☐	☐

Q43 When delivering the following types of care, which of the following professionals, including yourself, are on your care team(s) in your **primary setting?**

Please also indicate in the "Need More" column whether you are seeking to add any of the following professionals to your care team(s) in your **primary setting.**

	Prevent-ive	Acute	Chronic	Need More
Care Coordinator	☐	☐	☐	☐
Certified Nursing Assistant	☐	☐	☐	☐
Certified Nurse Midwife	☐	☐	☐	☐
Certified Registered Nurse Anesthetist	☐	☐	☐	☐
Clinical Nurse Specialist	☐	☐	☐	☐
Dentist	☐	☐	☐	☐
Licensed Practical Nurse	☐	☐	☐	☐
Medical/Healthcare Assistant	☐	☐	☐	☐
Medical Student/Resident	☐	☐	☐	☐
Mental/Behavioral Health Professional	☐	☐	☐	☐
Nurse Practitioner	☐	☐	☐	☐
Pharmacist	☐	☐	☐	☐
Physical/Occupational Therapist	☐	☐	☐	☐
Physician Assistant	☐	☐	☐	☐
Primary Care Physician	☐	☐	☐	☐
Registered Nurse	☐	☐	☐	☐
Social Worker	☐	☐	☐	☐
Specialist Physician	☐	☐	☐	☐

Q44 Overall, how satisfied have you been with your career:

	Very diss-atisfied	Dissatis-fied	Neither satsf. or dissatsf.	Satisfied	Very satisfied
In the last 12 months?	☐	☐	☐	☐	☐
Overall?	☐	☐	☐	☐	☐

Q45 Would you recommend that a young person today pursue a career in:

	Yes	No	Unsure
Medicine in general?	☐	☐	☐
Your primary specialty?	☐	☐	☐

Q46 If responding with "No" or "Unsure," please specify why that is the case:

☐

Q47 Does your **primary** work setting offer *qualified* interpreter/translation services, whether on-site or remotely, for the following languages, *excluding* those services covered by programs (e.g., Medicaid) which offer free translation services.

Check N/A if there is no population which speaks the language in your area or you do not provide direct patient care in your primary work setting.

	Yes	No	D/K	N/A
Spanish	☐	☐	☐	☐
Chinese	☐	☐	☐	☐
Vietnamese	☐	☐	☐	☐
Other language(s)	☐	☐	☐	☐

If you indicated "other language(s)" please specify:

☐

Q48 Do you experience burnout (i.e., feeling depleted or exhausted, being mentally distant from your job, or experiencing reduced professional productivity as a result of chronic workplace stress)?

☐ Yes Go to Q49   ☐ No **You've completed the survey.**

Q49 If YES, has it led you to reduce your work hours or planned age of retirement?

☐ Yes   ☐ No

Q50 How significantly have each of the following contributed to your burnout?

	Not at all	A little bit	A fair amount	A great deal
Administrative burden	☐	☐	☐	☐
Work hours/poor work-life balance	☐	☐	☐	☐
Patient relationships/expectations	☐	☐	☐	☐
Leadership relationships/expectations	☐	☐	☐	☐
Decision making autonomy	☐	☐	☐	☐
Health Information Technology (e.g., EHRs)	☐	☐	☐	☐
Inadequate number of professionals on team	☐	☐	☐	☐
Other	☐	☐	☐	☐

If you indicated "other" please specify:

☐

Thank you for your participation. Please return the completed survey in the enclosed postage paid envelope.

Use this reference sheet to respond to questions that require a code response.

List A

01	Addiction Medicine
02	Allergy & Immunology
03	Anesthesiology – General
04	Anesthesiology – Pain Management
05	Anesthesiology – Other subspecialties
06	Cardiology
07	Critical Care Medicine
08	Dermatology
09	Emergency Medicine
10	Endocrinology
11	Family Medicine – General
12	Family Medicine – Geriatrics
13	Family Medicine – Sports Medicine
14	Gastroenterology
15	Hematology/Oncology
16	Hospice and Palliative Medicine
17	Hospitalist – Internal Medicine
18	Hospitalist – Pediatrics
19	Hyperbaric Medicine
20	Infectious Diseases
21	Internal Medicine – General
22	Internal Medicine – Pediatrics
23	Internal Medicine – Other subspecialties
24	Medical Genetics
25	Nephrology
26	Neurology
27	Nuclear Medicine
28	OB/GYN – General
29	OB/GYN subspecialties
30	Ophthalmology
31	Otolaryngology
32	Pathology – General
33	Pathology subspecialties
34	Pediatrics – General
35	Pediatrics subspecialties
36	Physical Medicine and Rehabilitation
37	Preventive Medicine/Public Health
38	Occupational Health
39	Psychiatry – General
40	Psychiatry – Child and Adolescent
41	Psychiatry – Other subspecialties
42	Pulmonology
43	Radiology – Diagnostic
44	Radiology – Therapeutic/Radiation Oncology
45	Radiology – Interventional
46	Rheumatology
47	Sleep Medicine
48	Surgery – Cardiothoracic/Thoracic
49	Surgery – Colon and Rectal
50	Surgery – General
51	Surgery – Orthopaedic
52	Surgery – Neurological
53	Surgery – Plastic
54	Surgery – Vascular
55	Surgery – Other subspecialties
56	Urgent Care Medicine
57	Urology
58	Other specialty

*List B and C on other side

Use this reference sheet to respond to questions that require a code response.

List B

01	$0.00
02	>$0.00 to $24,999
03	$25,000 to $49,999
04	$50,000 to $74,999
05	$75,000 to $99,999
06	$100,000 to $124,999
07	$125,000 to $149,999
08	$150,000 to $174,999
09	$175,000 to $199,999
10	$200,000 to $224,999
11	$225,000 to $249,000
12	$250,000 to $274,999
13	$275,000 to $299,999
14	$300,000 to $324,999
15	$325,000 to $349,999
16	$350,000 to $374,999
17	$375,000 to $399,999
18	$400,000 to $424,999
19	$425,000 to $449,999
20	$450,000 to $474,999
21	$475,000 to $500,000
22	$500,000 or more

List C

01	Office/Clinic - Solo Practice
02	Office/Clinic - Single Specialty Group
03	Office/Clinic - Multi Specialty Group
04	Hospital - Inpatient
05	Hospital - Outpatient
06	Hospital - Emergency Department
07	Ambulatory Care Center
08	Federal Hospital (VA) and other military settings
09	Research Laboratory
10	Medical School
11	Nursing Home/Skilled Nursing Facility
12	Home Health Setting
13	Hospice Care
14	Federally Qualified Health Center
15	State or Local Health Department
16	Academic Institution
17	Volunteer in a Free Clinic/Other Volunteer Setting
18	Correctional Facility
19	University/College Student Health Facility
20	Psychiatric/Mental Health Facility
21	Substance Abuse Facility
22	Non-clinical setting (e.g., business, insurance)
23	Telemedicine (if not associated with one of the settings listed above)
24	Other

*List A on other side

INDIVIDUAL ITEM RESPONSE RATES

The following table shows the response rates for each survey item from the applicable subsample of respondents who were expected to answer.

Table 24: *Individual Item Response Rates*

Question No.	Question Description	Response Rate
Q1	Licensed Physician Status	100%
Q2	Reasons for Maintaining License	87.3%
Q3	Reasons for Working Outside Utah	74.6%
Q4	Reasons for Working Outside Medicine	94.4%
Q5	Race/Ethnicity	98.7%
Q6	Upbringing State/Country	98.4%
Q7	Upbringing Density	98.6%
Q8	Medical Degree State/Country	98.3%
Q8	Degree Type (MD/DO)	99.2%
Q8	Institution Type (Private/Public)	97.5%
Q8	Year of Graduation	98.3%
Q9-Q11	Post-Grad Programs	98.7%
Q12	Current Debt	96.9%
Q12	Debt at Graduation	95.5%
Q13	Income	96.6%
Q14	Setting	98.9%
Q15	Setting Move	98.8%
Q16	Setting Move Detailed	98.0%
Q17	Setting Move Reasons	99.5%
Q18	Specialty	98.9%
Q18	Board Certification	58.1%
Q19	Reasons for Choosing Specialty	98.3%
Q20-21	Setting ZIP Code	97.5%
Q20-21	Total Hours	96.2%
Q20-21	Direct Patient Care Hours	93.3%
Q22	Retirement Age	91.5%
Q23	Reduce Hours Prior to Retirement	96.5%
Q24	Years from Now to Reduce Hours	96.1%
Q24	Hours Worked After Reducing Hours	93.1%

Question No.	Question Description	Response Rate
Q25-26	Type of Care	93.9%
Q27	Years Since Providing Direct Patient Care	100%
Q28-Q31	Non-Patient Care Activities	96%
Q32-Q33	Patients per Hour	83.4%
Q34-Q35	Patient Ages	87.9%
Q36	Patient Coverage	79.4%
Q37	Sliding Fee Scale	57.6%
Q38	Value-Based Payments	52.3%
Q39	Patient Limiting	82.5%
Q40	Patient Wait	73.7%
Q41	Practice Status	84.5%
Q42	Technology Use	95.1%
Q43	Care Team	78.2%
Q44	Satisfaction: Last 12 Months	97.5%
Q44	Satisfaction: Overall	95.2%
Q45	Pursue Medicine	97.8%
Q45	Pursue Specialty	97.8%
Q46	Reasons for No or Unsure in Q45	90.6%
Q47	Language Translation	94.1%
Q48	Experience Burnout	97.7%
Q49	Reduced Hours/Age of Retirement due to Burnout	97.9%
Q50	Reasons for Burnout	97.2%

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