

Utah GME Retention Report

Utah Medical Education Council

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Academic Year 2015-2016

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Utah's GME Program Retention Summary

Academic Year 2015-2016

The *Utah Medical Education Council* (UMEC) works with Utah's Graduate Medical Education (GME) institutions to monitor the retention of GME-trained physicians in Utah. The retention of these graduates is vital to maintaining a competent and adequately dispersed physician workforce in Utah. Indeed, monitoring the distribution of these physicians by geography and specialty provides insight to GME programs to help them meet the needs of both their individual institution as well as the health of Utah's communities.

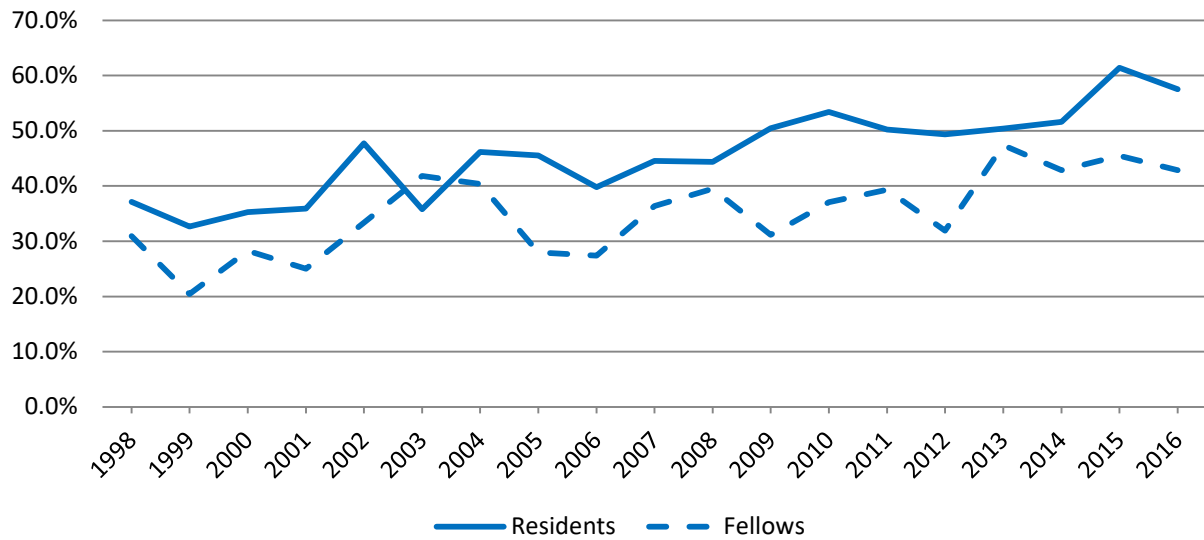
The retention rates are based on data received from the McKay Dee Family Medicine residency program, St. Mark's Family Medicine residency program, Utah Valley Family Medicine residency program, Intermountain Medical Center programs, and the University of Utah GME Office. In addition, the UMEC uses licensing data provided by the Utah Division of Occupational and Professional Licensing (DOPL), and works with each GME program in validating the accuracy of the information compiled by the UMEC.

Retention Formula

$$\frac{\text{Active Utah program graduate physicians, practicing, teaching or conducting research in Utah}}{(\text{Utah program graduates}) - (\text{Residents who are deceased})}$$

- Retention is program specific.
- International Medical Graduates (IMGs) are included in the program graduate count.

Figure 1: Retention Rate of Utah Trained Residents & Fellows by Year (as of November 2016)



The above graph illustrates the percentage of each graduating cohort in terms of those individuals who were Utah trained (either in a residency or fellowship program) and who are actively practicing in Utah as of November 2016. Individuals who are deceased, did not graduate, or are not practicing in Utah as of November 2016 are excluded from the overall retention percentage.

Figure 2: Total Residents and Fellows Retained each Year (as of November 2016)

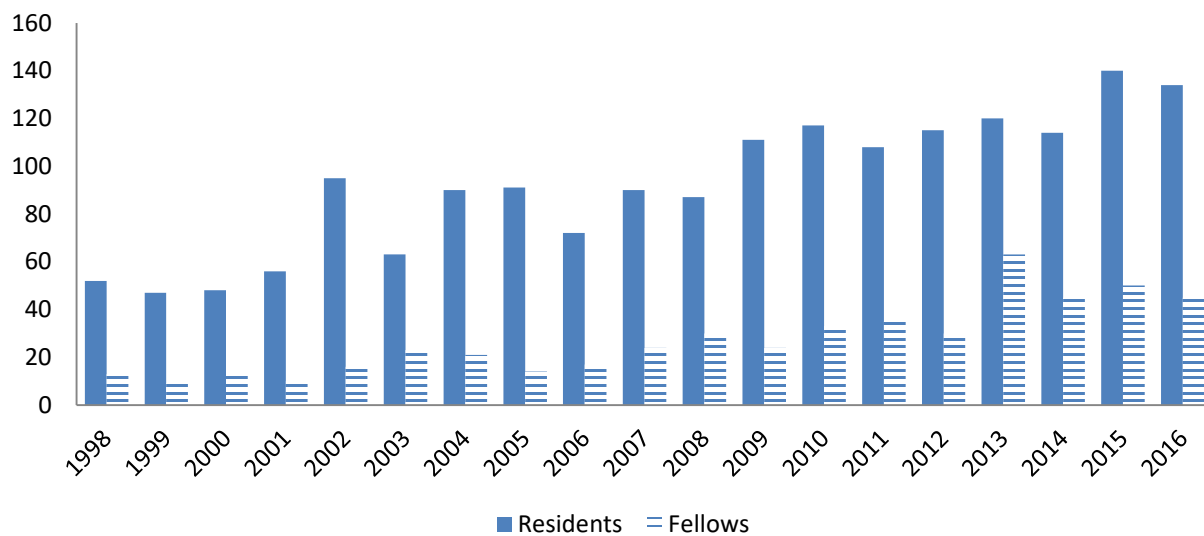


Table 1: Total Retention from 1998-2016 (as of November 2016)

Utah Trained Residents/Fellows	Residents/Fellows
Total Residencies/Fellowships Completed*	5,115
Unique Graduates**	4,509
Unique Active in Utah	1,939 (43.0%)

* This number includes the total number of residencies and fellowships that have been completed within Utah from 1998-2016. Residents/fellows who completed more than one program within Utah are counted as a graduate from each respective program.

** This is the total number of *unique* individuals who have completed a residency or fellowship in Utah from 1998-2016. Specifically, this number excludes counting residents/fellows who have completed more than one program as representing more than one resident/fellow. Thus, 4,509 individuals have completed 5,115 total residencies/fellowships in Utah from 1998-2016.

Table 2: Utah Trained Residents/Fellows Currently Practicing in the United States

Region*	Number of Utah Trained Residents	Number of Utah Trained Fellows
West**	2,774 (74.3%)	892 (64.5%)
South	434 (11.6%)	220 (15.9%)
Midwest	335 (9.0%)	176 (12.7%)
Northeast	147 (3.9%)	71 (5.1%)
TOTAL	3,690 (98.9%)***	1,383 (98.3%)

* Regions are here taken from the *Bureau of Labor Statistics*. See the Bureau's "Economy at a Glance" for region specific information.

**Includes Utah in region.

***Not all Utah trained residents/fellows are currently practicing within the United States. In addition, not all residents are practicing medicine at this time.

Table 3: Top Five States containing Utah Trained Resident/Fellows (1998-2016)

State	Number of Utah Trained Residents
California (West)	296
Oregon (West)	200
Washington (West)	190
Colorado (West)	177
Idaho (West)	177

Table 4: Total Retention by Specialty (Over last decade, 2007-2016)

Specialty	Residency (2007-2016)	Fellowship (2007-2016)
Adult Psychiatry	77.8%	75.0%
Anesthesiology	58.6%	24.2%
Child Psychiatry	64.3%	60.0%
Dental	43.6%	-
Dermatology	71.4%	-
Diagnostic Radiology	49.1%	50.0%
Emergency Medicine	50.7%	50.0%
Family Medicine	67.3%	40.0%
General Surgery	34.6%	20.6%
General Surgery - PRELIM	59.1%	-
Internal Medicine	53.2%	46.5%
Internal Medicine - PRELIM	51.0%	-
Internal Medicine - PEDIATRICS	54.2%	-
Medical Genetics	-	40.0%
Neurology	46.2%	61.1%
Neurosurgery	17.2%	28.6%
OBGYN	52.5%	51.9%
Occupational Medicine	48.4%	-
Ophthalmology	46.7%	-
Orthopedics	38.0%	17.7%
Otolaryngology	29.6%	50.0%
Pathology	62.7%	49.4%
Pediatrics	57.8%	41.0%
Physical Rehabilitation	40.4%	16.7%
Plastic Surgery	23.5%	11.1%
Podiatry	45.6%	-
Radiation Oncology	17.6%	-
Transitional Year	30.6%	-
Triple Board	55.6%	-
Urology	28.6%	-

Table 5: Total Retention (4 year intervals, 1998-2016)

Period	Total Graduates	Retained in Utah (2016)	Percent Retained
<i>1998-2000</i>	552	176	31.9%
<i>2001-2004</i>	921	366	39.7%
<i>2005-2008</i>	1033	421	40.8%
<i>2009-2012</i>	1236	568	46.0%
<i>2013-2016</i>	1373	702	51.1%
Total	5115	2233	43.7%

Table 6: 1998-2016 Residency Retention Changes by Specialty

Specialty	Residency Program 1998-2000	Residency Program 2001-04	Residency Program 2005-08	Residency Program 2009-12	Residency Program 2013-16	Trend Line
Adult Psychiatry	46.2%	61.9%	63.2%	67.9%	92.0%	
Anesthesiology	30.0%	72.7%	61.4%	56.9%	58.9%	
Child Psychiatry	-	50.0%	66.7%	66.7%	57.1%	
Dental	42.9%	26.9%	45.0%	48.8%	30.0%	
Dermatology	0.0%	50.0%	44.4%	60.0%	78.6%	
Diagnostic Radiology	22.2%	56.3%	28.6%	60.9%	47.8%	
Emergency Medicine	-	-	62.5%	45.5%	51.5%	
Family Medicine - Total	58.4%	52.6%	59.6%	73.2%	68.0%	
Family Medicine McKay Dee	66.7%	58.3%	54.2%	79.2%	70.8%	
Family Medicine St. Marks	58.3%	46.7%	82.4%	70.6%	68.8%	
Family Medicine U of U	52.6%	44.3%	45.0%	53.8%	57.1%	
Family Medicine Utah Valley	63.6%	62.5%	65.2%	80.0%	59.3%	
General Surgery	25.0%	22.7%	40.0%	32.3%	33.3%	
Internal Medicine	24.5%	41.2%	44.6%	53.1%	59.9%	
Internal Medicine - PEDIATRICS	50.0%	33.3%	60.0%	40.0%	75.0%	
Neurology	27.3%	26.7%	50.0%	47.6%	40.9%	
Neurosurgery	14.3%	27.3%	7.1%	18.2%	20.0%	
OBGYN	40.0%	52.6%	47.6%	43.5%	68.0%	
Occupational Medicine	25.0%	20.0%	45.5%	57.1%	28.6%	
Ophthalmology	42.9%	27.3%	38.5%	41.7%	58.3%	
Orthopedics	16.7%	31.3%	17.6%	54.5%	26.3%	
Otolaryngology	0.0%	40.0%	44.4%	10.0%	38.5%	
Pathology	40.0%	30.0%	58.3%	60.9%	63.6%	
Pediatrics	46.3%	45.6%	43.5%	50.6%	69.3%	
Physical Rehabilitation	20.0%	28.6%	40.0%	46.7%	34.8%	
Plastic Surgery	0.0%	50.0%	0.0%	25.0%	33.3%	
Podiatry	22.2%	27.3%	36.8%	41.2%	52.2%	
Radiation Oncology	0.0%	0.0%	14.3%	0.0%	28.6%	
Transitional Year	-	50.0%	37.0%	29.2%	28.6%	
Triple Board	50.0%	40.0%	40.0%	75.0%	42.9%	
Urology	0.0%	25.0%	11.1%	12.5%	44.4%	

Retention by Specialty

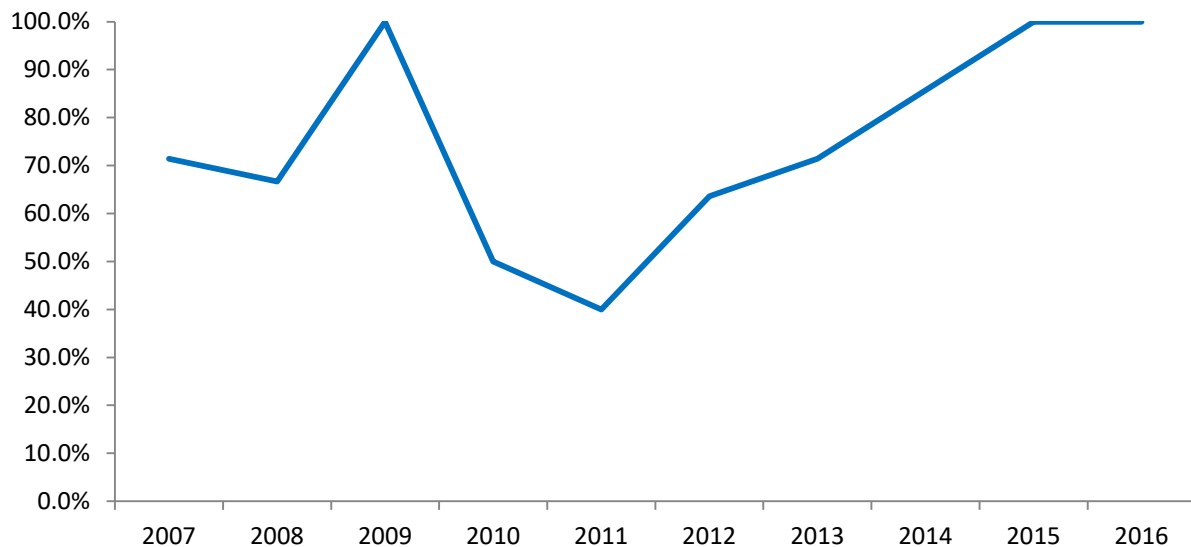
Adult Psychiatry – Residency and Fellowship Graduates

Table 7: Annual Adult Psychiatry Retention, 2007-2016

Year	Residency			Fellowship		
	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	7	5	71.4%	0	0	-
2008	3	2	66.7%	0	0	-
2009	8	8	100.0%	0	0	-
2010	4	2	50.0%	0	0	-
2011	5	2	40.0%	0	0	-
2012	11	7	63.6%	0	0	-
2013	5	4	80.0%	2	1	50.0%
2014	7	6	85.7%	0	0	-
2015	7	7	100.0%	1	1	100.0%
2016	6	6	100.0%	1	1	100.0%
TOTAL	63	49	77.8%	4	3	75.0%

** Fellowship programs contain: *Addiction Psychiatry*

Figure 3: Adult Psychiatry Retention, 2007-2016



With the small number of fellows, they have been included with residents.

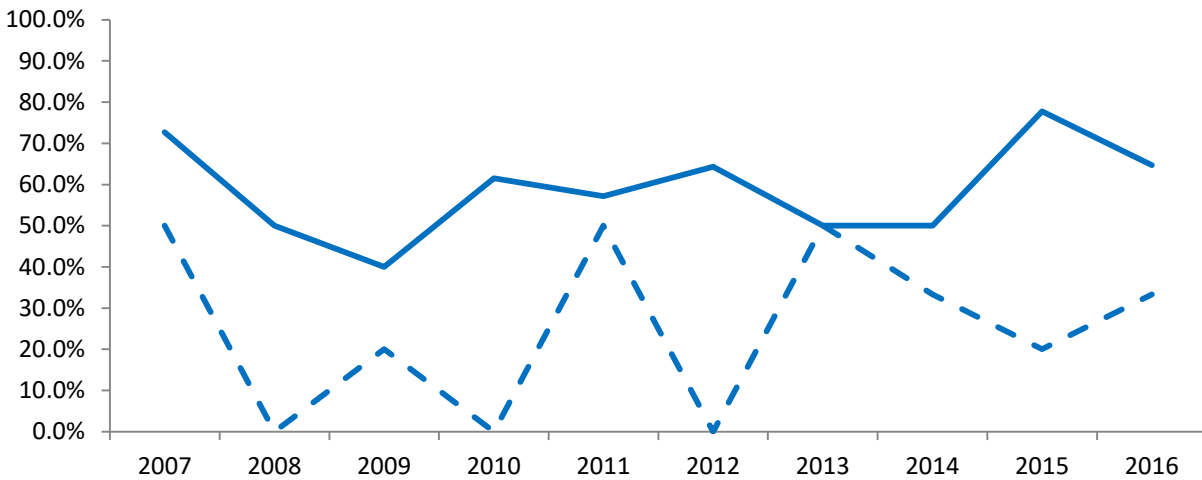
Anesthesiology – Residency and Fellowship Graduates

Table 8: Annual Anesthesiology Retention, 2007-2016

Year	Residency			Fellowship		
	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	11	8	72.7%	2	1	50.0%
2008	10	5	50.0%	2	0	0.0%
2009	10	4	40.0%	5	1	20.0%
2010	13	8	61.5%	4	0	0.0%
2011	14	8	57.1%	2	1	50.0%
2012	14	9	64.3%	3	0	0.0%
2013	16	8	50.0%	4	2	50.0%
2014	14	7	50.0%	3	1	33.3%
2015	9	7	77.8%	5	1	20.0%
2016	17	11	64.7%	3	1	33.3%
TOTAL	128	75	58.6%	33	8	24.2%

** Fellowship programs contain: *Anesthesia Pain Management* and *Pain Medicine*

Figure 4: Annual Anesthesiology Retention, 2007-2016



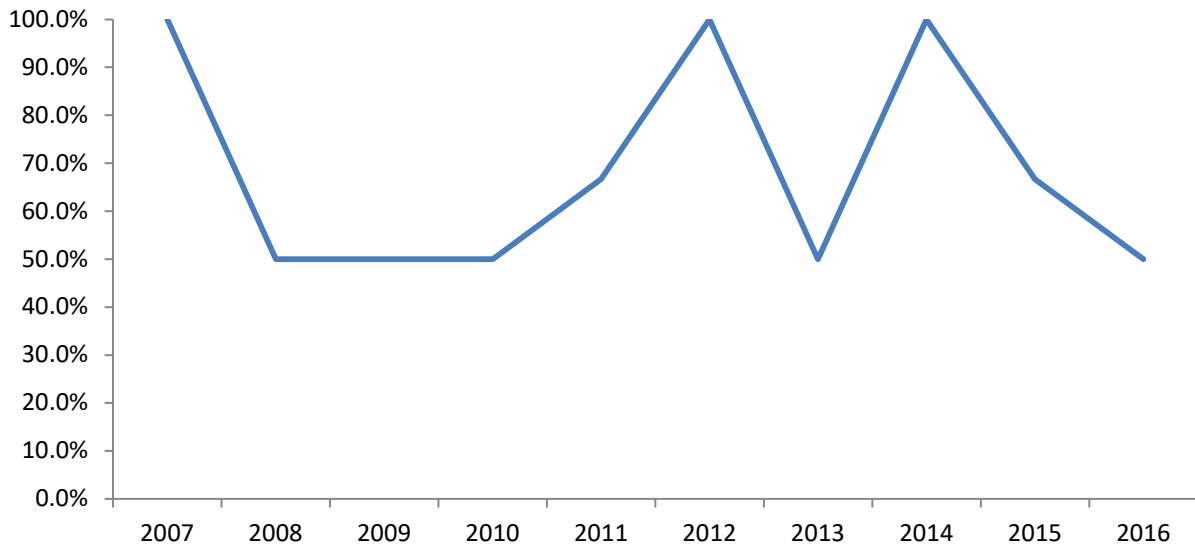
Child Psychiatry – Residency and Fellowship Graduates

Table 9: Annual Child Psychiatry Retention, 2007-2016

Year	Residency			Fellowship		
	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	1	1	100.0%	0	0	-
2008	0	0	-	2	1	50.0%
2009	0	0	-	2	1	50.0%
2010	2	1	50.0%	0	0	-
2011	3	2	66.7%	0	0	-
2012	1	1	100.0%	0	0	-
2013	2	1	50.0%	0	0	-
2014	0	0	-	1	1	100.0%
2015	3	2	66.7%	0	0	-
2016	2	1	50.0%	0	0	-
TOTAL	14	9	64.3%	5	3	60.0%

** Fellowship programs contain: *Child Psychiatry*

Figure 4: Annual Child Psychiatry Retention, 2007-2016



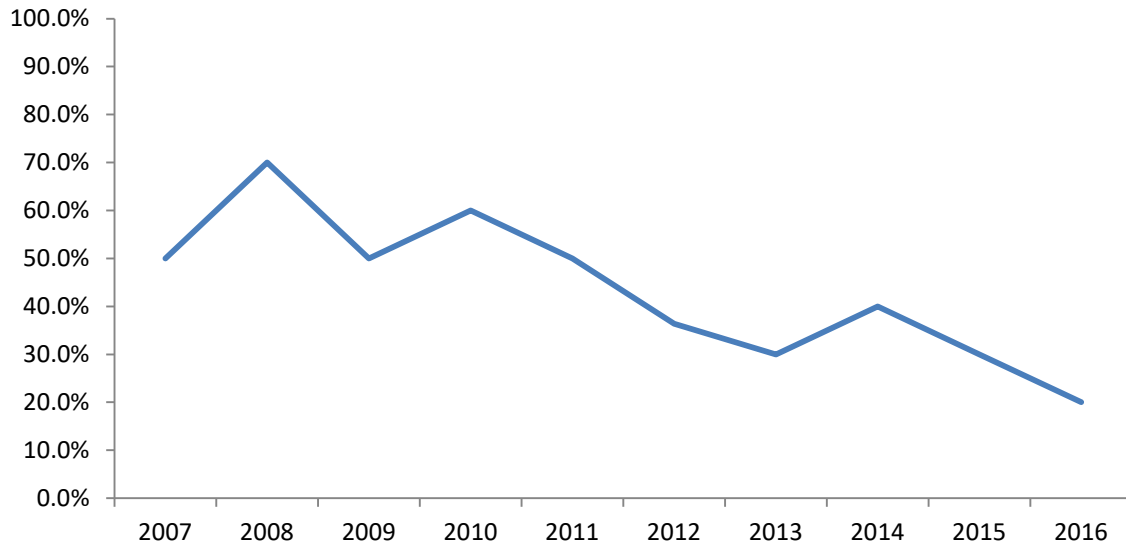
With the small number of Fellows, they have been included with the residents.

Dental – Residency Graduates Only

Table 10: Annual Dentistry Retention, 2007-2016

Year	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	10	5	50.0%
2008	10	7	70.0%
2009	10	5	50.0%
2010	10	6	60.0%
2011	10	5	50.0%
2012	11	4	36.4%
2013	10	3	30.0%
2014	10	4	40.0%
2015	10	3	30.0%
2016	10	2	20.0%
TOTAL	101	44	43.6%

Figure 5: Annual Dentistry Retention, 2007-2016

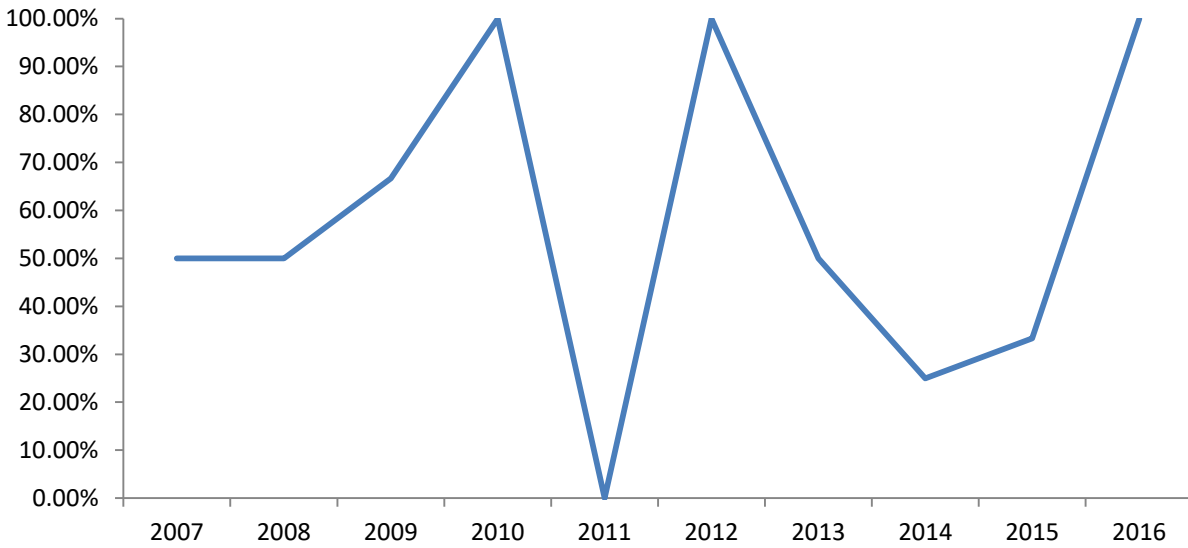


Dermatology – Residency Graduates Only

Table 11: Annual Dermatology Retention, 2007-2016

Year	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	2	1	50.0%
2008	2	1	50.0%
2009	3	2	66.7%
2010	2	2	100.0%
2011	3	0	0.0%
2012	3	3	100.0%
2013	2	1	50.0%
2014	4	1	25.0%
2015	3	1	33.3%
2016	3	3	100.0%
TOTAL	27	15	71.4%

Figure 6: Annual Dermatology Retention, 2007-2016



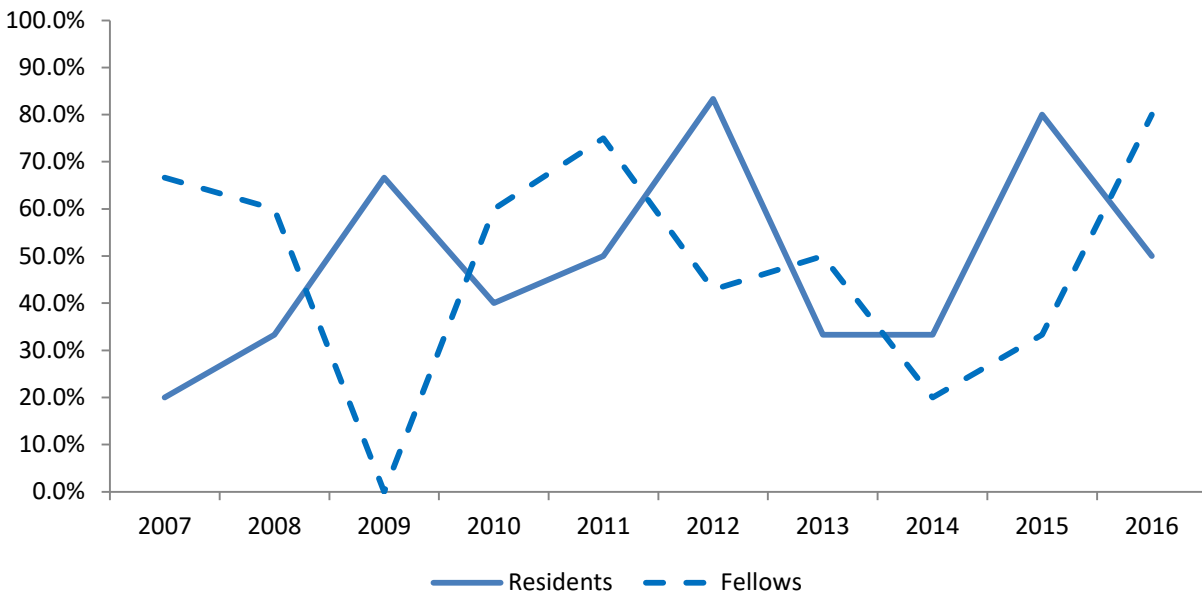
Diagnostic Radiology – Residency and Fellowship Graduates

Table 12: Annual Diagnostic Radiology Retention, 2007-2016

Year	Residency			Fellowship		
	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	5	1	20.0%	3	2	66.7%
2008	6	2	33.3%	5	3	60.0%
2009	6	4	66.7%	2	0	0.0%
2010	5	2	40.0%	5	3	60.0%
2011	6	3	50.0%	4	3	75.0%
2012	6	5	83.3%	7	3	42.9%
2013	6	2	33.3%	6	3	50.0%
2014	6	2	33.3%	5	1	20.0%
2015	5	4	80.0%	6	2	33.3%
2016	6	3	50.0%	5	4	80.0%
TOTAL	57	28	49.1%	48	24	50.0%

** Fellowship programs contain: *Neurointerventional Surgery, Vascular/Interventional Radiology, Neuroradiology, and Nuclear Radiology.*

Figure 7: Annual Diagnostic Radiology Retention, 2007-2016



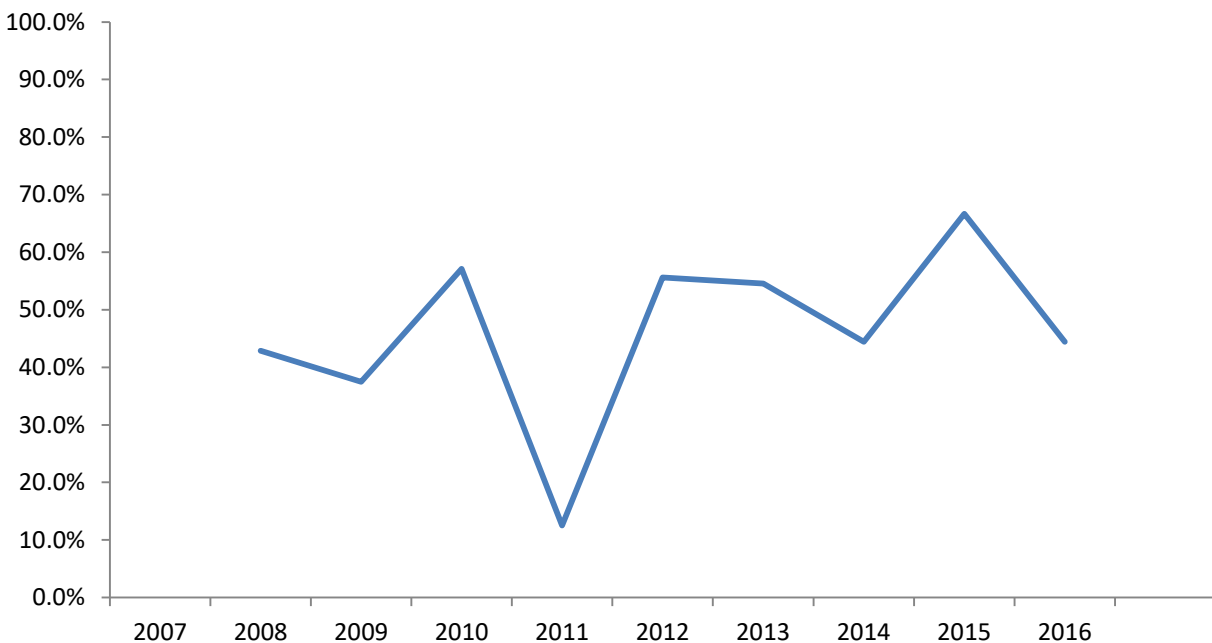
Emergency Medicine – Residency and Fellowship Graduates

Table 13: Annual Emergency Medicine Retention, 2007-2016

Year	Residency			Fellowship		
	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	0	0	-	0	0	-
2008	7	3	42.9%	0	0	-
2009	8	3	37.5%	0	0	-
2010	7	4	57.1%	0	0	-
2011	8	1	12.5%	0	0	-
2012	9	5	55.6%	0	0	-
2013	8	4	50.0%	3	2	66.7%
2014	8	4	50.0%	1	0	0.0%
2015	8	5	62.5%	1	1	100.0%
2016	8	4	50.0%	1	0	0.0%
TOTAL	71	33	46.5%	6	3	50.0%

** Fellowship programs contain: Sports Medicine

Figure 8: Annual Emergency Medicine Retention, 2007-2016



With the small number of Fellows, they have been included with the residents.

Family Medicine – Residency and Fellowship for ALL Programs

Table 14: Annual Family Medicine Retention, 2007-2016

Year	Residency			Fellowship		
	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	30	16	53.3%	3	0	0.0%
2008	24	14	58.3%	3	1	33.3%
2009	21	16	76.2%	3	2	66.7%
2010	27	24	88.9%	2	0	0.0%
2011	24	19	79.2%	3	0	0.0%
2012	25	12	48.0%	4	1	25.0%
2013	26	18	69.2%	3	1	33.3%
2014	23	13	56.5%	4	1	25.0%
2015	26	19	73.1%	4	2	50.0%
2016	25	18	72.0%	4	1	25.0%
TOTAL	251	169	67.3%	33	9	27.3%

** Fellowship programs contain: *Family Medicine (OBGYN)* and *Sports Medicine*

Figure 9: Annual Family Medicine Retention, 2007-2016

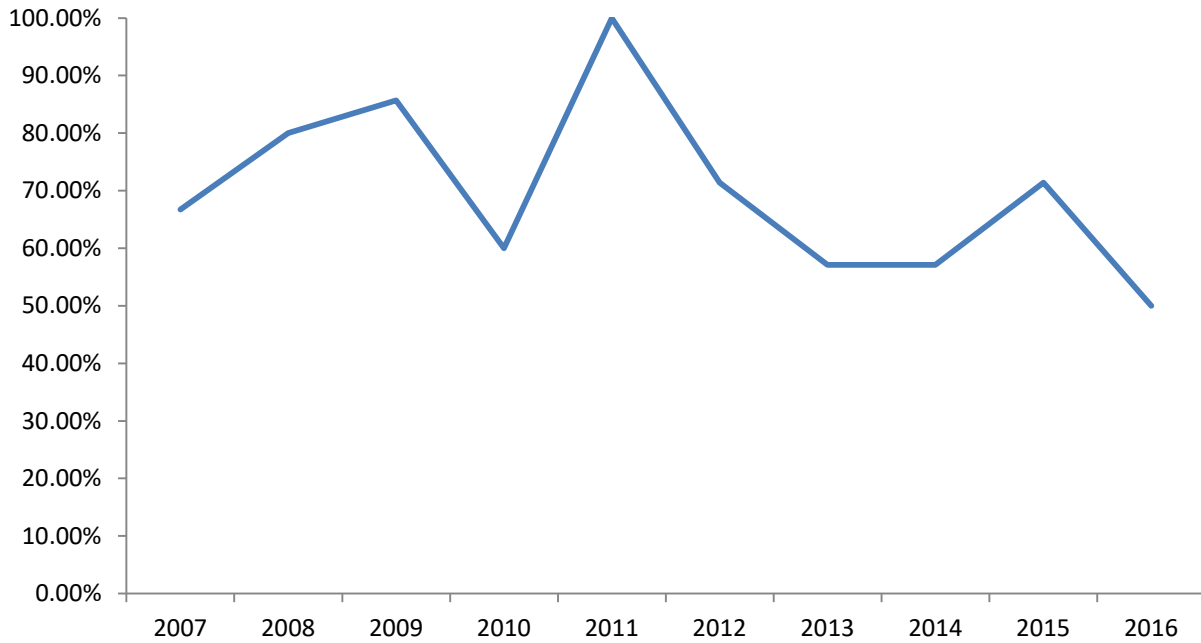


Family Medicine Cont. – Residents by Program

Table 15: Utah Valley: Annual Family Medicine Retention, 2007-2016

Year	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	6	4	66.7%
2008	5	4	80.0%
2009	7	6	85.7%
2010	5	3	60.0%
2011	6	6	100.0%
2012	7	5	71.4%
2013	7	4	57.1%
2014	7	4	57.1%
2015	7	5	71.4%
2016	6	3	50.0%
TOTAL	63	43	68.3%

Figure 10: Utah Valley: Annual Family Medicine Retention, 2007-2016



Family Medicine Cont. – Residents by Program

Table 16: University of Utah: Annual Family Medicine Retention, 2007-2016

Year	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	13	4	30.8%
2008	8	5	62.5%
2009	5	4	80.0%
2010	11	10	90.9%
2011	7	4	57.1%
2012	8	2	25.0%
2013	9	5	55.6%
2014	6	5	83.3%
2015	9	7	77.8%
2016	9	7	77.8%
TOTAL	85	53	62.4%

Figure 11: University of Utah: Annual Family Medicine Retention, 2007-2016



Family Medicine Cont. – Residents by Program

Table 17: St. Mark's: Annual Family Medicine Retention, 2007-2016

Year	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	5	5	100.0%
2008	5	2	40.0%
2009	3	3	100.0%
2010	5	5	100.0%
2011	5	4	80.0%
2012	4	0	0.0%
2013	4	4	100.0%
2014	4	1	25.0%
2015	4	3	75.0%
2016	4	3	75.0%
TOTAL	43	30	69.8%

Figure 12: St. Mark's: Annual Family Medicine Retention, 2007-2016

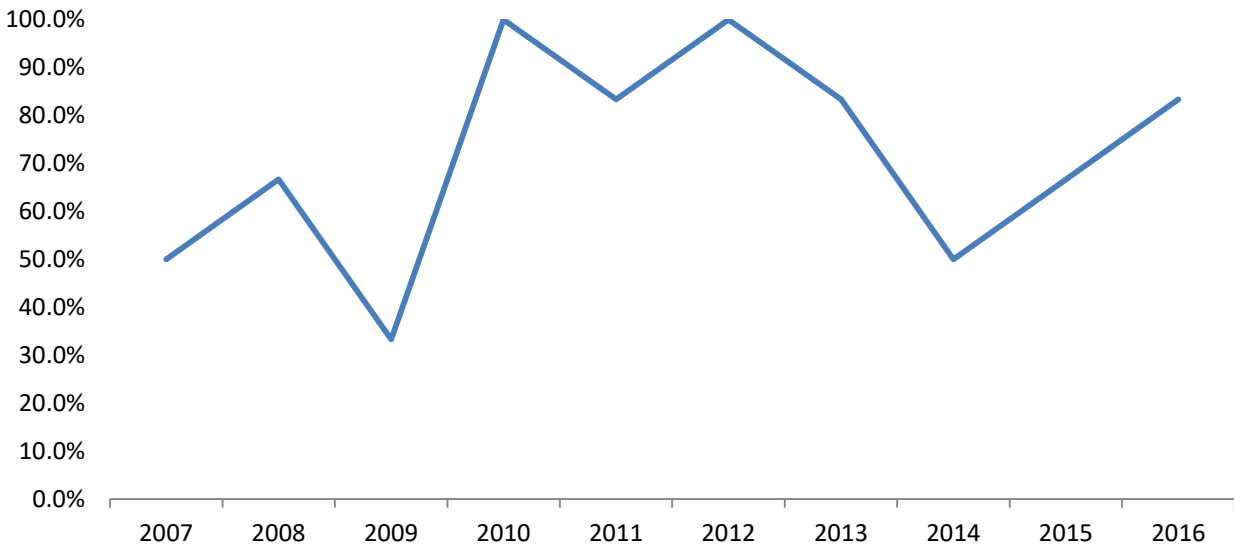


Family Medicine Cont. – Residents by Program

Table 18: McKay Dee: Annual Family Medicine Retention, 2007-2016

Year	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	6	3	50.0%
2008	6	4	66.7%
2009	6	2	33.3%
2010	6	6	100.0%
2011	6	5	83.3%
2012	6	6	100.0%
2013	6	5	83.3%
2014	6	3	50.0%
2015	6	4	66.7%
2016	6	5	83.3%
TOTAL	60	43	71.7%

Figure 13: McKay Dee: Annual Family Medicine Retention, 2007-2016



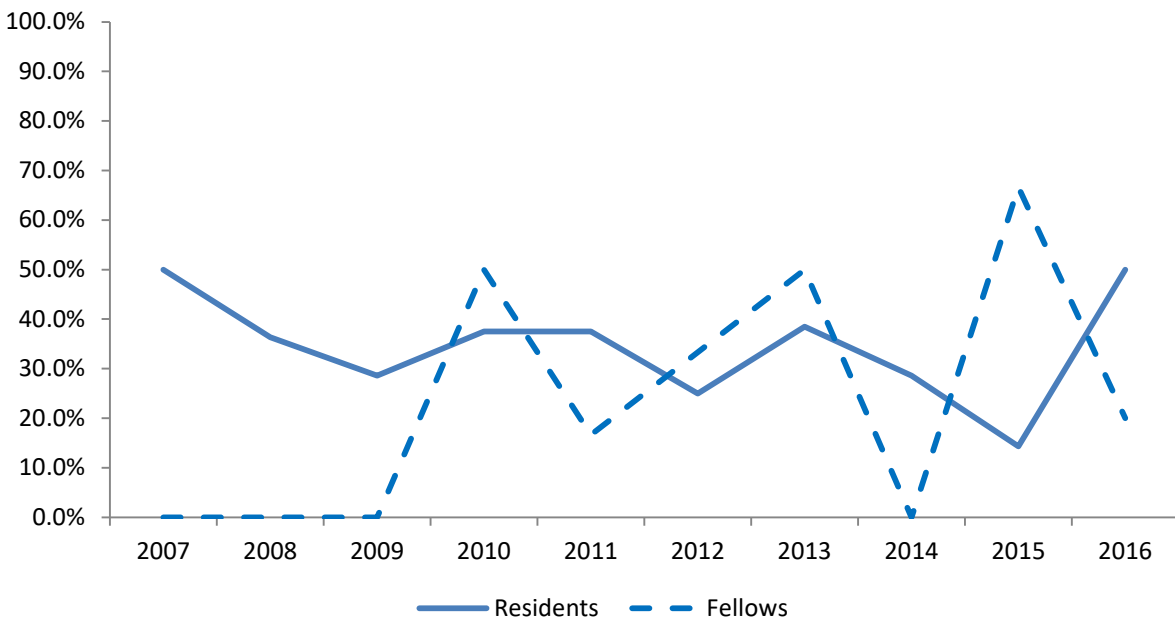
General Surgery – Residency and Fellowship Graduates

Table 19: Annual General Surgery Retention, 2007-2016

Year	Residency			Fellowship		
	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	6	3	50.0%	4	0	0.0%
2008	11	4	36.4%	5	0	0.0%
2009	7	2	28.6%	1	0	0.0%
2010	8	3	37.5%	2	1	50.0%
2011	8	3	37.5%	6	1	16.7%
2012	8	2	25.0%	3	1	33.3%
2013	13	5	38.5%	2	1	50.0%
2014	7	2	28.6%	3	0	0.0%
2015	7	1	14.3%	3	2	66.7%
2016	6	3	50.0%	5	1	20.0%
TOTAL	81	28	34.6%	34	7	20.6%

** Fellowship programs contain: *Vascular Surgery, Surgical Critical Care, Pediatric Surgery, Cardiothoracic Surgery, and Colorectal Surgery (St. Mark's)*

Figure 14: Annual General Surgery Retention, 2007-2016



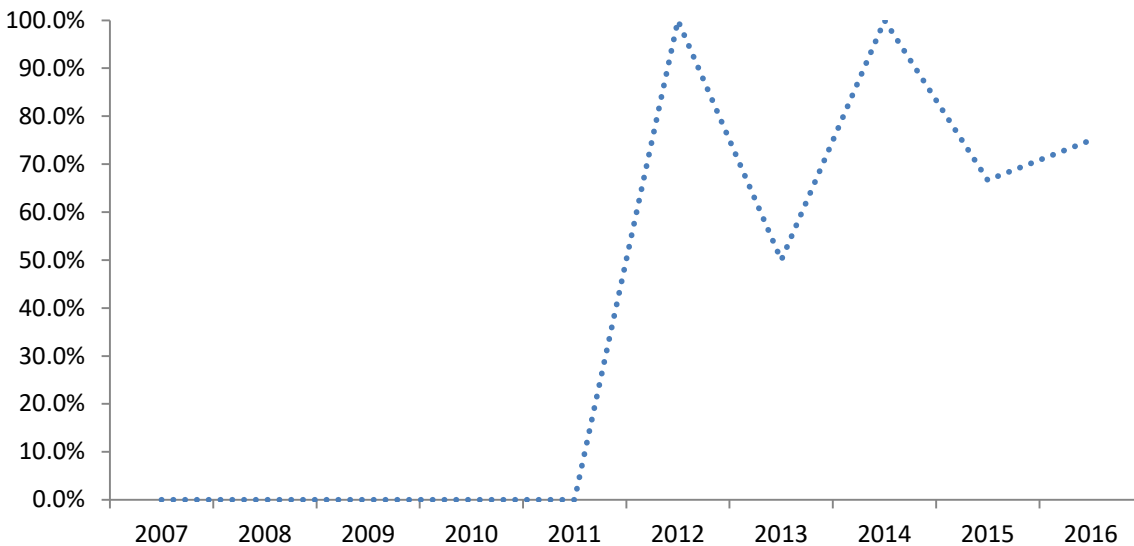
General Surgery PRELIM- Residency Graduates Only

Table 20: Annual General PRELIM Surgery Retention, 2007-2016

Year	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	1	0	0.0%
2008	0	0	-
2009	3	0	0.0%
2010	1	0	0.0%
2011	1	0	0.0%
2012	4	4	100.0%
2013	2	1	50.0%
2014	3	3	100.0%
2015	3	2	66.7%
2016	4	3	75.0%
TOTAL	22	13	59.1%

** Residency programs contain: *Otolaryngology, Anesthesiology, General Surgery, Urology, Orthopedic Surgery, Diagnostic Radiology, and Plastic Surgery.*

Figure 15: Annual General PRELIM Surgery Retention, 2007-2016



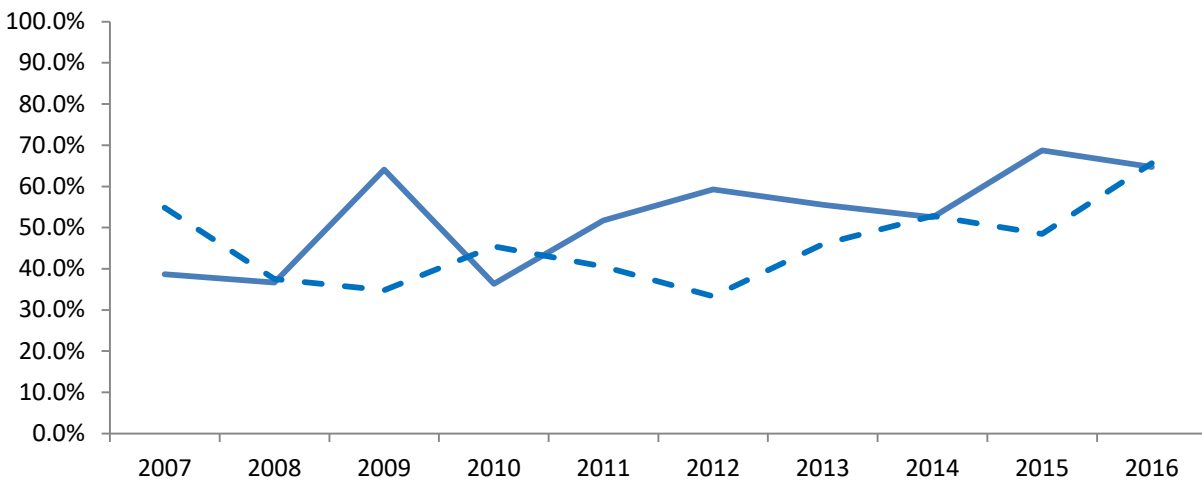
Internal Medicine – Residency and Fellowship Graduates

Table 21: Annual Internal Medicine Retention, 2007-2016

Year	Residency			Fellowship		
	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	31	12	38.7%	31	17	54.8%
2008	30	11	36.7%	24	9	37.5%
2009	39	25	64.1%	23	8	34.8%
2010	33	12	36.4%	33	15	45.5%
2011	29	15	51.7%	37	15	40.5%
2012	27	16	59.3%	30	10	33.3%
2013	36	20	55.6%	37	17	45.9%
2014	40	21	52.5%	36	19	52.8%
2015	32	22	68.8%	33	16	48.5%
2016	34	22	64.7%	32	21	65.6%
TOTAL	331	176	53.2%	316	147	46.5%

** Fellowship programs contain: *Infectious Disease, Hematology and Oncology, Gastroenterology, Cardiology, Interventional Cardiology, Cardiology Transplant, Pulmonary Disease and Critical Care Medicine, Cardiology/Sleep Medicine, Rheumatology, Nephrology; Endocrinology, Diabetes and Metabolism; Geriatric Medicine, Sleep Medicine, Clinical Cardiac Electrophysiology, Bone Marrow Transplant, Advanced Cardiac Imaging, and Wilderness Medicine.*

Figure 16: Annual Internal Medicine Retention, 2007-2016



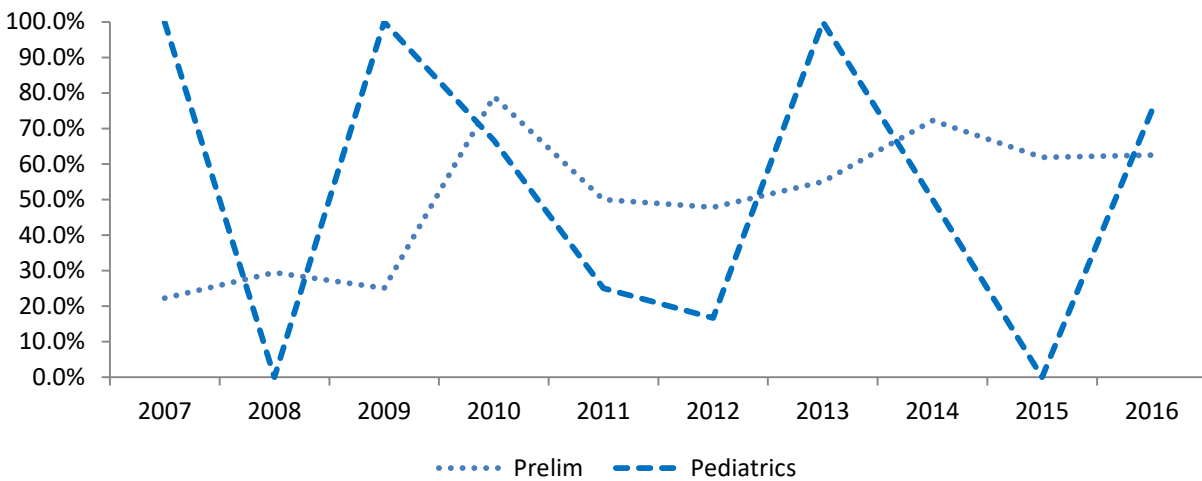
Internal Medicine PRELIM and PEDIATRICS– Residency Graduates Only

Table 22: Annual Internal Medicine PRELIM and PEDIATRICS Retention, 2007-2016

Year	PRELIM			PEDIATRICS		
	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	18	4	22.2%	1	1	100.0%
2008	17	5	29.4%	0	0	-
2009	20	5	25.0%	2	2	100.0%
2010	19	15	78.9%	3	2	66.7%
2011	22	11	50.0%	4	1	25.0%
2012	23	11	47.8%	6	1	16.7%
2013	20	11	55.0%	2	2	100.0%
2014	18	13	72.2%	2	1	50.0%
2015	21	13	61.9%	0	0	-
2016	24	15	62.5%	4	3	75.0%
TOTAL	202	103	51.0%	24	13	54.2%

** Residency programs contain: *Radiology, Pain Medicine, Dermatology, Anesthesiology, Ophthalmology, Neurology, Physical Med and Rehab, Diagnostic Radiology, Radiation Oncology, OBGYN, Occupational Medicine, Aerospace Medicine, General Practitioner, Internal Medicine, and Pediatrics.*

Table 17: Annual Internal Medicine PRELIM and PEDIATRICS Retention, 2007-2016



Medical Genetics – Fellowship Graduates Only

Table 23: Annual Medical Genetics Retention, 2007-2016

Year	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	1	1	100.0%
2008	0	0	-
2009	0	0	-
2010	0	0	-
2011	1	0	0.0%
2012	2	0	0.0%
2013	0	0	-
2014	0	0	-
2015	1	1	100.0%
2016	0	0	-
TOTAL	5	2	40.0%

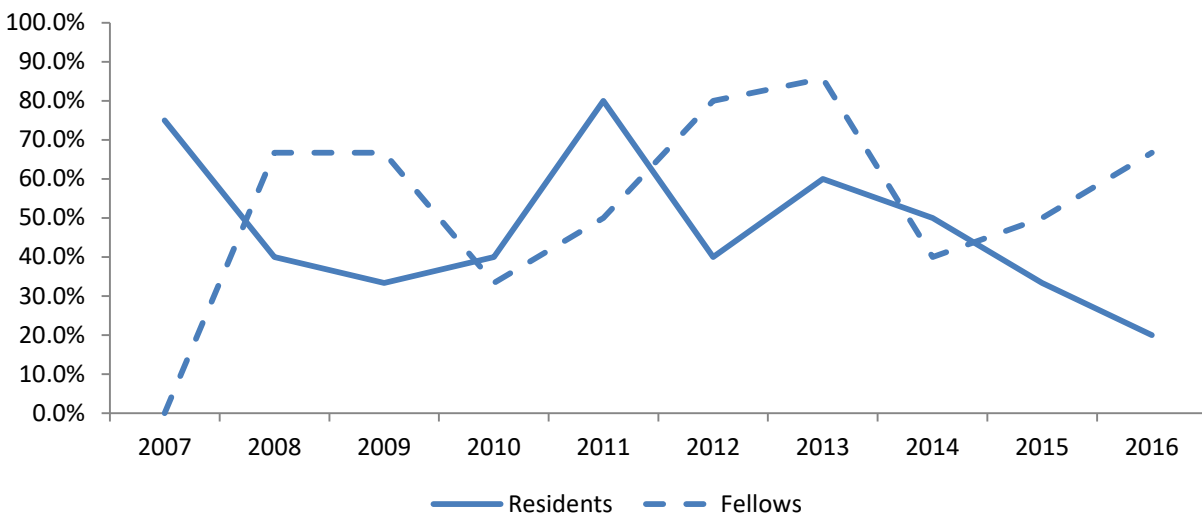
Neurology – Residency and Fellowship Graduates

Table 24: Annual Neurology Retention, 2007-2016

Year	Residency			Fellowship		
	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	4	3	75.0%	1	0	0.0%
2008	5	2	40.0%	3	2	66.7%
2009	6	2	33.3%	3	2	66.7%
2010	5	2	40.0%	3	1	33.3%
2011	5	4	80.0%	2	1	50.0%
2012	5	2	40.0%	5	4	80.0%
2013	5	3	60.0%	7	6	85.7%
2014	6	3	50.0%	5	2	40.0%
2015	6	2	33.3%	4	2	50.0%
2016	5	1	20.0%	3	2	66.7%
TOTAL	52	24	46.2%	36	22	61.1%

** Fellowship programs contain: *Clinical Neurophysiology, Child Neurology, Neurogenetics, Neuro Critical Care, and Vascular Neurology.*

Figure 18: Annual Neurology Retention, 2007-2016



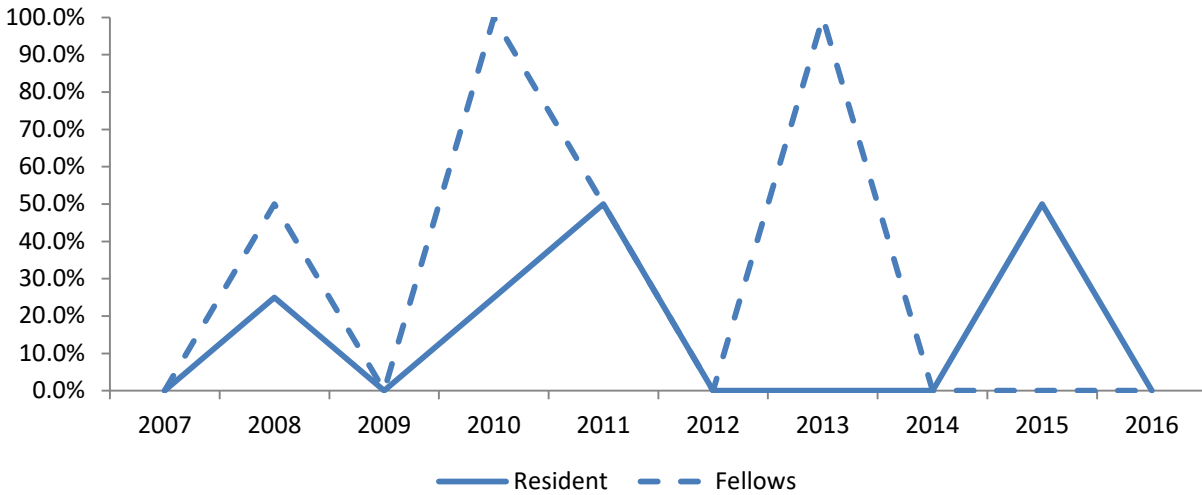
Neurosurgery – Residency and Fellowship Graduates

Table 25: Annual Neurosurgery Retention, 2007-2016

Year	Residency			Fellowship		
	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	4	0	0.0%	1	0	0.0%
2008	4	1	25.0%	2	1	50.0%
2009	3	0	0.0%	1	0	0.0%
2010	4	1	25.0%	1	1	100.0%
2011	2	1	50.0%	2	1	50.0%
2012	2	0	0.0%	2	0	0.0%
2013	4	0	0.0%	1	1	100.0%
2014	0	0	-	1	0	0.0%
2015	4	2	50.0%	1	0	0.0%
2016	2	0	0.0%	2	0	0.0%
TOTAL	29	5	17.2%	14	4	28.6%

** Fellowship programs contain: *Spine, Skull Base, and Endovasc NeuroRadio.*

Figure 19: Annual Neurosurgery Retention, 2007-2016



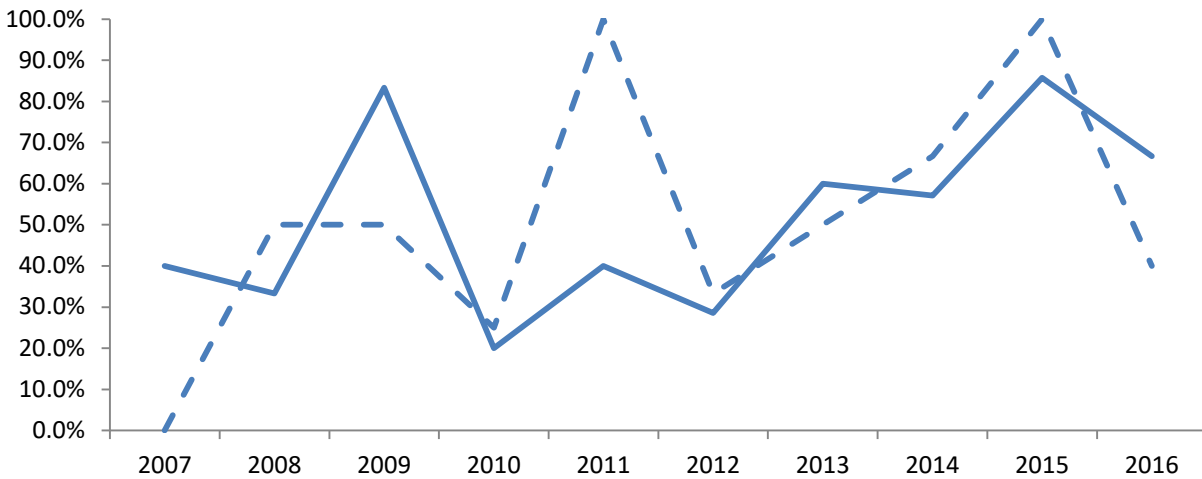
Obstetrics & Gynecology – Residency and Fellowship Graduates

Table 26: Annual Obstetrics & Gynecology Retention, 2007-2016

Year	Residency			Fellowship		
	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	5	2	40.0%	0	0	-
2008	6	2	33.3%	2	1	50.0%
2009	6	5	83.3%	2	1	50.0%
2010	5	1	20.0%	4	1	25.0%
2011	5	2	40.0%	2	2	100.0%
2012	7	2	28.6%	3	1	33.3%
2013	5	3	60.0%	4	2	50.0%
2014	7	4	57.1%	3	2	66.7%
2015	7	6	85.7%	2	2	100.0%
2016	6	4	66.7%	5	2	40.0%
TOTAL	59	31	52.5%	27	14	51.9%

** Fellowship programs contain: *Reproductive Endocrinology and Infertility, Maternal Fetal Medicine, and OB Family Planning.*

Figure 20: Annual Obstetrics & Gynecology Retention, 2007-2016



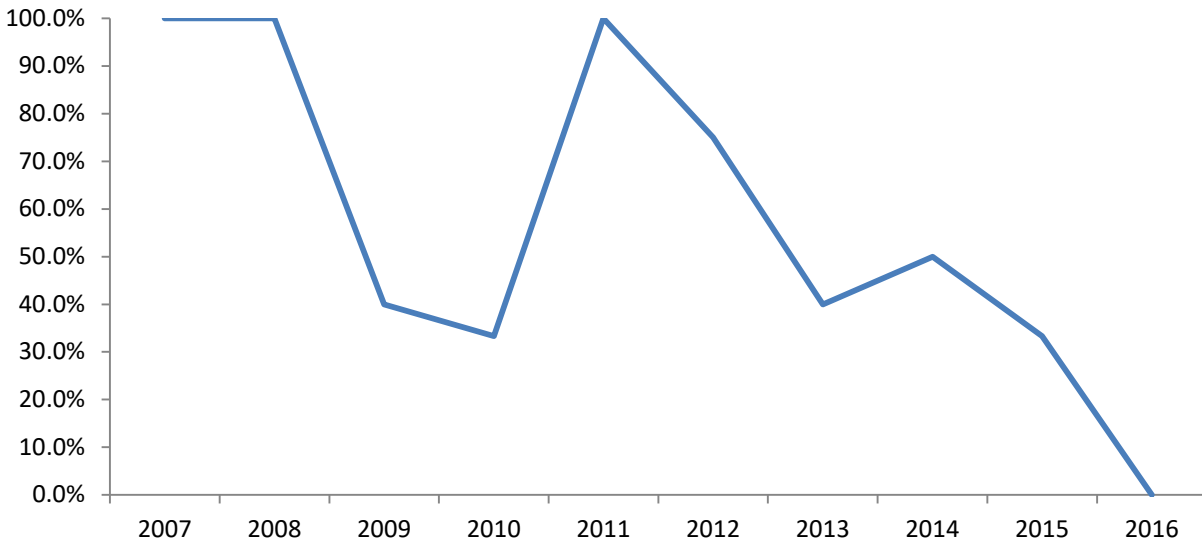
Occupational Medicine – Residency Graduates Only

Table 27: Annual Occupational Medicine Retention, 2007-2016

Year	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	1	1	100.0%
2008	2	2	100.0%
2009	5	2	40.0%
2010	3	1	33.3%
2011	2	2	100.0%
2012	4	3	75.0%
2013	5	2	40.0%
2014	2	1	50.0%
2015	3	1	33.3%
2016	4	0	0.0%
TOTAL	31	15	48.4%

** Residency programs contain: *Family Practice/Occupational Medicine, Physical Medicine & Rehab; Aerospace Medicine, Clinical Genetics, Internal Medicine, Occupational Medicine, Public Health; Otolaryngology, Preventative Medicine/Occupational Environmental Medicine, and Family Medicine.*

Figure 21: Annual Occupational Medicine Retention, 2007-2016

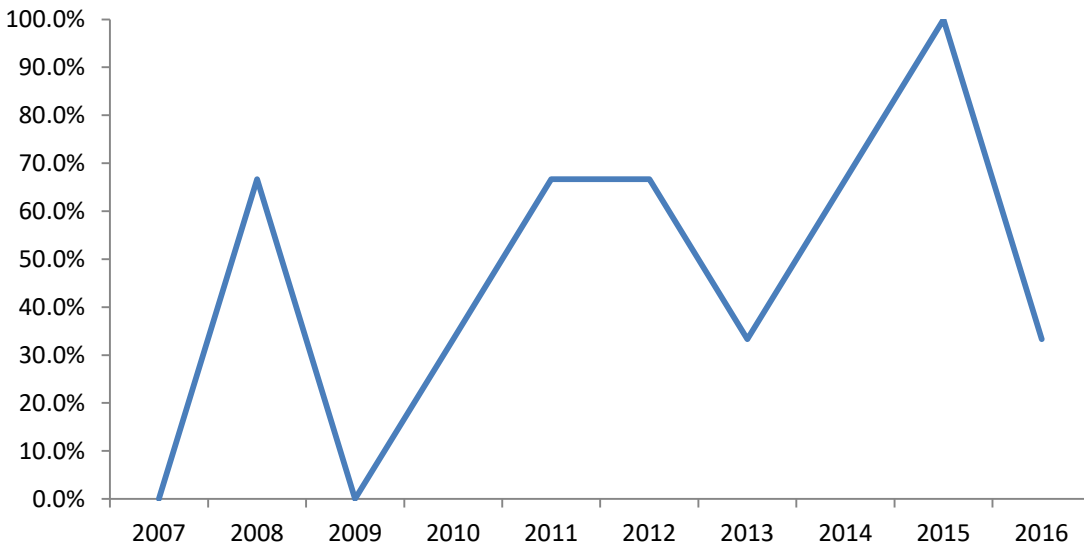


Ophthalmology – Residency Graduates Only

Table 28: Annual Ophthalmology Retention, 2007-2016

Year	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	3	0	0.0%
2008	3	2	66.7%
2009	3	0	0.0%
2010	3	1	33.3%
2011	3	2	66.7%
2012	3	2	66.7%
2013	3	1	33.3%
2014	3	2	66.7%
2015	3	3	100.0%
2016	3	1	33.3%
TOTAL	30	14	46.7%

Figure 22: Annual Ophthalmology Retention, 2007-2016



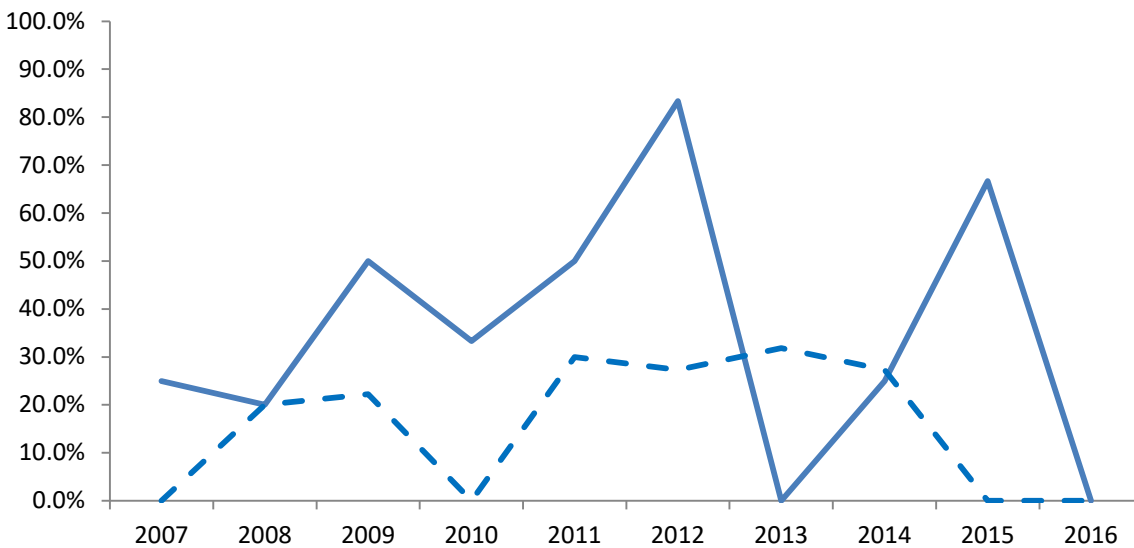
Orthopedics – Residency and Fellowship Graduates

Table 29: Annual Orthopedics Retention, 2007-2016

Year	Residency			Fellowship		
	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	4	1	25.0%	8	0	0.0%
2008	5	1	20.0%	8	3	20.0%
2009	6	3	50.0%	6	3	22.2%
2010	6	2	33.3%	13	1	0.0%
2011	4	2	50.0%	13	3	30.0%
2012	6	5	83.3%	14	4	27.3%
2013	4	0	0.0%	22	9	31.8%
2014	4	1	25.0%	15	3	27.3%
2015	6	4	66.7%	15	3	0.0%
2016	5	0	0.0%	15	0	0.0%
TOTAL	50	19	38.0%	113	20	17.7%

** Fellowship programs contain: *Orthopedic Joint Surgery, Orthopedic Sarcoma, Pediatric Orthopedics, Orthopedic Spine Surgery, Sports Medicine, Orthopedic Spine Surgery/Neurosurgery, Orthopedic Surgery- Hand, and Sarcoma Surgery.*

Figure 23: Annual Orthopedics Retention, 2007-2016



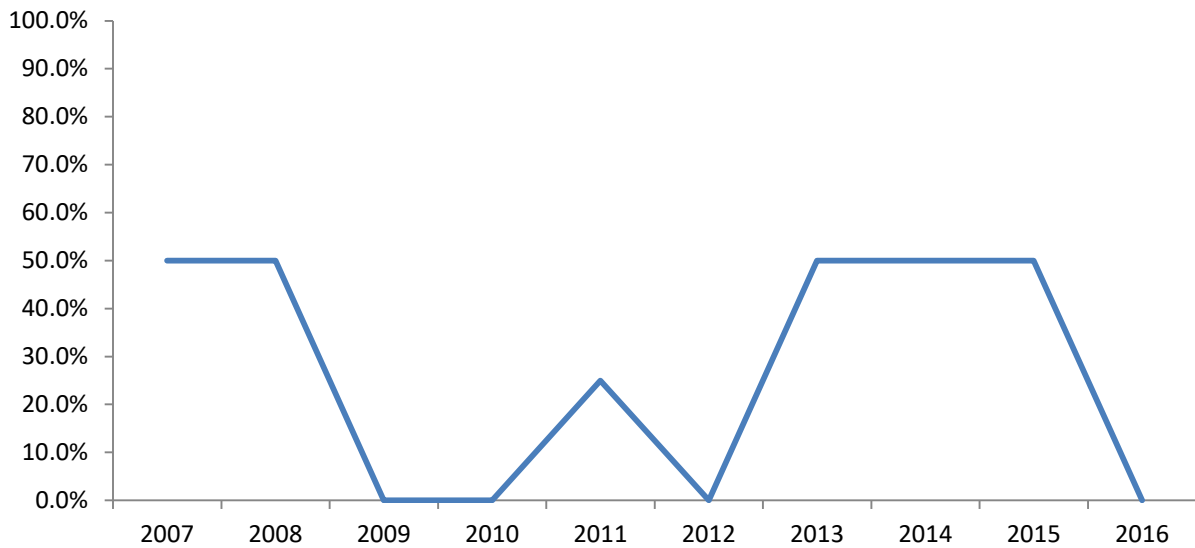
Otolaryngology – Residency and Fellowship Graduates

Table 30: Annual Otolaryngology Retention, 2007-2016

Residency

Year	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	2	1	50.0%	0	0	0.0%
2008	2	1	50.0%	0	0	0.0%
2009	2	0	0.0%	0	0	0.0%
2010	1	0	0.0%	0	0	0.0%
2011	4	1	25.0%	0	0	0.0%
2012	3	0	0.0%	0	0	0.0%
2013	4	2	50.0%	0	0	0.0%
2014	3	1	33.3%	1	1	100.0%
2015	3	2	66.7%	1	0	0.0%
2016	3	0	0.0%	0	0	0.0%
TOTAL	27	8	29.6%	2	1	50.0%

Figure 24: Annual Otolaryngology Retention, 2007-2016



With the small number of Fellows, they have been included with residents.

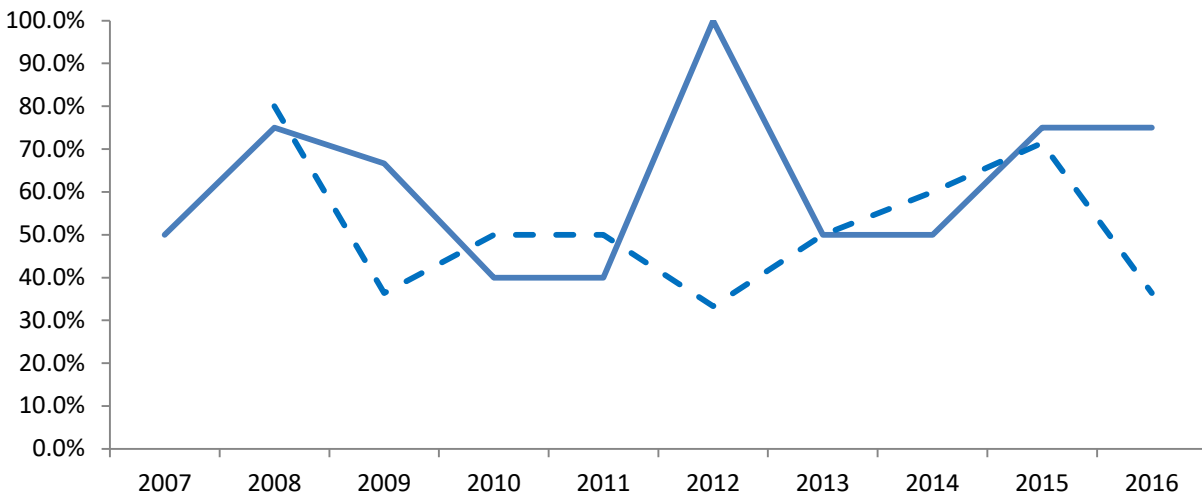
Pathology – Residency and Fellowship Graduates

Table 31: Annual Pathology Retention, 2007-2016

Year	Residency			Fellowship		
	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	2	1	50.0%	5	0	0.0%
2008	4	3	75.0%	5	4	75.0%
2009	6	4	66.7%	11	4	40.0%
2010	5	2	40.0%	8	4	57.1%
2011	5	2	40.0%	4	2	50.0%
2012	7	6	85.7%	9	3	33.3%
2013	4	2	50.0%	10	5	55.6%
2014	6	3	50.0%	10	6	60.0%
2015	8	6	75.0%	14	10	69.2%
2016	4	3	75.0%	11	4	40.0%
TOTAL	51	32	62.7%	81	40	49.4%

** Fellowship programs contain: *Molecular Genetic Pathology, Pediatric Pathology, Surgical Pathology, Cytopathology, Hematopathology, Medical Microbiology, Hematology/Oncology, and Gastrointestinal Pathology.*

Figure 25: Annual Pathology Retention, 2007-2016



Pediatrics – Residency and Fellowship Graduates

Table 32: Annual Pediatrics Retention, 2007-2016

Year	Residency			Fellowship		
	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	23	13	56.5%	6	3	50.0%
2008	17	6	35.3%	9	4	44.4%
2009	22	9	40.9%	12	2	16.7%
2010	20	14	70.0%	10	3	30.0%
2011	17	11	64.7%	11	5	55.5%
2012	24	8	33.3%	10	2	20.0%
2013	23	18	78.3%	17	12	70.6%
2014	22	14	63.6%	16	6	37.5%
2015	23	16	69.6%	15	6	40.0%
2016	20	13	65.0%	16	7	43.8%
TOTAL	211	122	57.8%	122	50	41.0%

** Fellowship programs contain: *Internal Medicine, Pediatric Critical Care, Pediatric Emergency Medicine, Pediatrics Neonatal-Perinatal, Pediatric Pulmonology, Pediatric Cardiology, Pediatric Neonatology, Pediatric Infectious Disease, Pediatric Gastroenterology, Pediatric Hematology/Oncology, and Pediatric Neurosurgery.*

Figure 26: Annual Pediatrics Retention, 2007-2016



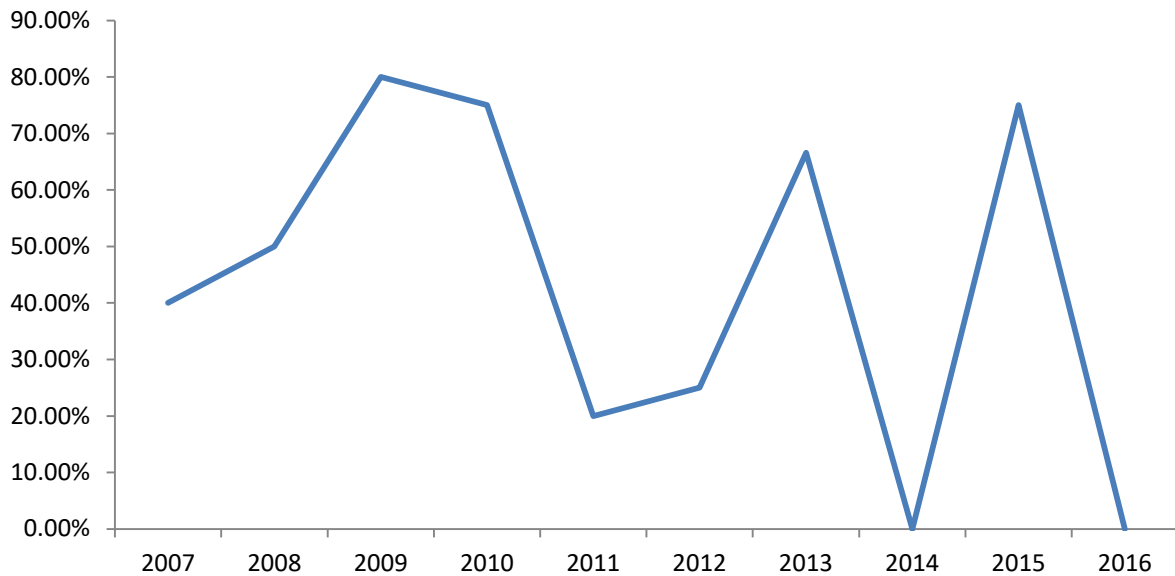
Physical Rehabilitation – Residency and Fellowship Graduates

Table 33: Annual Physical Rehabilitation Retention, 2007-2016

Year	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	5	2	40.0%	0	0	-
2008	4	2	50.0%	0	0	-
2009	5	4	80.0%	0	0	-
2010	4	3	75.0%	0	0	-
2011	5	1	20.0%	0	0	-
2012	4	1	25.0%	1	0	0.0%
2013	6	4	66.6%	2	0	0.0%
2014	5	0	0.0%	1	0	0.0%
2015	4	3	75.0%	1	1	100.0%
2016	5	0	0.0%	1	0	0.0%
TOTAL	47	19	40.4%	6	1	16.7%

** Fellowship programs contain: *Sports Medicine*

Figure 27: Annual Physical Rehabilitation Retention, 2007-2016



With the small number of Fellows, they have been included with residents

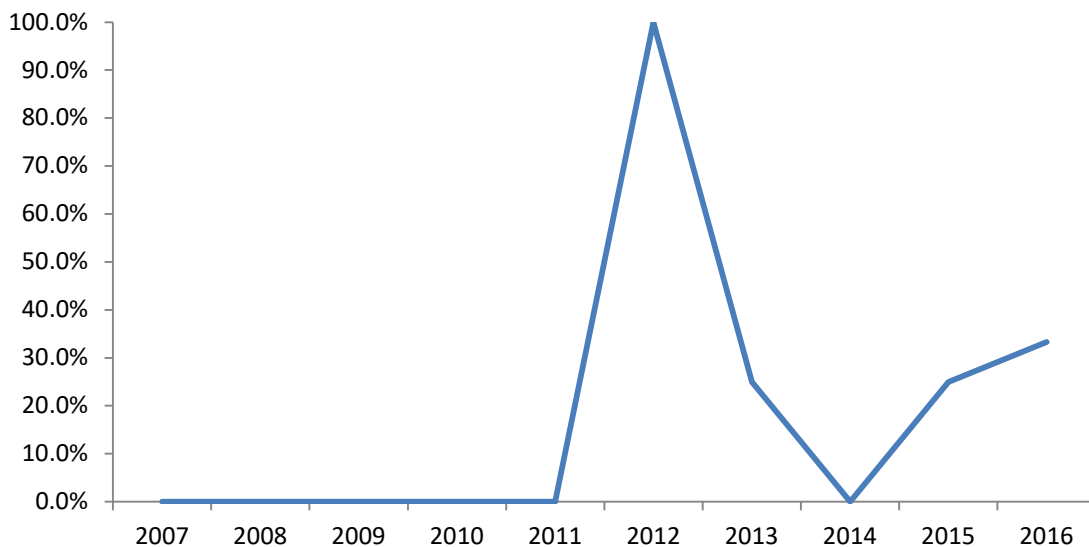
Plastic Surgery – Residency Graduates Only

Table 34: Annual Plastic Surgery Retention, 2007-2016

Year	Residency			Fellowship		
	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	2	0	0.0%	0	0	-
2008	1	0	0.0%	1	0	0.0%
2009	2	0	0.0%	0	0	-
2010	2	0	0.0%	1	0	0.0%
2011	2	0	0.0%	1	0	0.0%
2012	2	2	100.0%	0	0	-
2013	1	0	0.0%	3	1	33.3%
2014	1	0	0.0%	0	0	-
2015	2	1	50.0%	2	0	0.0%
2016	2	1	50.0%	1	0	0.0%
TOTAL	17	4	23.5%	9	1	11.1%

** Fellowship programs contain: *Craniofacial and Plastic/Reconstructive Breast Surgery*

Figure 28: Annual Plastic Surgery Retention, 2007-2016



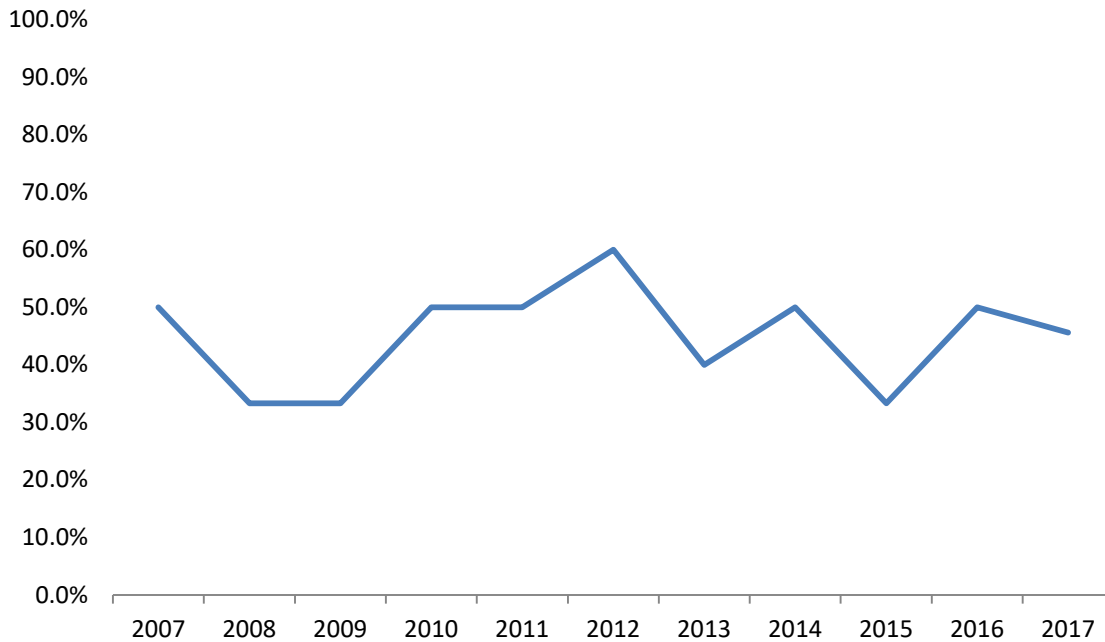
With the small number of Fellows, they have been included with residents.

Podiatry – Residency Graduates Only

Table 35: Annual Podiatry Retention, 2007-2016

Year	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	4	2	50.0%
2008	3	1	33.3%
2009	3	1	33.3%
2010	4	2	50.0%
2011	4	2	50.0%
2012	5	3	60.0%
2013	5	2	40.0%
2014	6	3	50.0%
2015	6	2	33.3%
2016	6	3	50.0%
TOTAL	46	21	45.6%

Figure 29: Annual Podiatry Retention, 2007-2016

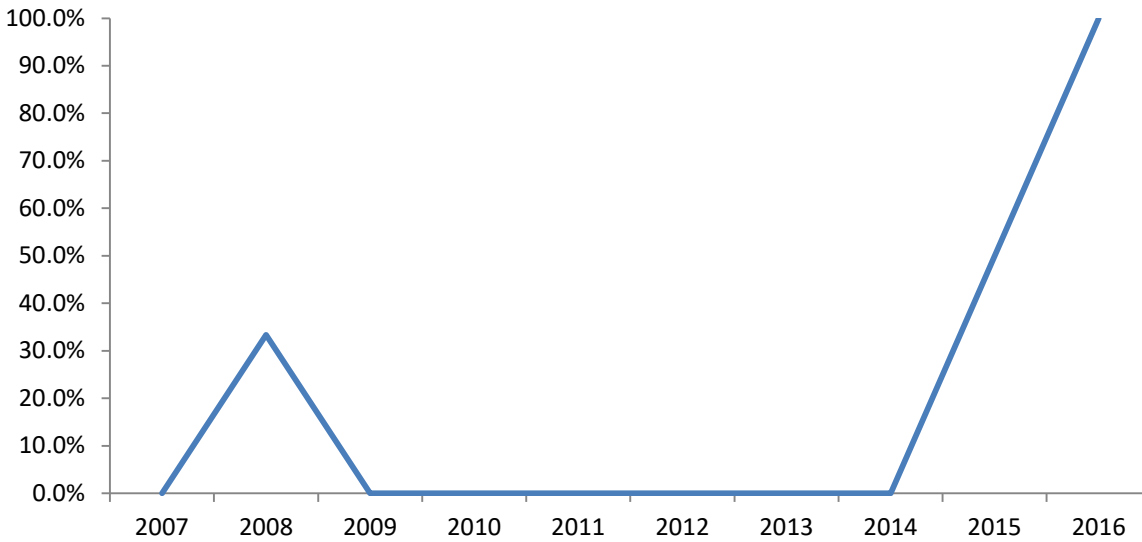


Radiation Oncology – Residency Graduates Only

Table 36: Annual Radiation Oncology Retention, 2007-2016

Year	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	1	0	0.0%
2008	3	1	33.3%
2009	0	0	-
2010	3	0	0.0%
2011	1	0	0.0%
2012	2	0	0.0%
2013	1	0	0.0%
2014	3	0	0.0%
2015	2	1	50.0%
2016	1	1	100.0%
TOTAL	17	3	17.6%

Figure 30: Annual Radiation Oncology Retention, 2007-2016



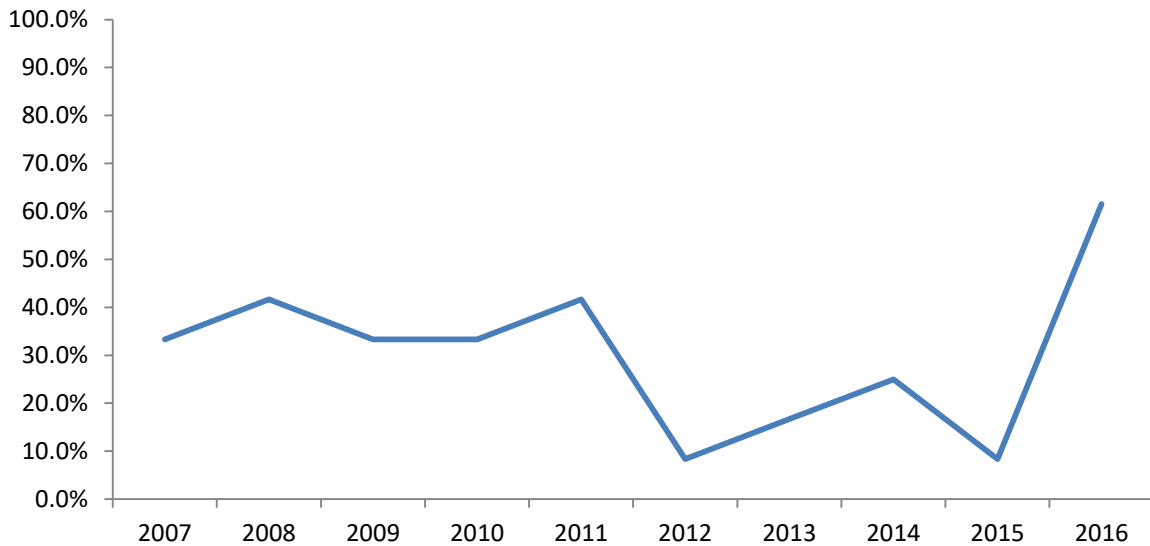
Transitional Year

Table 37: Transitional Year Retention (5 year periods), 2007-2016

Year	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	12	4	33.3%
2008	12	5	41.7%
2009	12	4	33.3%
2010	12	4	33.3%
2011	12	5	41.7%
2012	12	1	8.3%
2013	12	2	16.7%
2014	12	3	25.0%
2015	12	1	8.3%
2016	13	8	61.5%
TOTAL	121	37	30.6%

** Internship programs contain: *Anesthesiology, Dermatology, Radiology Oncology, Diagnostic Radiology, Ophthalmology, Emergency Medicine, Physical Medicine and Rehabilitation, and Otolaryngology.*

Figure 31: Transitional Year Retention (5 year periods), 2007-2016

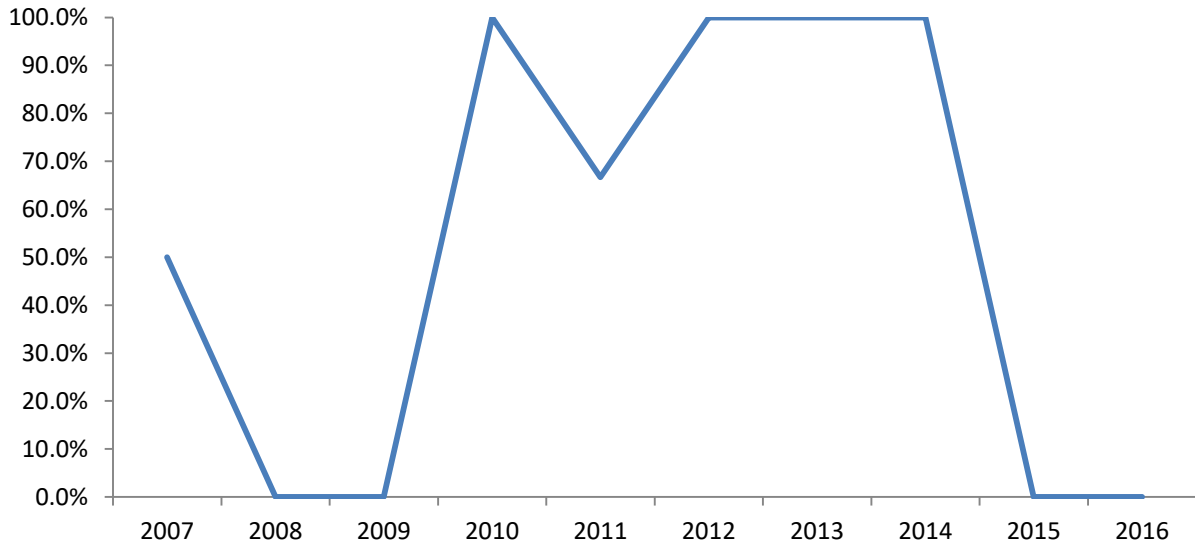


Triple Board– Residency Graduates Only

Table 38: Annual Triple Board Retention, 2007-2016

Year	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	2	1	50.0%
2008	1	0	0.0%
2009	1	0	0.0%
2010	3	3	100.0%
2011	3	2	66.7%
2012	1	1	100.0%
2013	1	1	100.0%
2014	2	2	100.0%
2015	3	0	0.0%
2016	1	0	0.0%
TOTAL	18	10	55.6%

Figure 32: Annual Triple Board Retention, 2007-2016



Urology – Residency Graduates Only

Table 72: Annual Urology Retention, 2007-2016

Year	Total Graduates	Retained in Utah (2016)	% Retained in Utah (2016)
2007	2	1	50.0%
2008	2	0	0.0%
2009	2	1	50.0%
2010	2	0	0.0%
2011	2	0	0.0%
2012	2	0	0.0%
2013	2	0	0.0%
2014	2	1	50.0%
2015	2	1	50.0%
2016	3	2	66.7%
TOTAL	21	6	28.6%

Figure 33: Annual Urology Retention, 2007-2016

