



# **Rural Rotation Program**

*Utah Medical Education Council*

**2007-2013**

[www.utahmec.org](http://www.utahmec.org)



## **SECTION 1: THE UMEC'S RURAL ROTATION PROGRAM**

### **1.1 BACKGROUND**

The Utah Medical Education Council (UMEC, [www.utahmec.org](http://www.utahmec.org)) was created in 1997 out of a need to secure and stabilize the state's supply of healthcare clinicians. The legislation authorized the UMEC to conduct ongoing healthcare workforce analyses and to assess Utah's training capacity and graduate medical education (GME) financing policies.

The UMEC also works to provide medical training in rural locations throughout Utah. The purpose of these rural clinical rotations is threefold: first, increase access to healthcare for underserved areas in Utah; second, provide medical professionals with unique insight into providing care in rural locations; and three, lower barriers that could prevent a medical professional from choosing to practice in a rural location. Accordingly, the goal of UMEC's rural rotation program is to equip medical practitioners in a manner that is conducive to improving both the short- and long-term care of underserved communities around Utah.

### **1.2 PROGRAM OVERVIEW**

In 2011, roughly 15%<sup>1</sup> of Utah's population lived in a designated rural county.<sup>2</sup> In addition, 23 of 29 counties in Utah currently have some form of Primary Care Health Professional Shortage Area (HPSA) designation.<sup>3,4</sup>

Studies have shown that medical students interested in rural medicine are more likely to have grown up in rural areas and/or volunteered in rural or developing areas.<sup>5,6</sup> Rural rotations are thus utilized by the UMEC to help provide residents/students with a chance to experience and see firsthand rural life and practice – thereby improving the chances that these students will return to rural areas to practice. In many small communities, a physician assistant or a nurse practitioner is the only primary care provider available. As a result, rural rotations offered through the UMEC have been expanded to incorporate numerous healthcare disciplines.

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<sup>1</sup> See Utah Governor's Office of Management and Budget (GOMB)- Demographic and Economic Analysis- Population Estimates- Population Estimates, State of Utah and Counties 1940 to 2011, [http://www.governor.utah.gov/dea/UPEC/All\\_UPEC\\_Data.xls](http://www.governor.utah.gov/dea/UPEC/All_UPEC_Data.xls).

<sup>2</sup> In 2000, the rural population in Utah was 11.8%. U.S. Census Bureau, 2000 Census of Population and Housing, Population and Housing Unit Counts PHC-3. See also <<http://www.census.gov/prod/cen2000/index.html>>.

<sup>3</sup> See Utah's Physician Workforce, 2012. [www.utahmec.org](http://www.utahmec.org)

<sup>4</sup> HPSA's are defined as areas experiencing "shortages of primary medical care, dental or mental health providers and may be geographic, demographic, or institutional." See Health Resources and Services Administration. *One Department Serving Rural America: HHS Rural Task Force Report to the Secretary, 2007*. Available at: <http://ruralhealth.hrsa.gov/PublicReport.htm>.

<sup>5</sup> Feldman, Kymm., et al. "The difference between medical students interested in rural family medicine versus urban family or specialty medicine." *CJRM* 73.2 (2008): 73-9.

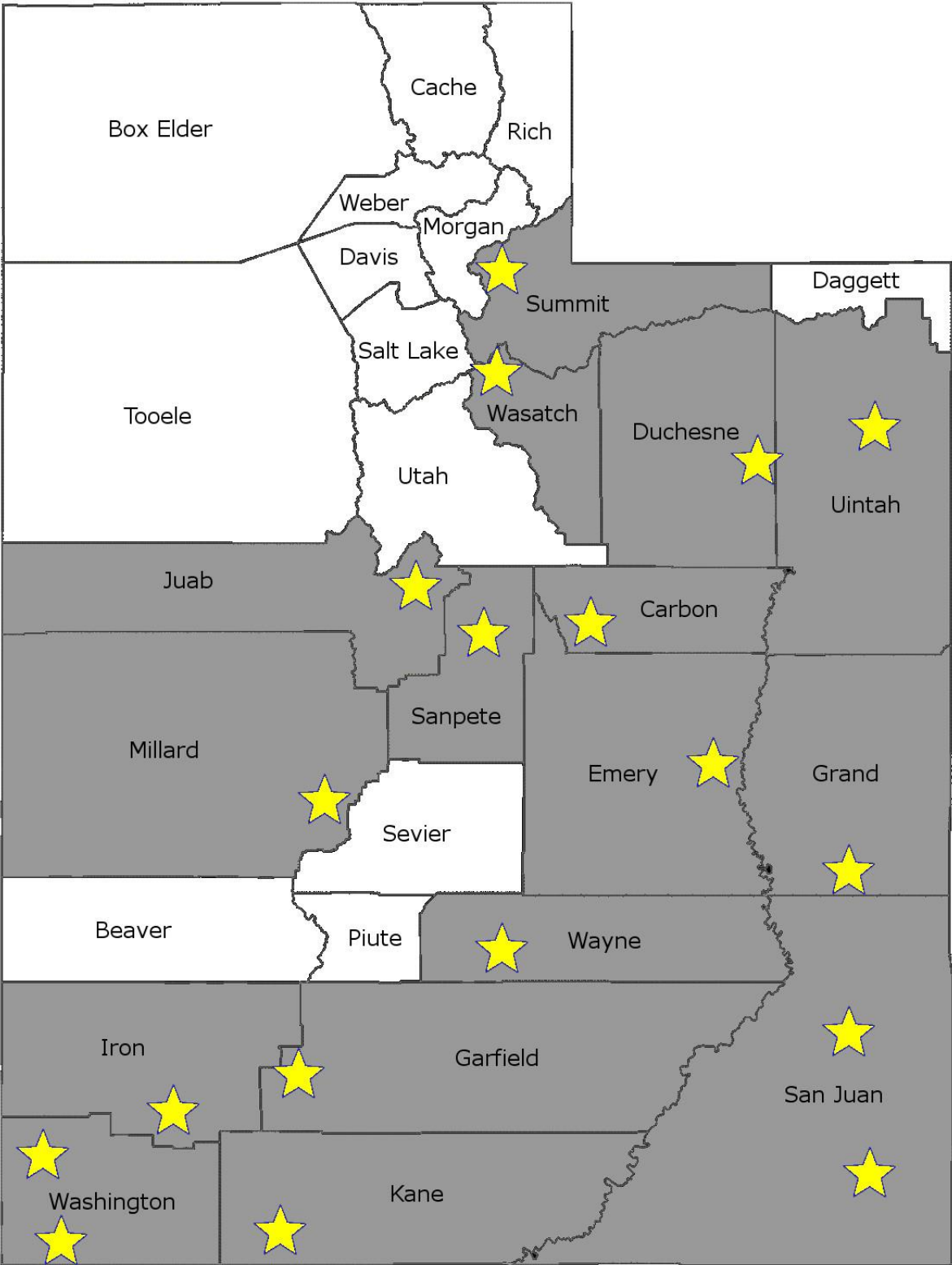
<sup>6</sup> Barrett, Felicia A., Martin S. Lipsky, and May Nawal Lutfiyya. "The Impact of Rural Training Experiences on Medical Students: A Critical Review." *Academic Medicine* 86.2 (2011): 259-63.

**Table 1 - Utah's Rural Healthcare Workforce**

<b>Healthcare Workforce</b>	<b>% Workforce in All Rural Counties throughout Utah</b>
Physicians (ALL) (2012)	7.2%
<i>Primary Care Physicians</i>	12%
Dentist (2013)	11.0%
APRNs (2011)	10%
PAs (2008)	13.9%
Pharmacists (2013)	13.8%

Approximately 15% of Utah’s population lives in a designated rural county. Table 1 indicates that only two of Utah’s healthcare workforces (PAs and pharmacists) approach the population percentage within these rural counties. Accordingly, not only are these healthcare workforces currently underrepresented across rural counties in Utah, but future retirement trends and an aging population within these counties can exacerbate an already thin group of medical practitioners serving these areas (see Table 12 and 13). The UMEC attempts to utilize rural rotation programs across these healthcare disciplines as a means to properly train and secure a workforce that can appropriately address the current and future healthcare needs of these rural communities.

# Locations of Clinical Rural Rotations, 2013



**SECTION 2: OUTLINE OF THE UMEC’S RURAL ROTATION PROGRAM, FY 2013**

**2.1 RURAL ROTATIONS IN 2013**

In 2007, the UMEC’s rural rotation program consisted of 6 medical residents serving in 3 rural locations in 3 counties (Beaver, Nephi, and Vernal). The UMEC’s program has been expanded to include medical and dental residents, Advanced Practice Registered Nurse students (APRNs), pharmacy students, and Physician Assistant students (PAs). In 2013, the UMEC’s rural rotation program sponsored 79 residents/students in 18 rural locations across 16 different counties around Utah.

**Table 2 – Rotations and Residents/Students, FY 2013**

<b>Profession</b>	<b># of Students</b>	<b># of Clinical Rotations</b>
Medical Residents	22	22
Dental Residents (DDS)	9	9
Pharmacy Students	31	34
Physician Assistant Students (PAs)	15	18
Advanced Practice Registered Nurse Students (APRNs)	2	2
<b>TOTAL</b>	<b>79</b>	<b>85</b>

**Table 3 – Locations of Rotations by Profession, FY 2013**

<b>Location</b>	<b>Medical Resident</b>	<b>Dental Resident</b>	<b>Pharmacy Students</b>	<b>PAs</b>	<b>APRNs</b>
<i>Bicknell</i>	---	---	2	---	---
<i>Blanding</i>	4	---	5	---	---
<i>Cedar City</i>	---	---	6	4	1
<i>Coalville</i>	1	---	---	---	---
<i>Enterprise</i>	---	---	---	2	---
<i>Fillmore</i>	---	---	---	1	---
<i>Green River</i>	---	---	---	3	---
<i>Heber City</i>	5	---	---	---	---
<i>Kanab</i>	1	---	---	---	---
<i>Moab</i>	1	---	1	---	---
<i>Montezuma Creek</i>	1	9	1	2	---
<i>Mt. Pleasant</i>	3	---	5	---	---
<i>Nephi</i>	6	---	1	---	---
<i>Panguitch</i>	---	---	1	---	---
<i>Price</i>	---	---	---	2	---
<i>Roosevelt</i>	---	---	2	1	---
<i>St. George</i>	---	---	8	3	1
<i>Vernal</i>	---	---	2	---	---
<b>TOTAL</b>	<b>22</b>	<b>9</b>	<b>34</b>	<b>18</b>	<b>2</b>

While some residents/students who have participated in these rotations are from outside of Utah, the vast majority of these participants are individuals receiving their medical education in Utah.<sup>7</sup>

**Table 4 – Rotations and Participants by University, FY 2013**

<b>University/School</b>	<b>Participants</b>	<b>Rotations</b>
University of Utah (Utah)	66	67
McKay Dee (Utah)	5	5
Idaho State University (Idaho)	2	5
AT Still University (Missouri)	1	3
Others*	5	5
<b>TOTAL</b>	<b>79</b>	<b>85</b>

\*Includes: Frontier School of Family Nursing, Oregon Health and Sciences University, St. Marks, University of Cincinnati, and Wake Forest University.

**Table 5 – Provider Type by University, FY 2013**

<b>University/School</b>	<b>Medical Resident</b>	<b>Dental Resident</b>	<b>Pharmacy Students</b>	<b>PAs</b>	<b>APRNs</b>
<i>University of Utah</i>	16	9	30	11	---
<i>McKay Dee</i>	5	---	---	---	---
<i>Idaho State University</i>	---	---	1	1	---
<i>AT STILL University</i>	---	---	---	1	---
<i>Others*</i>	1	---	---	2	2
<b>TOTAL</b>	<b>22</b>	<b>9</b>	<b>31</b>	<b>15</b>	<b>2</b>

\* Includes: Frontier School of Family Nursing, Oregon Health and Sciences University, St. Marks, University of Cincinnati, and Wake Forest University.

<sup>7</sup> In order for out-of-state students to qualify for these rural rotations, they must show a background or interest in working in rural Utah.

**SECTION 3: OUTLINE OF UMEC’S RURAL ROTATION PROGRAM, 2007-2013**

**3.1 RURAL ROTATION PROGRAM SINCE INCEPTION: 2007 – 2013**

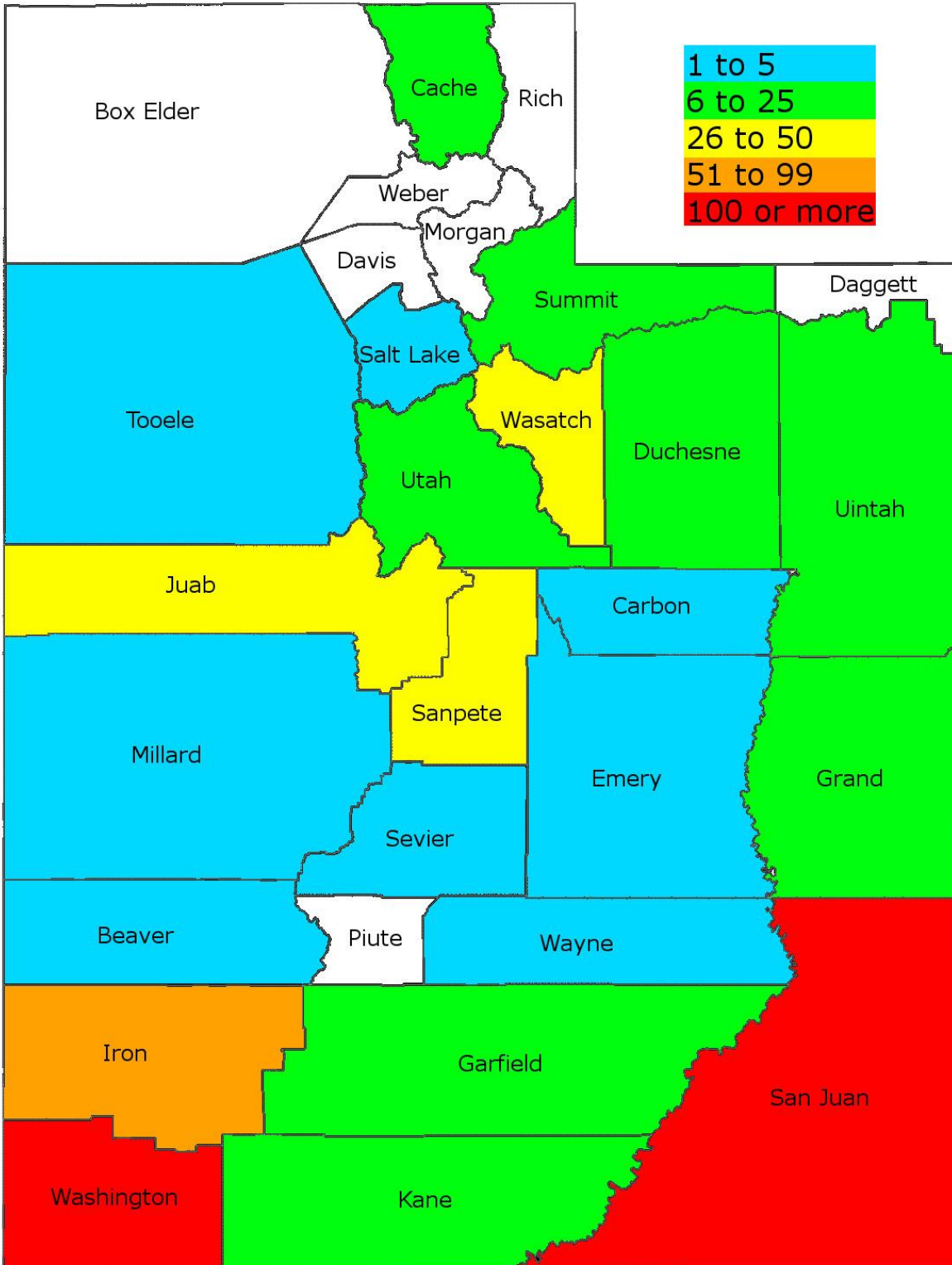
Since 2007, the UMEC has sponsored 510 rotations for 405 healthcare residents/students across 38 different rural Utah locations. A majority of rotations have been undertaken by medical residents (28%), followed by PAs (24%), pharmacy students (23%), medical students (11%), dental residents (10%), and APRNs (4%). Since inception, these rotations have provided services in 38 different areas, covering 24 of the 29 counties in Utah. San Juan and Washington counties have had the most rotations.

**Table 6 – Rotations and Residents/Students, 2007-2013**

<b>Profession</b>	<b># of Students</b>	<b># of Clinical Rotations</b>
Medical Residents	132	145
Dental Residents (DDS)	53	53
Pharmacy Students	102	119
Physician Assistant Students (PAs)	61	122
Medical Students (MS)	42	53
Advanced Practice Registered Nurse Students (APRNS)	15	18
<b>TOTAL</b>	<b>405</b>	<b>510</b>



# Clinical Rotations, ALL ROTATIONS (2007-2013)



**Table 7 – Locations of Rotations by Profession, 2007-2013**

<b>Location</b>	<b>Medical Resident</b>	<b>Dental Resident</b>	<b>PAs</b>	<b>Pharmacy Students</b>	<b>APRNs</b>	<b>Medical Student</b>	<b>Total</b>
<i>American Fork</i>	---	---	---	---	---	3	<b>3</b>
<i>Beaver</i>	1	---	1	2	---	---	<b>4</b>
<i>Bicknell</i>	1	---	---	4	---	---	<b>5</b>
<i>Blanding</i>	8	---	---	20	---	---	<b>28</b>
<i>Bountiful</i>	1	---	---	---	---	---	<b>1</b>
<i>Bullfrog</i>	---	---	2	---	---	---	<b>2</b>
<i>Castledale</i>	---	---	---	---	---	1	<b>1</b>
<i>Cedar City</i>	3	---	23	18	1	14	<b>59</b>
<i>Coalville</i>	6	---	---	---	---	---	<b>6</b>
<i>East Carbon</i>	---	---	---	---	1	---	<b>1</b>
<i>Enterprise</i>	---	---	2	---	---	---	<b>2</b>
<i>Ephraim</i>	---	---	---	---	---	1	<b>1</b>
<i>Fillmore</i>	---	---	1	---	---	---	<b>1</b>
<i>Ft. Duchesne</i>	---	---	---	---	---	4	<b>4</b>
<i>Green River</i>	---	---	3	---	---	---	<b>3</b>
<i>Heber City</i>	27	---	---	---	---	1	<b>28</b>
<i>Highland</i>	---	---	2	---	---	---	<b>2</b>
<i>Hurricane</i>	---	---	4	2	1	1	<b>8</b>
<i>Kanab</i>	4	---	4	---	---	1	<b>9</b>
<i>Logan</i>	2	---	---	6	---	1	<b>9</b>
<i>Moab</i>	3	---	---	4	---	2	<b>9</b>
<i>Montezuma Creek</i>	14	53	3	1	---	---	<b>71</b>
<i>Monticello</i>	1	---	---	---	---	---	<b>1</b>
<i>Mt. Pleasant</i>	7	---	---	18	---	---	<b>25</b>
<i>Nephi</i>	37	---	---	4	1	1	<b>43</b>
<i>Ogden</i>	4	---	---	---	---	1	<b>5</b>
<i>Panguitch</i>	1	---	1	3	1	4	<b>10</b>
<i>Pleasant Grove</i>	---	---	---	---	---	1	<b>1</b>
<i>Price</i>	1	---	2	1	---	---	<b>4</b>
<i>Provo</i>	---	---	---	---	---	1	<b>1</b>
<i>Richfield</i>	1	---	---	---	---	1	<b>2</b>
<i>Roosevelt</i>	2	---	1	4	---	---	<b>7</b>
<i>Salina</i>	1	---	---	---	---	---	<b>1</b>
<i>Salt Lake City</i>	5	---	---	---	---	---	<b>5</b>
<i>St. George</i>	4	---	73	27	13	14	<b>131</b>
<i>Stansbury</i>	3	---	---	---	---	---	<b>3</b>
<i>Tooele</i>	1	---	---	---	---	---	<b>1</b>
<i>Vernal</i>	7	---	---	5	---	1	<b>13</b>
<b>TOTAL</b>	<b>145</b>	<b>53</b>	<b>122</b>	<b>119</b>	<b>18</b>	<b>53</b>	<b>510</b>

The rural rotation program has included participants from both in-state and out-of-state institutions. The largest proportion of participants (72%) and rotations (62%) have been University of Utah residents/students.

**Table 8 – Rotations and Participants by University, 2007-2013**

<b>University/School</b>	<b>Participants</b>	<b>Rotations</b>
University of Utah (Utah)	291	319
McKay Dee (Utah)	34	38
Touro University (California)	19	59
Idaho State University (Idaho)	9	19
AT Still University (Missouri)	4	10
Others*	48	65
<b>TOTAL</b>	<b>406</b>	<b>511</b>

\*Includes: Arizona State University, Campbell University, and Des Moines University. Drexel University, Frontier School of Family Nursing, Intermountain Medical Center, Kansas City University of Medicine and Biosciences, LECOM, Lehigh Valley Hospital, Long Island University, Mary Imogene Bassett Hospital, Michigan State University, Midwestern AZCOM, Ohio University, Oklahoma State University, Oregon Health and Sciences University, Pacific University, Quinnipiac University, Rocky Vista University, Saint Francis University, Samuel Merritt University, St. Marks, Texas Tech, Towson, University of Cincinnati, University of New Mexico, University of Rochester, University of South Alabama, University of Southern Nevada, Utah Valley Residency, Wake Forest University, Washington University, Western University, Western University of Health Sciences, and Westminster College.

**Table 9 – Provider Type by University, 2007-2013**

<b>University/School</b>	<b>Medical Resident</b>	<b>Dental Resident</b>	<b>Pharmacy Students</b>	<b>PAs</b>	<b>APRNs</b>	<b>Medical Student</b>
<i>University of Utah</i>	87	53	98	22	8	23
<i>McKay Dee</i>	34	---	---	---	---	---
<i>Touro University</i>	---	---	---	17	---	2
<i>Idaho State University</i>	---	---	1	8	---	---
<i>AT STILL University</i>	---	---	---	1	---	3
<i>Others*</i>	11	---	3	13	7	14
<b>TOTAL</b>	<b>132</b>	<b>53</b>	<b>102</b>	<b>61</b>	<b>15</b>	<b>42</b>

\*Includes: Arizona State University, Campbell University, and Des Moines University. Drexel University, Frontier School of Family Nursing, Intermountain Medical Center, Kansas City University of Medicine and Biosciences, LECOM, Lehigh Valley Hospital, Long Island University, Mary Imogene Bassett Hospital, Michigan State University, Midwestern AZCOM, Ohio University, Oklahoma State University, Oregon Health and Sciences University, Pacific University, Quinnipiac University, Rocky Vista University, Saint Francis University, Samuel Merritt University, St. Marks, Texas Tech, Towson, University of Cincinnati, University of New Mexico, University of Rochester, University of South Alabama, University of Southern Nevada, Utah Valley Residency, Wake Forest University, Washington University, Western University, Western University of Health Sciences, and Westminster College.

### 3.2 PROFESSION SPECIFIC HIGHLIGHTS: 2007-2013

#### 3.2.a MEDICAL RESIDENTS

Medical residents comprise the largest group sponsored by the UMEC rural rotation program with 145 (28%) of all rotations. The rotations for medical residents have encompassed numerous specialties – with Family Medicine comprising the majority (64%) followed by Obstetrics and Gynecology (23%). Family Medicine and OB/GYN residents are given a higher priority due to the demand for their services in rural communities.

**Table 10 – Number of Medical Residents by Specialty, 2007- 2013**

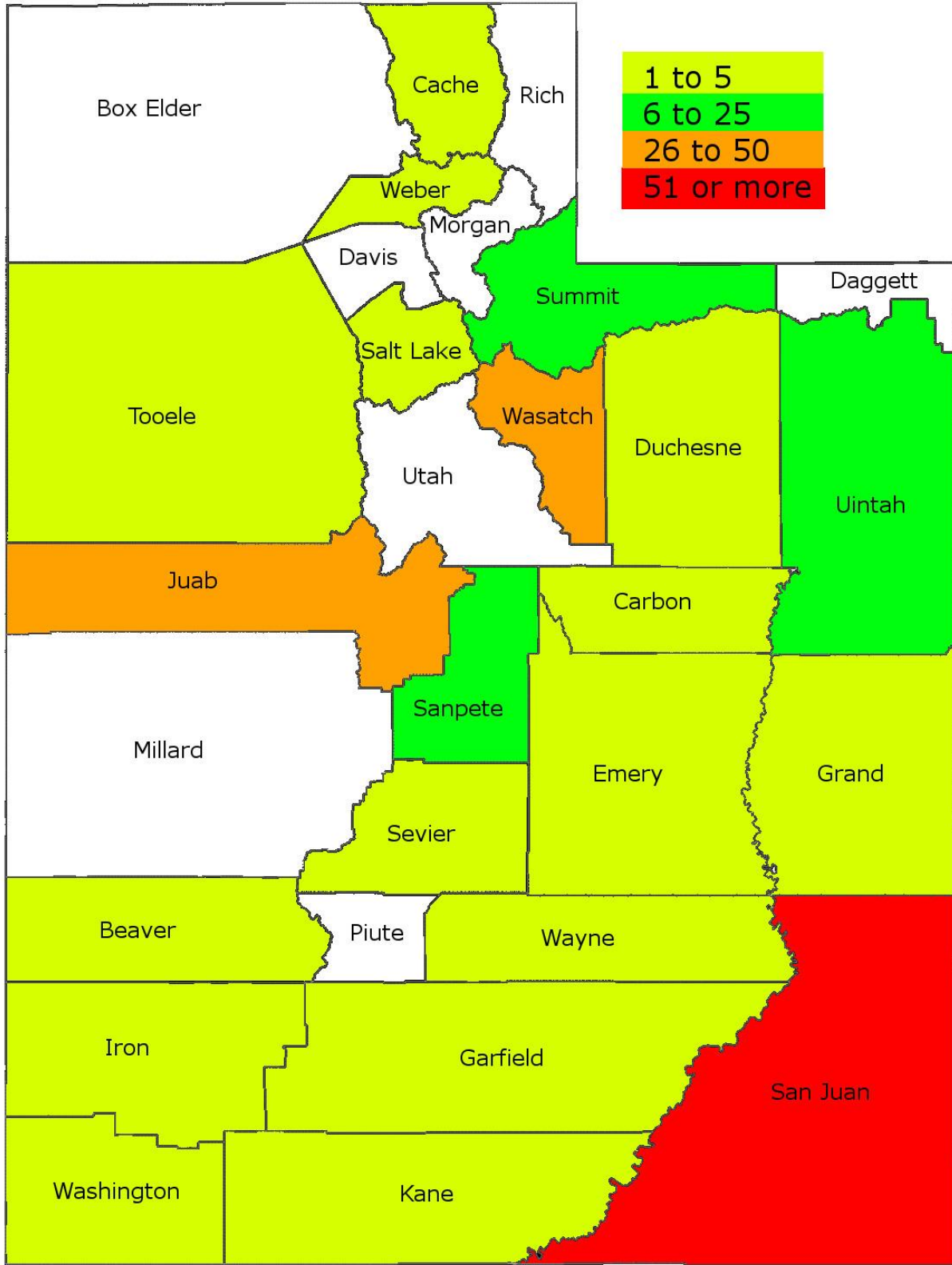
<b>Specialty</b>	<b>Residents</b>	<b>Rotations</b>
<i>Anesthesiology</i>	3 (2%)	3 (2%)
<i>Emergency</i>	1 (1%)	1 (1%)
<i>Family Practice</i>	85 (64%)	93 (64%)
<i>Geriatric</i>	1 (1%)	1 (1%)
<i>Internal</i>	4 (3%)	5 (4%)
<i>OB/GYN</i>	30 (23%)	33 (23%)
<i>Oncology</i>	1 (1%)	1 (1%)
<i>Pathology</i>	1 (1%)	1 (1%)
<i>Pediatrics</i>	3 (2%)	3 (1%)
<i>Psychiatry</i>	1 (1%)	1 (1%)
<i>Radiology</i>	1 (1%)	1 (1%)
<i>Surgery</i>	1 (1%)	2 (1%)
<b>TOTAL</b>	<b>133</b>	<b>145</b>

Medical Residents have rotated or had rotation help across 25 different underserved locations in Utah. The most common location for Family Medicine providers is in Nephi (40%), while nearly half of OB/GYN rotations were in Heber City (48%).

**Table 11 – Locations of Rotations by Profession, 2007-2013**

<b>Location</b>	<b>Family Medicine</b>	<b>OB/GYN</b>	<b>Other</b>	<b>Total</b>
<i>Beaver</i>	1	---	---	1
<i>Bicknell</i>	1	---	---	1
<i>Blanding</i>	2	5	1	8
<i>Bountiful</i>	---	---	1	1
<i>Cedar City</i>	3	---	---	3
<i>Coalville</i>	5	---	1	6
<i>Heber City</i>	11	16	1	27
<i>Kanab</i>	3	---	2	5
<i>Logan</i>	---	1	1	2
<i>Moab</i>	1	---	1	2
<i>Montezuma Creek</i>	4	7	3	14
<i>Monticello</i>	1	---	---	1
<i>Mt. Pleasant</i>	6	1	---	7
<i>Nephi</i>	37	---	1	37
<i>Ogden</i>	3	---	1	4
<i>Panguitch</i>	1	---	---	1
<i>Price</i>	---	---	1	1
<i>Richfield</i>	1	---	---	1
<i>Roosevelt</i>	---	---	2	2
<i>Salina</i>	1	---	---	1
<i>Salt Lake City</i>	2	1	2	5
<i>St. George</i>	2	1	1	4
<i>Stansbury</i>	2	1	---	3
<i>Tooele</i>	1	---	---	1
<i>Vernal</i>	5	---	---	5
<b>Total</b>	<b>93</b>	<b>33</b>	<b>19</b>	<b>145</b>

### Clinical Rotations, Medical/Dental Residents ONLY (2007-2013)



### **3.2.b Dental Residents**

The UMEC has sponsored 53 rural rotations for 53 General Practice Residencies for Dentists from the University of Utah from 2008 to 2013. Of note, these residents have all served in the rural underserved area of Montezuma Creek, Utah. The UMEC has sponsored 9 rotations annually since 2008. With only 6 dentists in all of San Juan County, these residents have contributed immensely to the oral health of this community. In addition, the contribution of these residents will become even more vital over the next decade as 4 of the 6 local dentists plan to retire (see Table 12).

### **3.2.c Pharmacy Students**

The UMEC has funded 102 pharmacy students to do 119 rotations from 2009 to 2013. Currently, 4 sites make up the vast majority (70%) of all pharmacy student rotations – St. George (27), Blanding (20), Cedar City (18), and Mt. Pleasant (18). In addition, 96% of all pharmacy students in these rotations have come from the University of Utah. Of note, recent UMEC data indicates that no pharmacists currently work in Wayne County. By funding 2 rotations in Wayne County in 2013, the UMEC helped provide services in this area which would have otherwise not existed at all.

## **SECTION 4: FUTURE IMPORTANCE OF RURAL ROTATION PROGRAM**

### **4.1 RURAL PRACTICE RESULTS**

Declining interest in generalist careers in rural locations is epidemic throughout the healthcare system in the United States. Accordingly, incentivizing individuals to pursue a career in these communities is becoming more and more difficult.

#### **4.1.a Physicians**

The UMEC's rural rotation program is structured to help train, familiarize, and provide incentive for individuals to pursue a career in rural communities in Utah. Since 2007, 11% (45) of physicians who have completed a rural rotation through the UMEC chose to practice in a rural setting within Utah. Only 5.4% (324) of the entering physician workforce in 2012 chose to practice in rural areas in Utah.<sup>8</sup> Moreover, only 7.2% of the entire physician workforce in Utah in 2012 currently practices in a rural county within the state.<sup>9</sup> In addition, 8% of all Primary Care Physicians (Family Care, OBGYN, Pediatrics, and Internal) that have completed a UMEC sponsored rural rotation are currently practicing in a rural community in Utah. The need for the UMEC's rural rotation program to develop and encourage the movement of more physicians to these underserved communities is palpable.

### **4.2 RURAL WORKFORCE RETIREMENT OVER NEXT DECADE**

The UMEC's data on physician, dentist, APRN, PA, and pharmacist workforces can help illuminate retirement patterns of each workforce by rural county. This self-reported data is

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<sup>8</sup> <http://www.utahmec.org/uploads/files/75/2012-Physician-Workforce-Report.pdf>

<sup>9</sup> <http://www.utahmec.org/uploads/files/75/2012-Physician-Workforce-Report.pdf>

crucial for helping to project retirement and ameliorate any adverse results that can emerge from a shortage of medical practitioners in these already underserved communities.

Roughly 30% of each workforce, from the 16 rural counties with UMEC sponsored rural rotation sites in 2013, expect to retire over the next decade. While it is expected that some counties will not lose healthcare workers over the next decade, it is expected that some counties, like Millard, Kane, Iron, Washington, Uintah, Summit, and Sanpete will lose substantial proportions of their healthcare workforce. These numbers may actually be higher as they do not include attrition estimates (i.e. individuals leaving the workforce for reasons other than retirement at the age of 65).

**Table 12 – Expected Retirement Over Next Decade by Workforce and Location:  
Self-Reported Estimates**

<b>Utah County</b>	<b>Physicians</b>	<b>PCP</b>	<b>Dentist</b>	<b>APRNs</b>	<b>PAs</b>	<b>Pharmacists</b>
<i>Carbon</i>	22.6% (7)	18.2% (<5)	42.9% (6)	28.6% (<5)	36% (9)	25% (<5)
<i>Duchesne</i>	35.3% (12)	18.2% (<5)	25% (<5)	16.7% (<5)	0%	22.2% (<5)
<i>Emery</i>	0.0%	0.0%	0%	100% (<5)	14.3% (<5)	0.0%
<i>Garfield</i>	40% (<5)	0.0%	100% (<5)	50% (<5)	0%	0.0%
<i>Grand</i>	47.4% (9)	0.0%	25% (<5)	66.7% (<5)	0%	66.7% (<5)
<i>Iron</i>	27.7% (13)	34.5% (10)	0%	38.9% (7)	16.7% (<5)	34.6% (9)
<i>Juab</i>	63.6% (7)	50% (<5)	0%	25% (<5)	0%	57.1% (<5)
<i>Kane</i>	66.7% (<5)	0.0%	0%	100% (<5)	100% (<5)	66.7% (<5)
<i>Millard</i>	75% (6)	75% (6)	50% (<5)	50% (<5)	100% (<5)	28.6% (<5)
<i>San Juan</i>	20% (<5)	40% (<5)	66.7% (<5)	33.3% (<5)	50% (<5)	33.3% (<5)
<i>Sanpete</i>	34.5% (10)	33.3% (8)	36.8% (7)	33.3% (<5)	50% (<5)	9.0% (<5)
<i>Summit</i>	21.9% (16)	26.8% (11)	50% (7)	38.1% (8)	40% (<5)	27.3% (6)
<i>Uintah</i>	25.0% (6)	26.7% (<5)	30.8% (<5)	20% (<5)	25% (<5)	18.2% (<5)
<i>Wasatch</i>	37.5% (6)	40% (6)	15.4% (<5)	25% (<5)	0%	25.0% (<5)
<i>Washington</i>	29.7% (82)	35.1% (34)	32% (31)	32.4% (22)	21.6% (8)	29.3% (29)
<i>Wayne</i>	0.0%	0.0%	0%	0%	0%	0.0%
<b>TOTAL</b>	<b>30.5% (180)</b>	<b>32.7% (92)</b>	<b>31.2% (71)</b>	<b>33.5% (58)</b>	<b>28.6% (30)</b>	<b>28.0% (76)</b>

### 4.3 AGING RURAL POPULATION IN UTAH

Older age cohorts typically have a higher demand for healthcare services on average, relative to their younger counterparts. Indeed, demand for health services can be expected to increase as the proportion of a rural community’s elderly cohort increases. An aging cohort of individuals over the age of 60 can both impose additional demand on the local health system, and by doing so, exacerbate any medical personnel shortage that may exist.

For example, the proportion of individuals over the age of 60 is projected to increase over the next decade in each of the 16 rural counties served by the UMEC’s rural rotation program. Specifically, population of 60 years olds and older composed an average of 17.8% of the population in these 16 rural communities in 2010. By 2020, this cohort is projected to increase to 19.8%. Current shortages of medical practitioners within these communities can expect an



increase in healthcare utilization as the proportion of these communities age over the next two decades.

**Table 13 – Proportion of Population Over 60 by County and Year<sup>10</sup>**

<b>Utah County</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>
<i>Carbon</i>	19.2%	21.7%	24.1%
<i>Duchesne</i>	14.8%	15.7%	17.3%
<i>Emery</i>	17.9%	21.0%	24.5%
<i>Garfield</i>	23.2%	25.2%	25.7%
<i>Grand</i>	20.3%	22.6%	25.0%
<i>Iron</i>	13.8%	14.8%	15.4%
<i>Juab</i>	14.5%	14.5%	15.0%
<i>Kane</i>	27.5%	28.2%	24.2%
<i>Millard</i>	19.4%	21.3%	22.6%
<i>San Juan</i>	15.4%	17.8%	24.0%
<i>Sanpete</i>	15.9%	17.8%	20.6%
<i>Summit</i>	12.9%	15.7%	20.0%
<i>Uintah</i>	13.0%	14.8%	19.5%
<i>Wasatch</i>	12.9%	14.7%	16.5%
<i>Washington</i>	22.5%	25.7%	32.7%
<i>Wayne</i>	21.8%	24.9%	23.6%
<b>AVERAGE</b>	<b>17.8%</b>	<b>19.8%</b>	<b>22%</b>

#### **4.4 MOVING FORWARD**

The UMEC’s rural rotation program will continue to be an important factor in helping train and incentivize healthcare practitioners to practice in rural areas in Utah. As the population continues to age, and individuals retire from the rural workforce, the need to replace and grow these workforces becomes an ever more challenging and significant task.

<sup>10</sup> Demographic and Economic Projections." *Governor's Office of Management and Budget*. State of Utah. 18 Feb. 2014. <http://governor.utah.gov/DEA/projections.html>.