

Health Care Personnel Shortage Task Force Annual Report

Attachment

Health Professions Education in Washington Completions 2004-2011



December 2012

Workforce Training and Education Coordinating Board
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This education completions report was produced by Terry Travis, with the Research staff of Washington's Workforce Training & Education Coordinating Board for purposes of supporting the Health Care Personnel Shortage Task Force and its work.

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INTRODUCTION

This report documents completions of postsecondary health career educational programs throughout Washington. Each page summarizes program completions for one of 36 selected health education programs. The term “completion” as used in this report encompasses graduation from degree programs as well as completion of a course of study leading to a non-degreed credential. This report covers the periods from 2003-04 through 2010-11. Trend data include absolute numbers of program completions by gender, population-adjusted completion rates, and completions by race/ethnicity. Throughout the report, each academic year, beginning in July and ending in June, is referred to by the calendar year in which the academic year ended.

DATA SOURCES

Data for this report come from the Integrated Postsecondary Education Data system (IPEDS) of the National Center for Education Statistics for 2004 through 2011. IPEDS is a systematic survey of educational organizations whose primary purpose is to provide postsecondary education. IPEDS does not collect data from organizations that are not primarily educational in nature, for example, hospitals that offer nursing diploma programs. For this reason, the numbers of health career program completers may be underestimated for some professions, such as nurse aides. More information about IPEDS can be found at <http://nces.ed.gov/ipeds/>.

Some educational organizations did not report or under-reported data to IPEDS in prior years. In instances where this was known, data was obtained from the Washington State Board for Community and Technical Colleges (SBCTC) to supplement completions in the affected programs.

State population data are from the Washington State Office of Financial Management Population Estimates for 2008 and the US Census Bureau for 2009 through 2011.

Gender: IPEDS provides complete counts by gender, imputing for missing data.

Race and Ethnicity: Completions reported by IPEDS categorize completers into one of the following racial/ethnic designations:

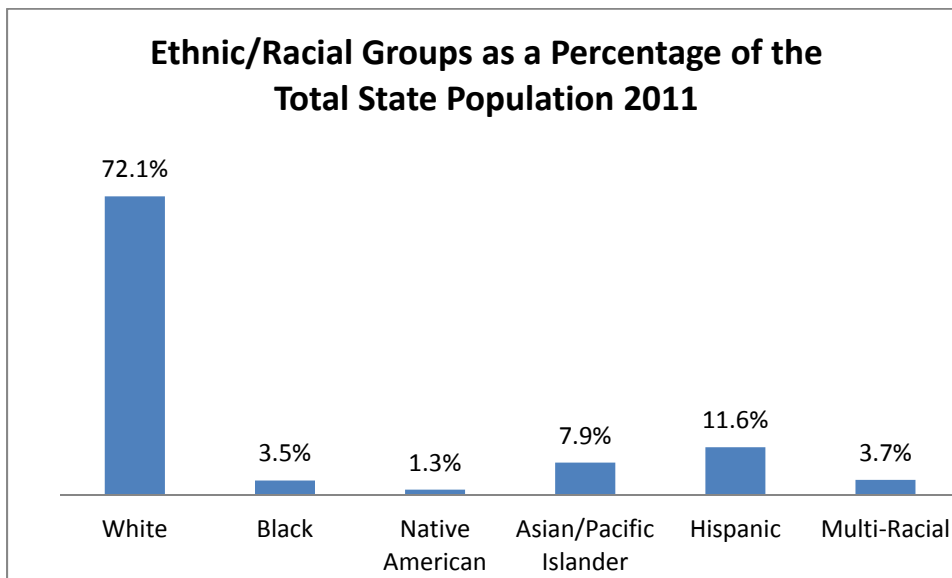
- White, non-Hispanic
- Hispanic or Latino
- Black, non-Hispanic
- Asian or Pacific Islander
- American Indian or Alaskan Native
- Nonresident alien
- Unknown.

For the purpose of charting data the ethnic groups are designate das white, Black, Hispanic, Asian and American Indian. Some racial/ethnic data were missing from the data sets. Completions in this report by race and ethnicity are based on percentages for those

completers in which race and ethnicity were known (excluding from the denominator those completers whose racial/ethnic data were missing or non-resident aliens).

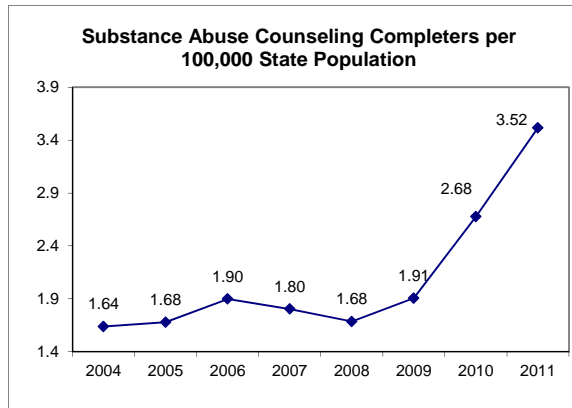
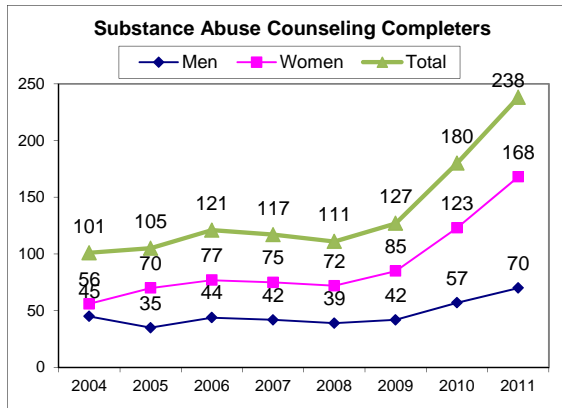
Limitations of the Data

The data in this report are subject to the following conditions. IPEDS attempts to conduct a complete census of all postsecondary educational organizations. Coverage is thought to be high, with response rates above 90 percent. Yearly verification is performed using accreditation lists, but it is not known how many institutions are missing. Although IPEDS imputes for non-responses, the extent of the undercount for missing institutions, non-responses, and specific health occupations where training is available outside of education institutions is unknown.



US Census Bureau

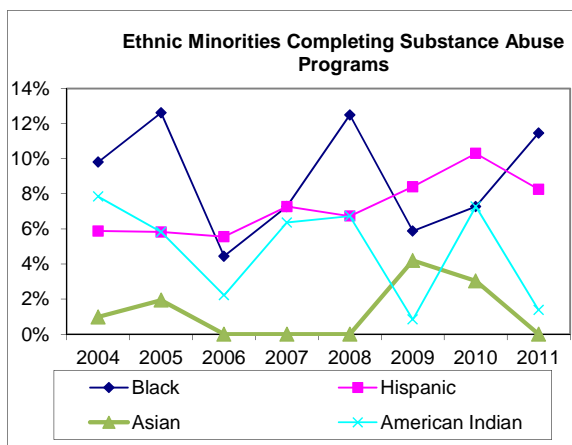
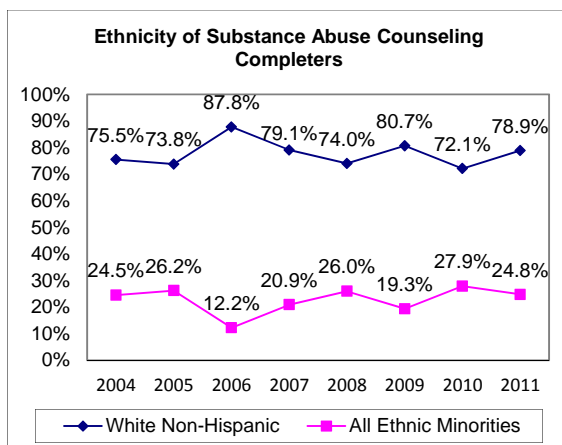
Substance Abuse/Addiction Counseling Program Completers (CIP 51.1501)



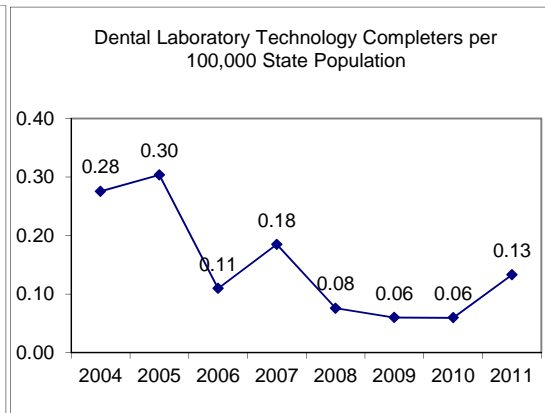
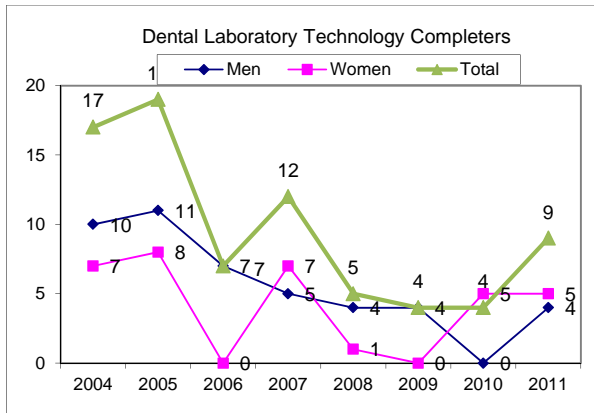
- Sixteen educational institutions offered substance abuse/addiction counseling programs in 2011.
- There are two types of credentials for substance abuse/addiction counseling from programs in Washington. The number of program completions from 2004-2011 by type are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Less than two years	50	50	63	68	54	68	92	141
Associate	51	55	58	49	57	59	88	97

- Total annual program completions increased by 135.6 percent from 2004 to 2011.
- Completions per 100,000 population increased by 114 percent over the same time period.
- 71 percent of program completers were female in 2011 compared to 55 percent in 2004.



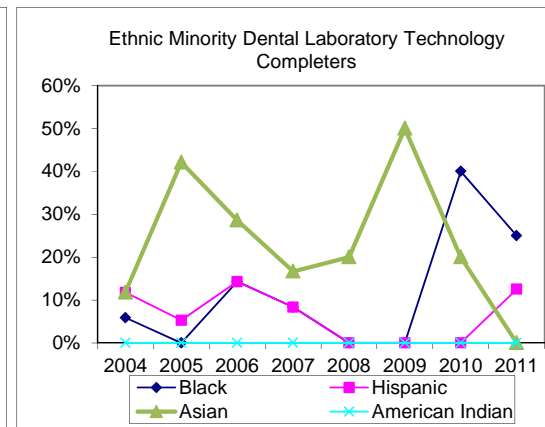
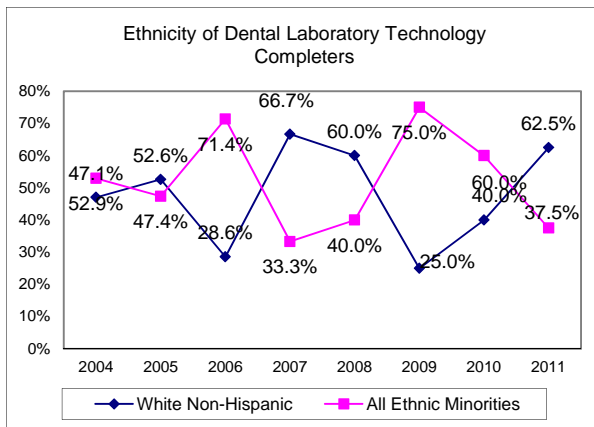
Dental Laboratory Technology/Technician Program Completers (CIP 51.0603)



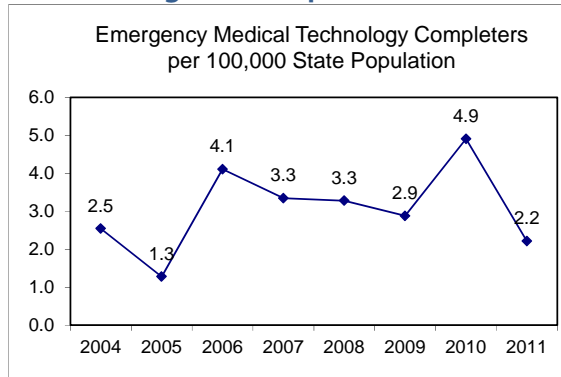
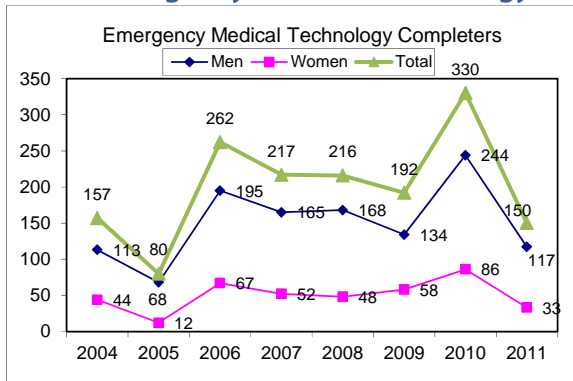
- One educational institution offered a Dental Laboratory Technology/Technician program in 2011.
- The number of program completion credentials from 2004-2011 are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Less than two years	5	4	1	3	1	1	2	7
Associate	2	6	3	3	3	3	3	2
2 to 4 years	10	9	3	6	1	0	0	0

- Total annual program completions decreased by 47 percent from 2004 to 2011. However with the number of completions per year being low, a small variance in any one year can give a false impression of the significance of the percent of change.
- The number of completers more than doubled from 2010.
- Completions per 100,000 population decreased by 52 percent from 2004 to 2011.
- 56 Percent of program completers were female in 2011 compared to 41 percent in 2004.



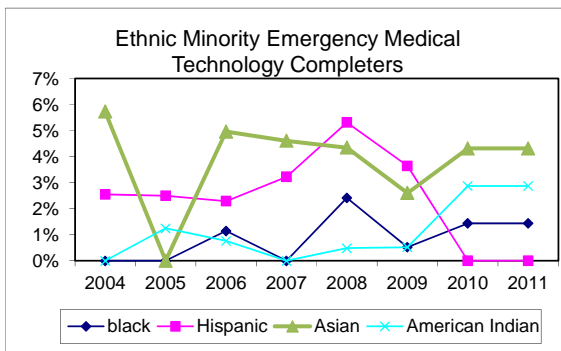
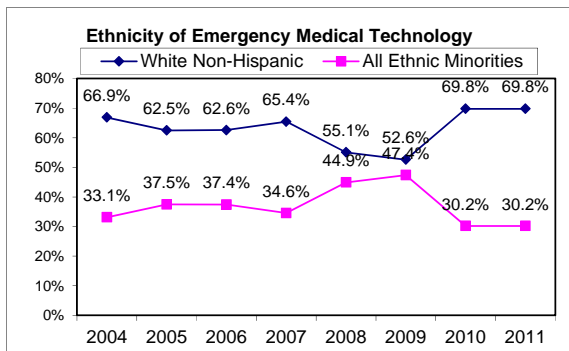
Emergency Medical Technology/Technician Program Completers (CIP51.0904)



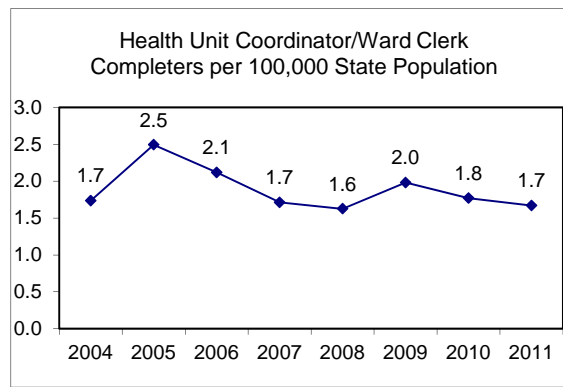
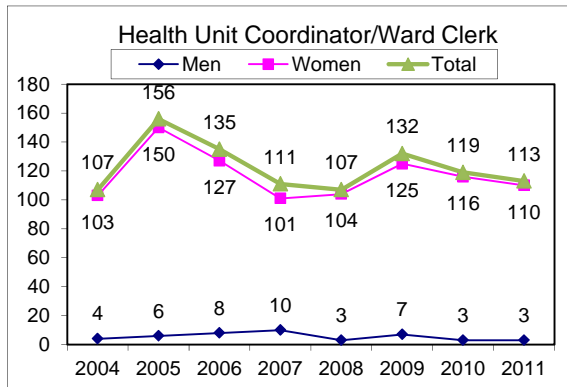
- Five educational institutions offered Emergency Medical Technology programs in 2011, down from six in 2010.
- There are several types of Emergency Medical Technology/Technician Program credentials in Washington. The number of program completions from 2004-2011 by type are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Less than two years	140	63	246	194	197	172	123	128
Associate	7	9	10	9	8	7	6	13
Baccalaureate	10	8	6	14	11	13	10	9

- Total annual program completions decreased by 4.5 percent from 2004 to 2011 but increased by 8 percent from 2010.
- Completions per 100,000 population decreased by 13 percent from 2004.
- 22 percent of program completers were female in 2011 compared to 22 percent in 2004.



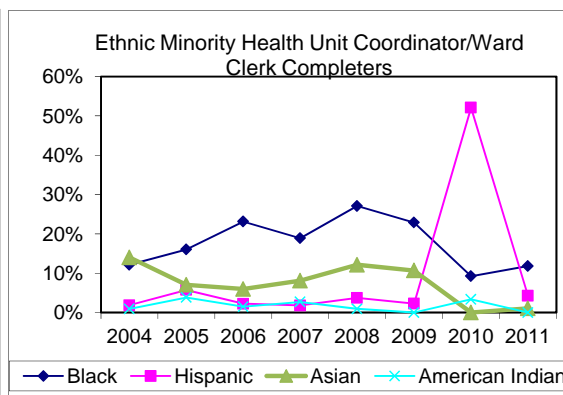
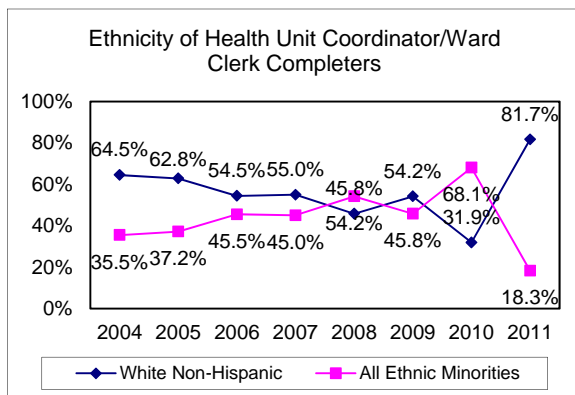
Health Unit Coordinator/Ward Clerk Program Completers (CIP 51.0703)



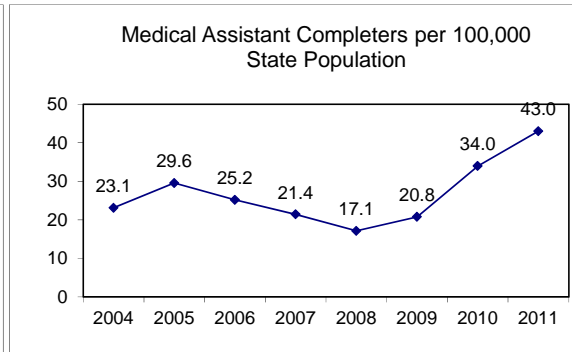
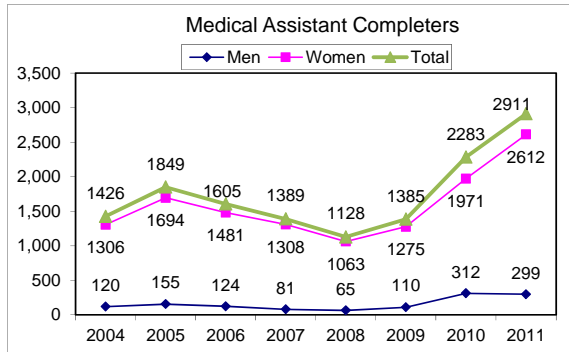
- Seven educational institutions offered Health Unit Coordinator/Ward Clerk programs in 2010, up by one from 2009
- There are two types of Health Unit Coordinator/Ward Clerk Program credentials in Washington. The number of program completions from 2004-2011 by type are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Less than two years	101	148	135	110	106	129	114	112
Associate	6	8	0	1	1	3	5	1

- Total annual program completions increased by 5.6 percent from 2004 to 2011.
- Completions per 100,000 population increase by 5.8 percent over the same time period and increased by 9 percent from 2008.
- 97.3 percent of program completers were female in 2011 compared to 96.3 percent in 2004.



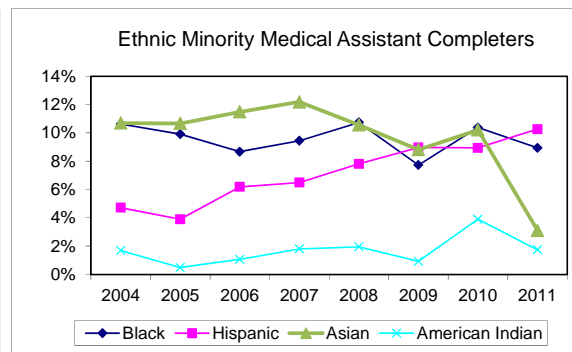
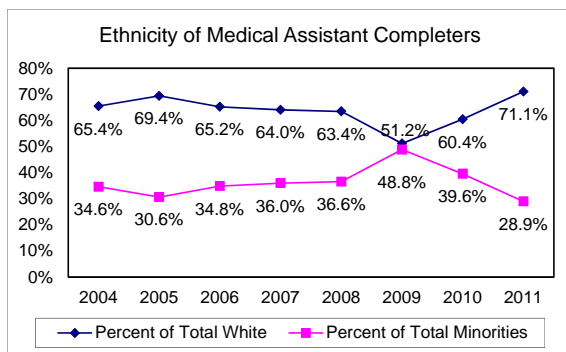
Medical/Clinical Assistant (CIP 51.0801)



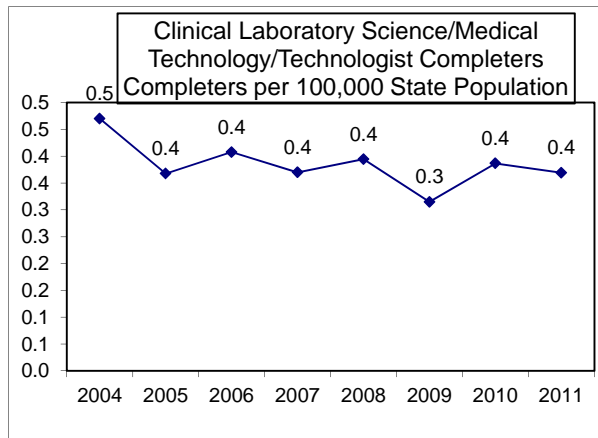
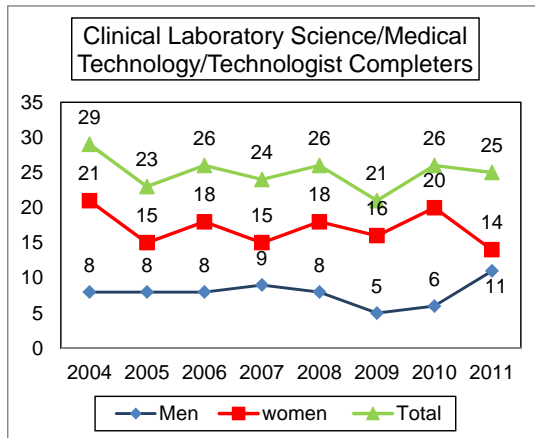
- Twenty-nine educational institutions offered Medical/Clinical Assistant programs in 2011.
- There have been three types of Medical/Clinical Assistant Program credentials in Washington but only two as of 2009. The number of program completions from 2004-2011 by type are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Less than two years	1261	1690	1422	1228	968	1244	2076	2599
Associate	164	155	174	149	157	141	207	312
2 to 4 years	1	4	9	12	3	0	0	0

- Total annual program completions increased by 104.1 percent between 2004 and 2011, and by 27.5 percent from 2010.
- Completions per 100,000 population increased by 86 percent from 2004 and 2010.
- 89.7 percent of program completers were female in 2011.



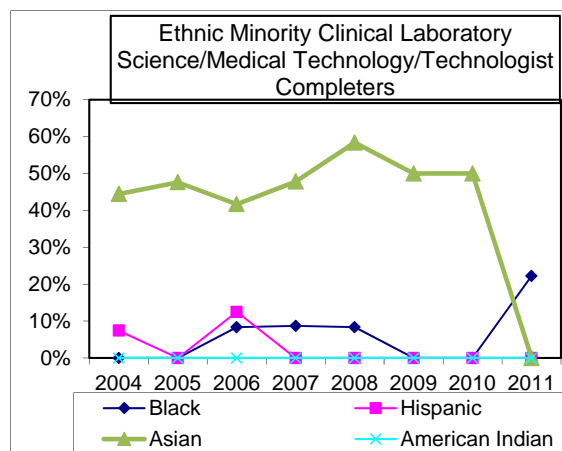
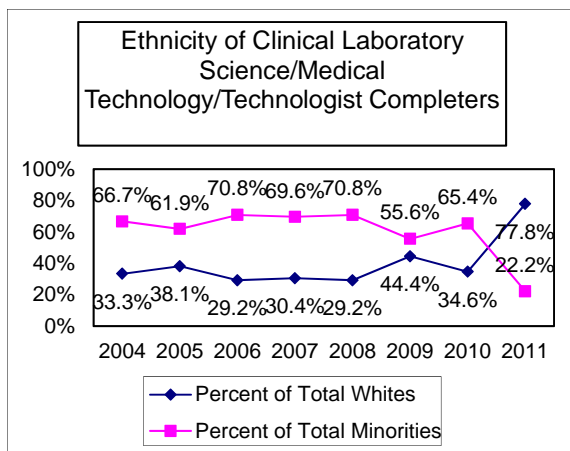
Clinical Laboratory Science/Medical Technology/Technologist (CIP 51.1005)



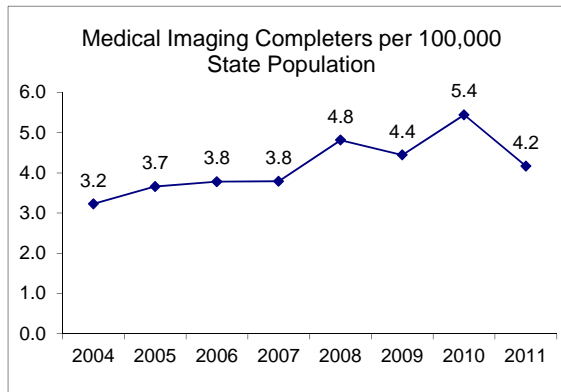
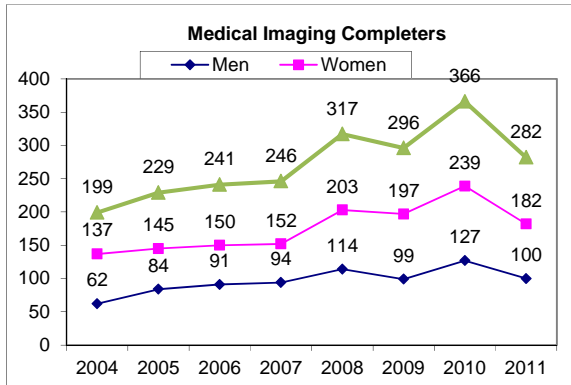
- Two educational institutions offered Clinical Laboratory Science/Medical Technology/Technologist programs in 2011 the same as in 2010
- There is one type of Clinical Laboratory Science/Medical Technology/Technologist program offered in Washington. The number of program completions from 2004-2011 are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Baccalaureate	29	23	26	24	26	21	26	25

- Total annual program completions decreased by 13.8 percent between 2004 and 2011 and 3.4 percent from 2011. With the number of completions per year being low, a small variance in any one year can give a false impression of the significance of the percent of change.
- Completions per 100,000 population decreased by 21.4 percent from 2004 to 2011
- 56 percent of program completers were female in 2010 compared to 72.4 percent in 2004.



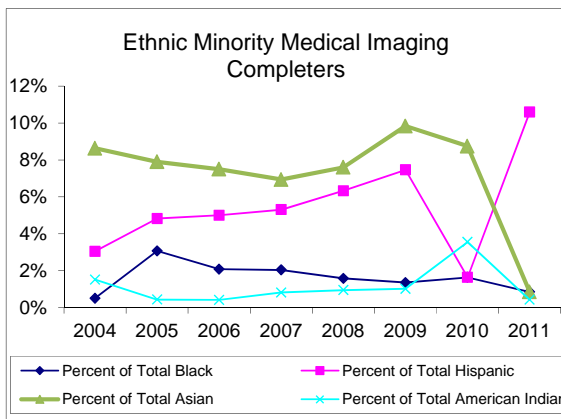
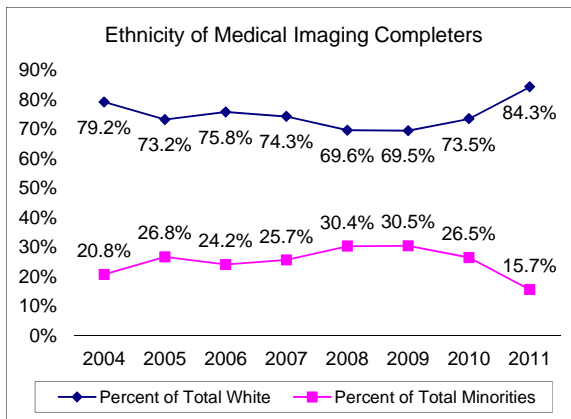
Medical Imaging (Radiology) (CIPs 51.0905, 0907, 0910 and 0911)



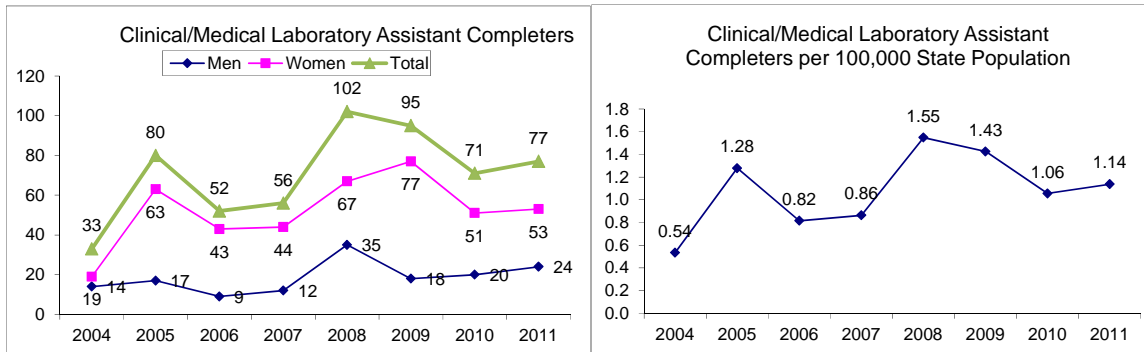
- Twelve educational institutions offered Medical Imaging (Radiology) programs in 2011. The programs include: Nuclear Medical Technology/Technologist; Medical Radiologic Technology/Science - Radiation Therapist; Diagnostic Medical Sonography/Sonographer & Ultrasound Technician; and Radiologic Technology/Science - Radiographer. Total annual program completions increased by 41.7 percent between 2004 and 2011, but down by 23 percent from 2010.
- The number of program completion credentials from 2004-2011 by type are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Less than two years	13	8	14	13	12	11	45	63
Associate	167	206	209	207	285	265	305	219
Baccalaureate	19	15	18	23	20	20	16	0

- Total annual program completions increased by 41.7 percent between 2004 and 2011, but down by 23 percent in 2010.
- Completions per 100,000 population increased by 29.1 percent over the same time period.
- 64.5 percent of program completers were female in 2011 compared to 68.8 percent in 2004.



Medical/Clinical Laboratory Assistant (CIP 51.0802)

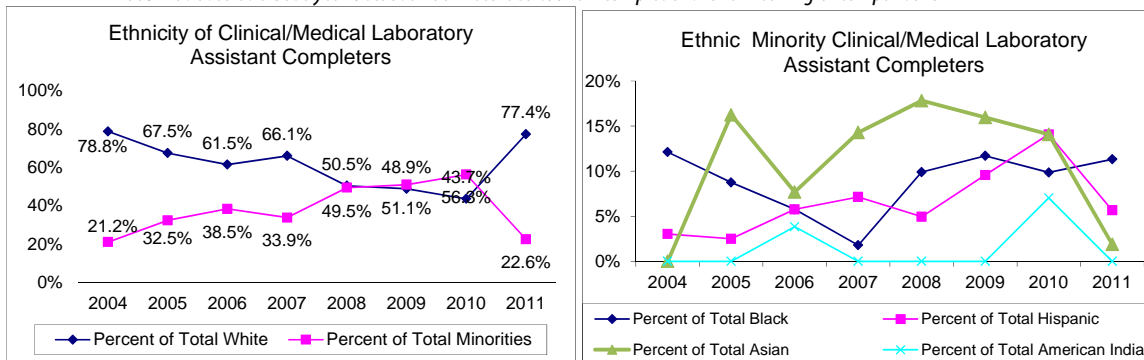


- Six educational institutions offered Clinical/Medical Laboratory assistant programs in 2011, up from 5 in 2010.
- There are two types of Medical/Clinical Laboratory Assistant Program credentials in Washington. The number of program completions from 2004-2011 by type are as follows:

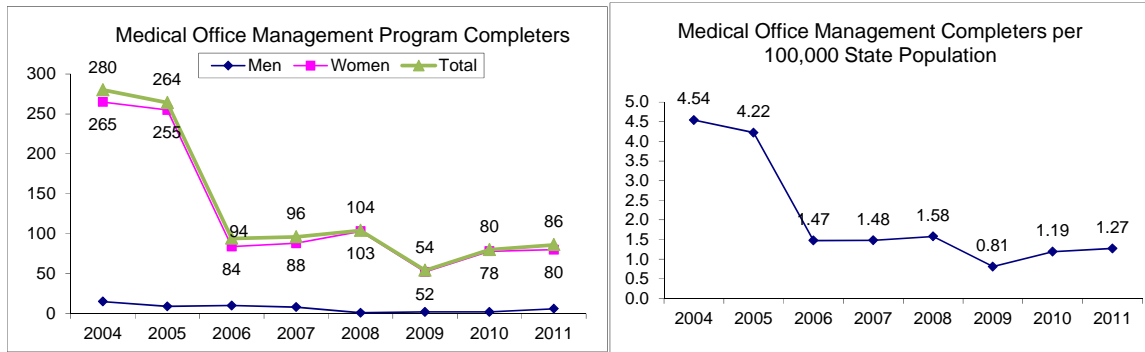
Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Less than two years	3	37	16	17	50	56	39	49
Associate	0	24	30	43	36	39	32	28

- Total annual program completions increased by 26.2 percent between 2005 and 2011 and by 8.5 percent from 2010 to 2011.*
- Completions per 100,000 population increased by 16.7 percent over the same time period.
- 68.6 percent of program completers were female in 2011 compared to 44 percent in 2005.

* 2005 was used as a base year because 2004 recorded too few completions for a meaningful comparison.



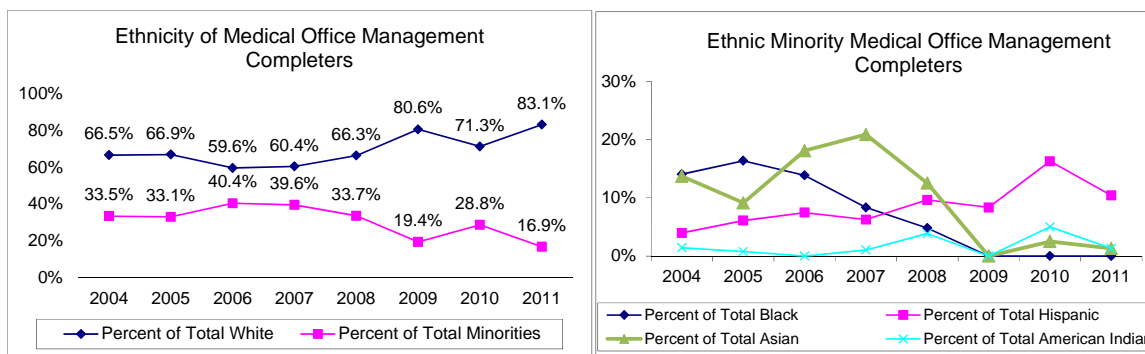
Medical Office Management Administration (CIP 51.0705)



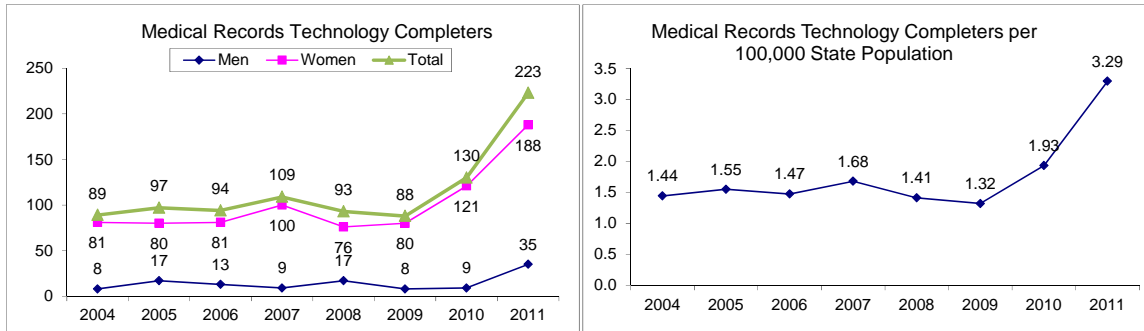
- Six educational institutions offered Medical/Clinical Assistant programs in 2011, up from four in 2010.
- There are two types of Medical Office Management Administration Program credentials in Washington. The number of program completions from 2004-2011 by type are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Less than two years	276	259	93	95	98	52	71	78
Associate	4	5	1	1	6	2	9	8

- Total annual program completions decreased by 69.3 percent between 2004 and 2011, showing some improvement since a low point in 2009.
- Completions per 100,000 population decreased by 72 percent from 2004 to 2011.
- 93 percent of program completers were female in 2011 compared to 94.6 percent in 2004.



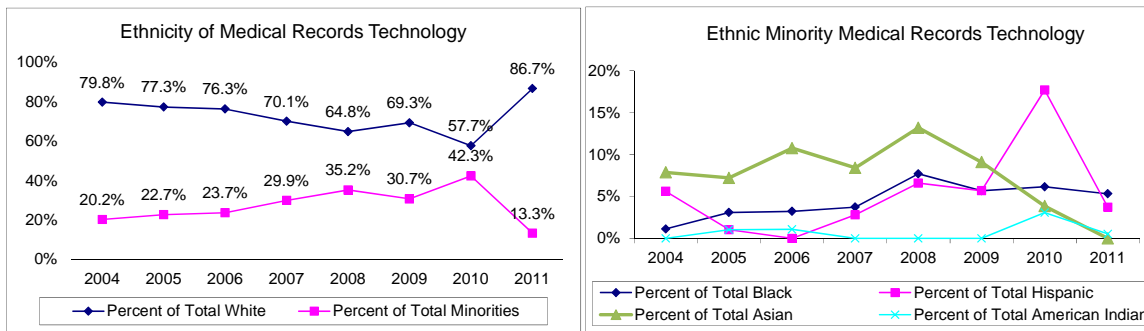
Medical Records Technology/Technician (CIP 51.0707)



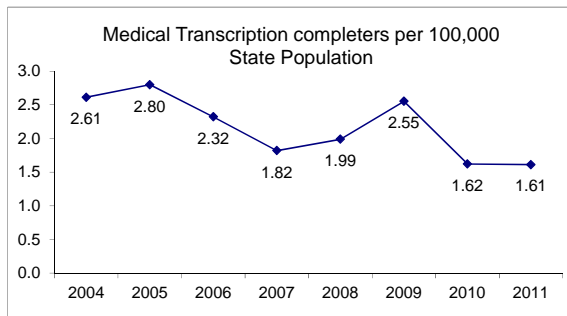
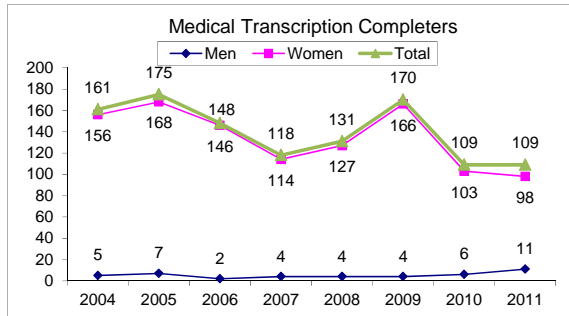
- Nine educational institutions offered Medical Records Technology/Technician programs in 2011, down from 11 in 2010.
- There are two types of Medical Records Technology/Technician Program credentials in Washington. The number of program completions from 2004-2011 by type are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Less than two years	37	44	47	55	40	47	81	113
Associate	52	53	47	54	53	41	49	110

- Total annual program completions increased by 150.6 percent between 2004 and 2011, increasing by 38 percent from 2010.
- Completions per 100,000 population increased by 128.3 percent over the same time period.
- 84.3 percent of program completers were female in 2011 compared to 91 percent 2004.



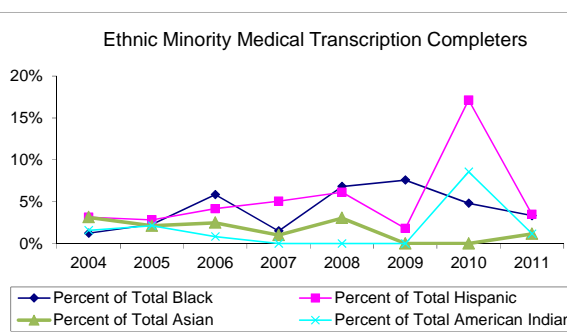
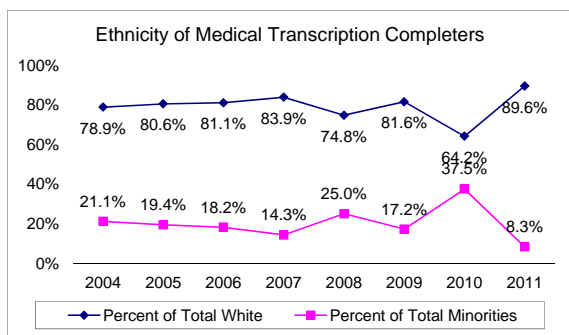
Medical Transcription (CIP 51.0708)



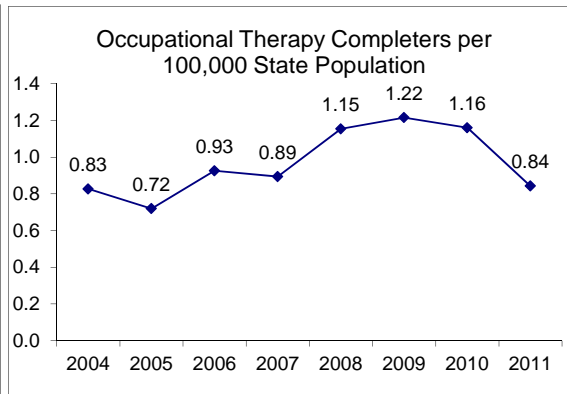
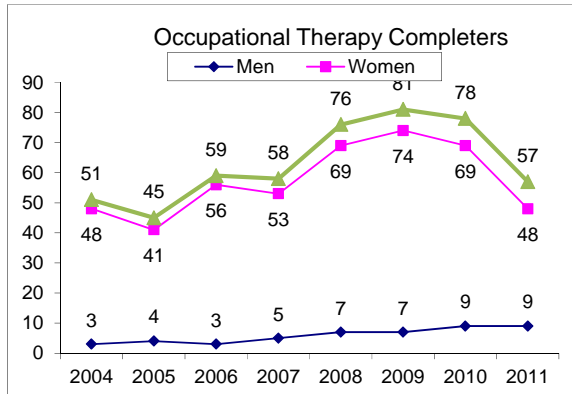
- Twelve educational institutions offered Medical Transcription programs in 2011.
- There is one type of Medical Transcription Program credential in Washington. The number of program completions from 2004-2011 are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Less than two years	161	174	148	118	129	170	109	109

- Total annual program completions decreased by 32.3 percent from 2004 to 2011, and remained the same from 2010.
- Completions per 100,000 population decreased by 38.3 percent from 2004, but only by 0.6 percent from 2010.
- 89.9 percent of program completers were female in 2011 compared to 96.9 percent in 2004.



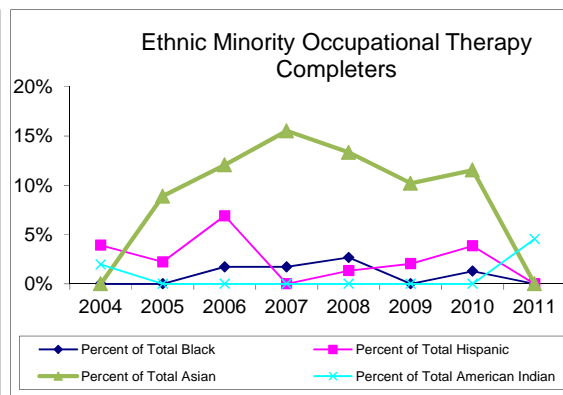
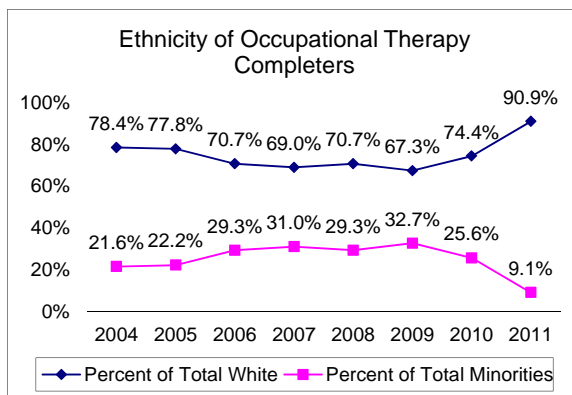
Occupational Therapy (CIP 51.2306)



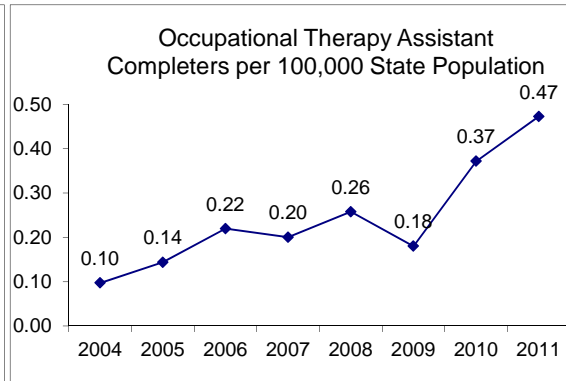
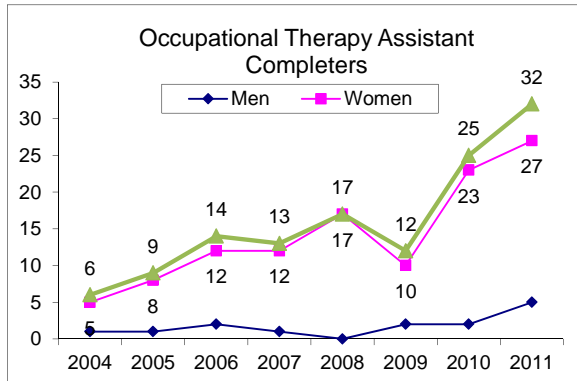
- Two universities offered Occupational Therapy programs in 2011.
- There are two types of Occupational Therapy Program credentials in Washington. The number of program completions from 2004-2011 by type are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Baccalaureate	21	14	16	15	1	0	0	0
Master's	30	31	43	43	75	81	78	57

- Total annual program completions increased by 11.8 percent between 2004 and 2011 but declined by 26.9 percent from 2010.
- Completions per 100,000 population increased by 1.4 percent over the same time period.
- 84.2 percent of program completers were female in 2011 compared to 94.1 percent in 2004.



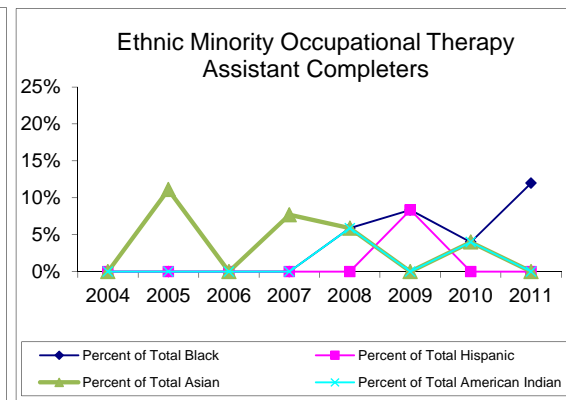
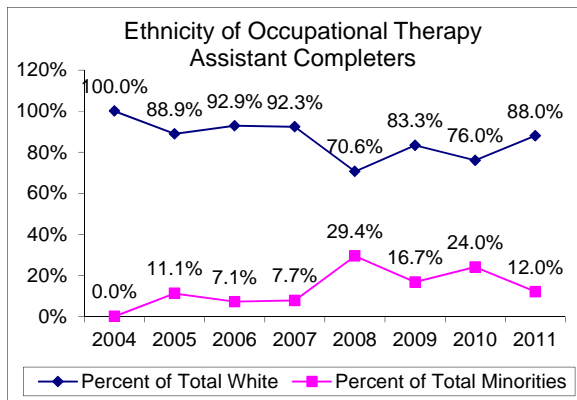
Occupational Therapy Assistant (CIP 51.0803)



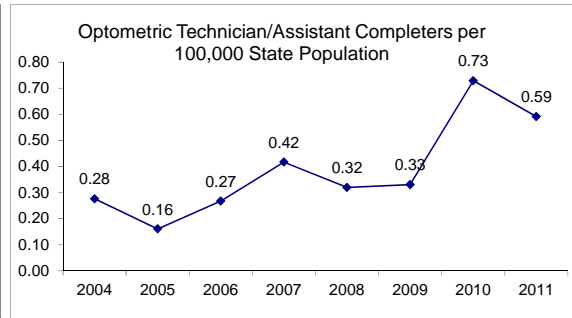
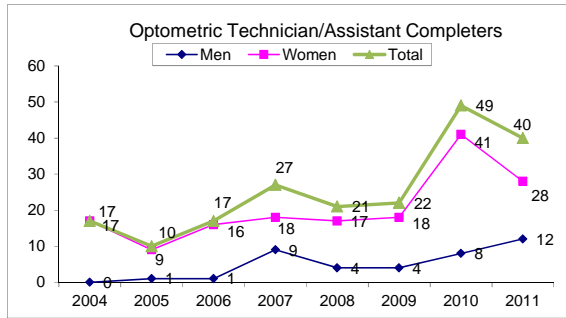
- One educational institution offered an Occupational Therapy Assistant program in 2011.
- There is one type of Occupational Therapy Assistant Program credential in Washington. The number of program completions from 2004-2011 by type are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Associate	6	9	14	13	17	12	25	32

- Total annual program completions increased by 433 percent from 6 to 32 between 2004 and 2011. With the number of completions per year being low, a small variance in any one year can give a false impression of the significance of the percent of change.
- Completions per 100,000 population increased by 386 percent over the same time period
- 84.4 percent of program completers were female in 2011 compared to 83.3 percent in 2004.



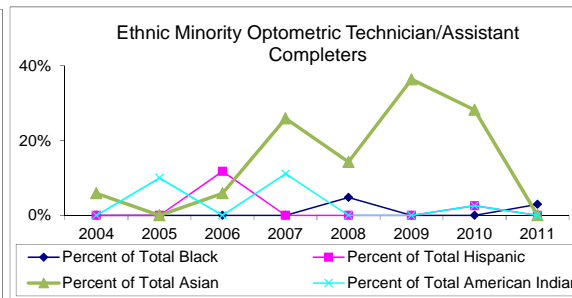
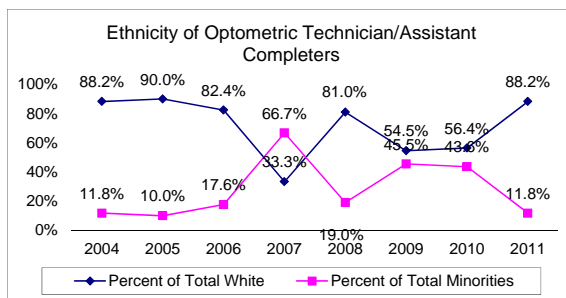
Optometric Technician Assistant (CIP 51.1802)



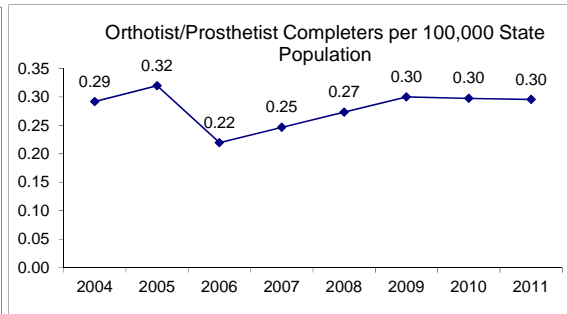
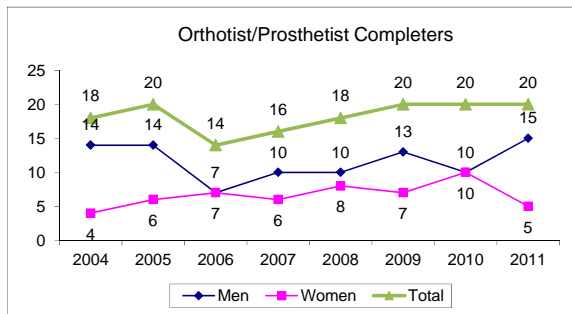
- Two educational institutions offered an Optometric Technician Assistant program in 2011.
- There are two types of Optometric Technician Program credentials in Washington. The number of program completions from 2004-2011 by type are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Less than two years	9	8	9	21	14	14	34	25
Associate	8	2	8	6	7	8	15	15

- Total annual program completions increased by 135 percent between 2004 and 2011
- Completions per 100,000 population increased by 114 percent over the same time period
- 70 percent of program completers were female in 2011 compared to 100 percent in 2004



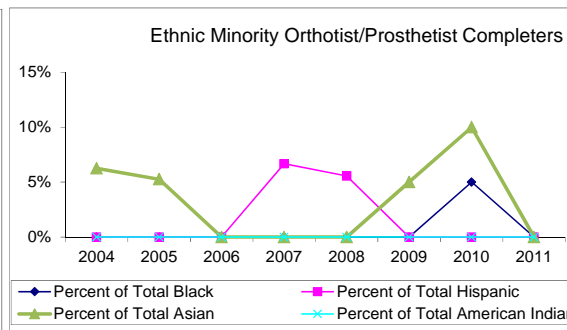
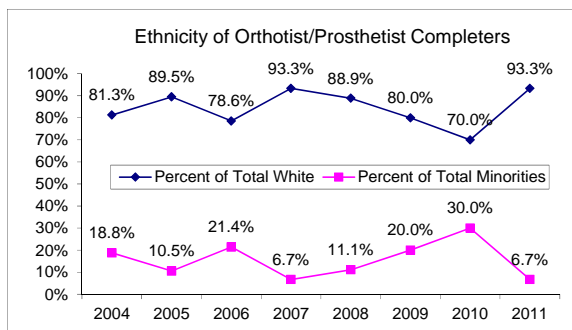
Orthotist/Prosthetist (CIP 51.2307)



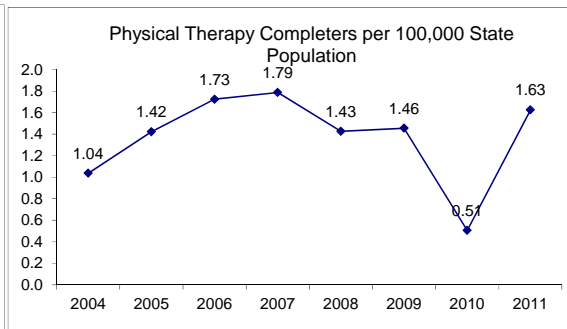
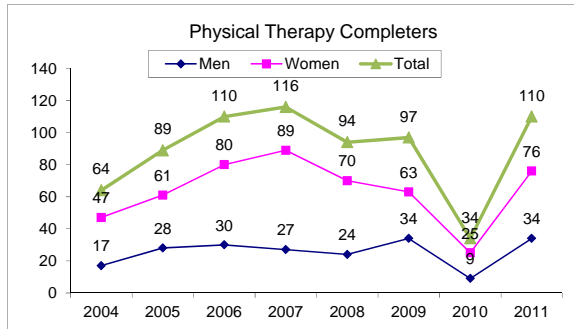
- Two educational institutions offered Orthotist/Prosthetist programs in 2011.
- There are three types of Orthotist/Prosthetist Program credentials in Washington. The number of program completions from 2004-2011 by type are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Less than two years	1	0	0	0	1	2	2	3
Associate	8	8	5	6	6	8	6	8
Baccalaureate	9	12	9	10	11	10	12	9

- Although total annual program completions increased by 11.1 percent between 2004 and 2011 the number of completers is small which can misrepresent the significance of the percent of change.
- Completions per 100,000 population increased by 1.3 percent from 2004 to 2011.
- 25 percent of program completers were female in 2011 compared to 36.4 percent in 2004.



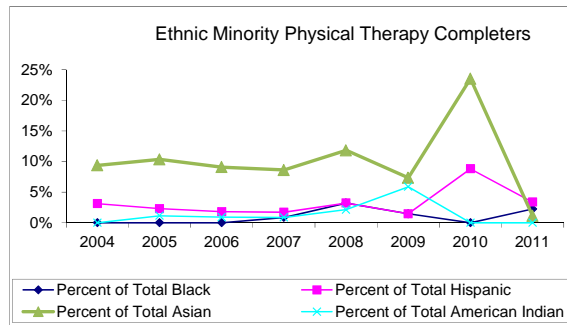
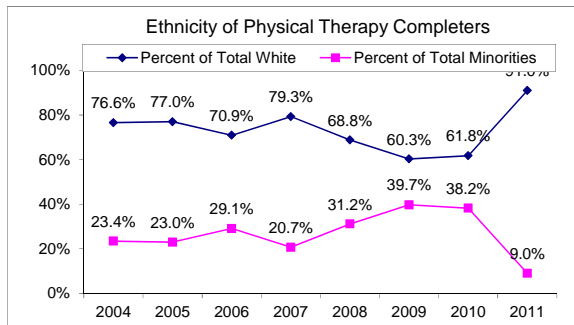
Physical Therapy (CIP 51.2308)



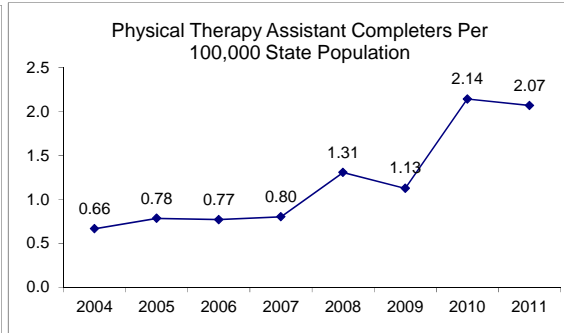
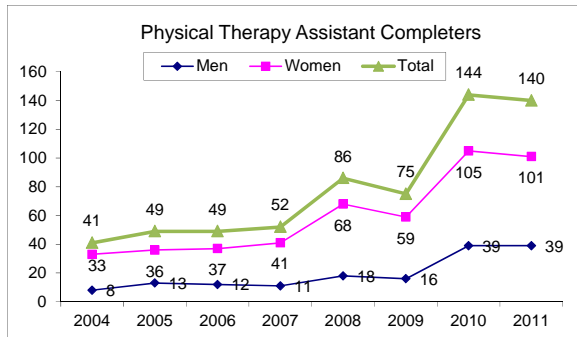
- Three universities in the state offered Physical Therapy programs in 2011 which is up from one in 2010
- There have been two types of Physical Therapy Program credentials in Washington, but since 2008 only doctoral programs have had graduates.
- The number of program completions from 2004-2011 by type are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Master's	64	42	46	53	0	0	0	0
Doctoral	0	47	64	63	94	97	34	110

- Total annual program completions increased by 72 percent between 2004 and 2011.
- Completions per 100,000 population increased by 56.68 percent from 2004 to 2011.
- 69.1 percent of program completers were female in 2011 compared to 65.6 percent in 2004.



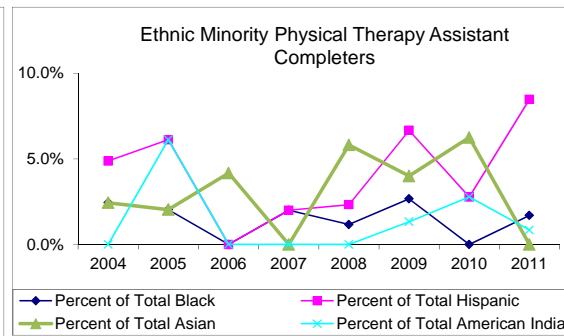
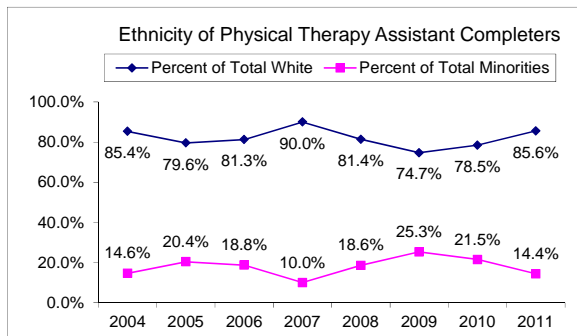
Physical Therapy Assistant (CIP 51.0806)



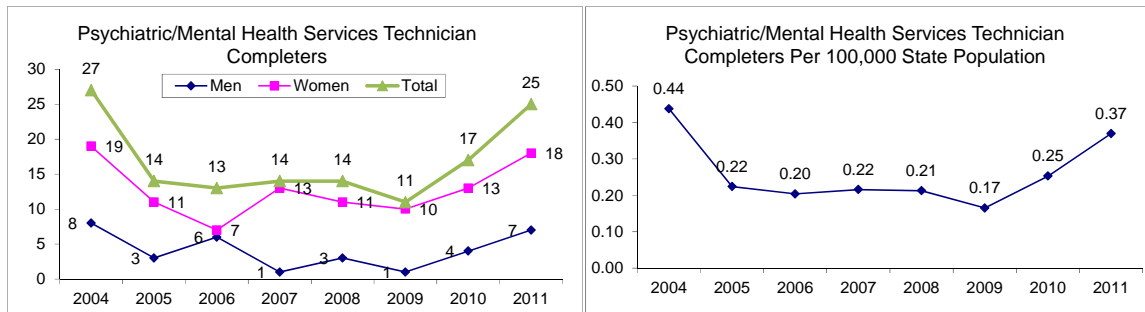
- Six educational institutions offered Physical Therapy Assistant programs in 2011.
- There is one type of Physical Therapy Assistant Program credential in Washington. The number of program completions from 2004-2011 by type are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Associate	41	49	49	52	86	75	144	140

- Total annual program completions increased by 241.5 percent between 2004 and 2011 but decreased by 2.8 percent from 2010.
- Completions per 100,000 population increased by 211 percent from 2004 to 2011.
- 58.1 percent of program completers were female in 2010 compared to 55.4 percent in 2004.



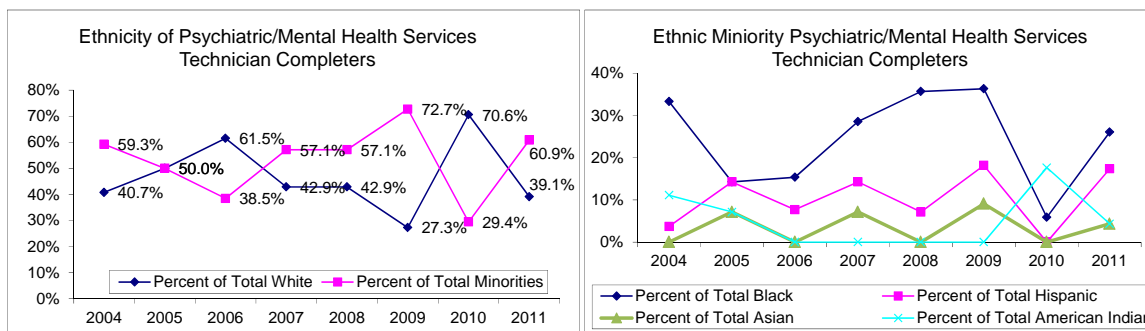
Psychiatric/Mental Health Services Technician (CIP 51.1502)



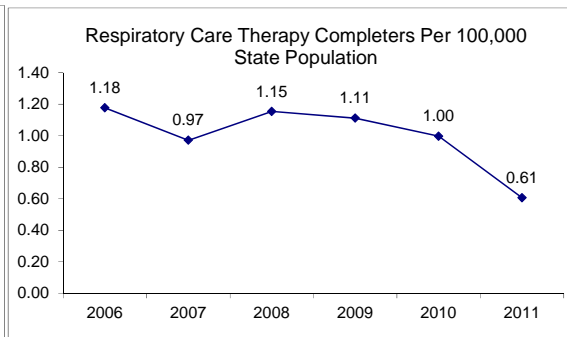
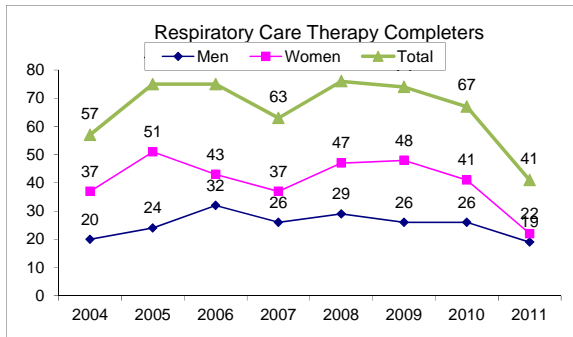
- One community and technical college offered Psychiatric/Mental Health Services Technician programs in 2011.
- There are two types of Psychiatric/Mental Health Program credentials in Washington. The number of program completions from 2004-2011 by type are as follows:

	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Less than two years	22	10	9	11	12	9	13	25
Associate	5	4	4	3	2	2	4	0

- Total annual program completions decreased by 7.4 percent between 2004 and 2011.
- Completions per 100,000 population decreased by 15.6 percent from 2004 to 2011.
- 72 percent of program completers were female in 2011 compared to 86.4 percent in 2004.



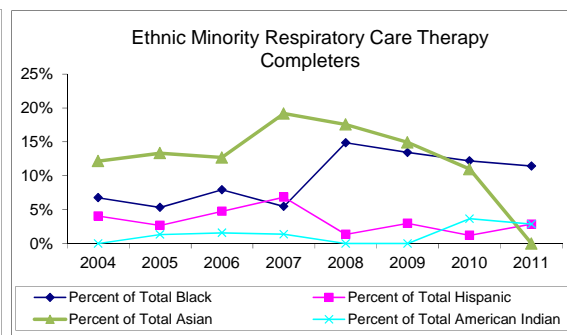
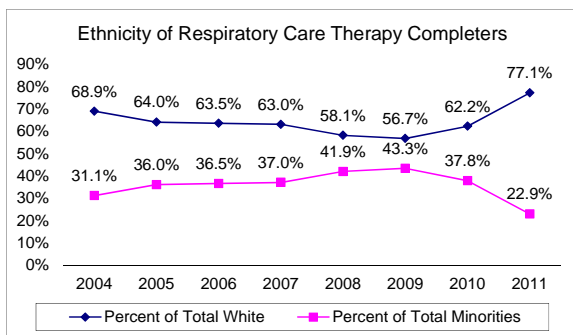
Respiratory Care Therapy (CIP 51.0908)



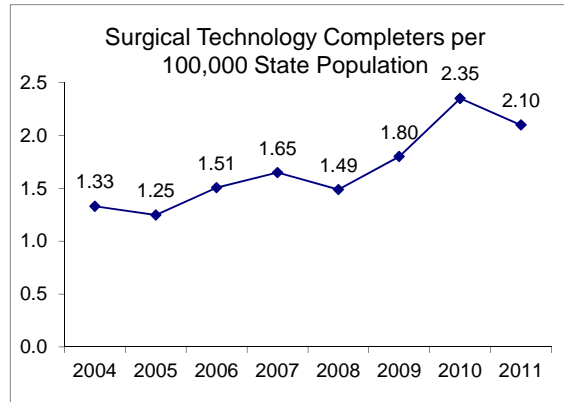
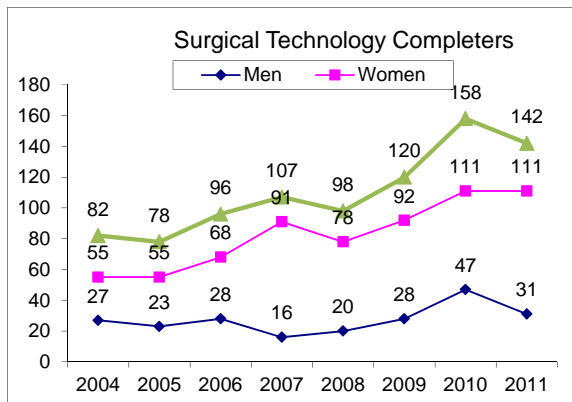
- One medical institute offered Respiratory Care Therapy programs in 2011, down from five in 2010.
- An associate’s degree is the only type of Respiratory Care Therapy Program credential currently available in Washington. The number of program completions from 2004-2011 are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Associate	65	75	63	76	74	67	82	41

- Total annual program completions decreased by 28 percent between 2004 and 2011.
- Completions per 100,000 population decreased by 34 percent from 2004 to 2011.
- 54 percent of program completers were female in 2011, compared to 65 percent in 2010.



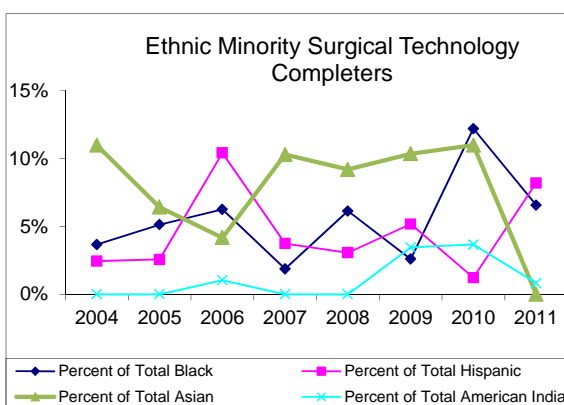
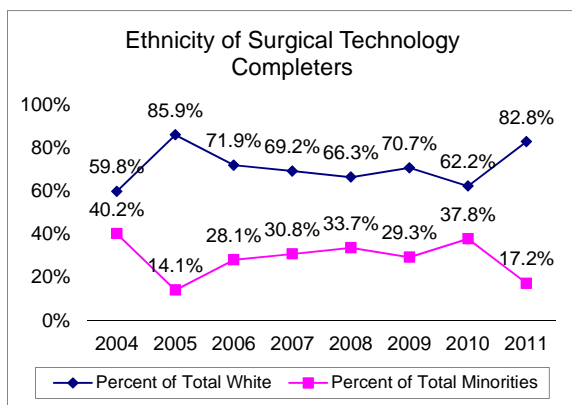
Surgical Technology Program (CIP 51.0909)



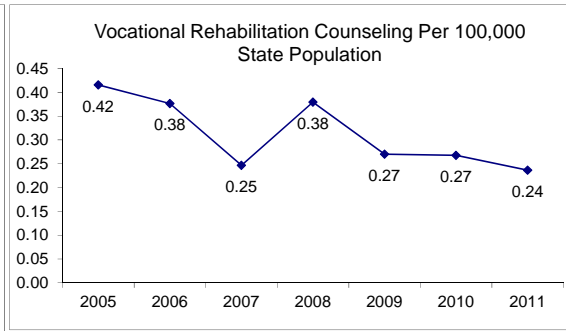
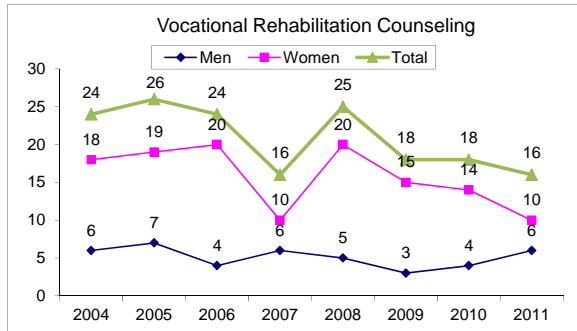
- Seven educational institutions offered Surgical Technology programs in 2011 down from nine in 2010
- There are two types of Surgical Technology program credentials in Washington. The number of program completions from 2004-2011 by type are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Less than two years	67	54	56	69	52	62	94	70
Associate	15	24	40	38	46	58	64	72

- Total annual program completions increased by 73 percent between 2004 and 2011 but declined by 10 percent from 2010.
- Completions per 100,000 population increased by 58 percent from 2004 to 2011.
- 78 percent of program completers were female in 2011 compared to 67 percent in 2004.



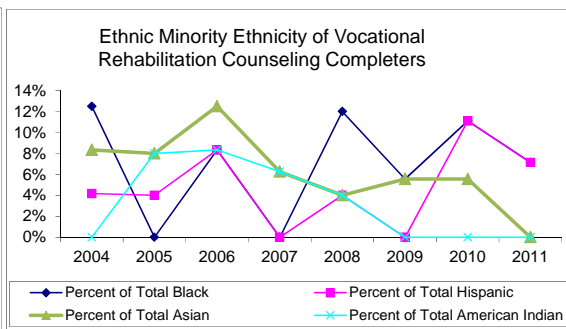
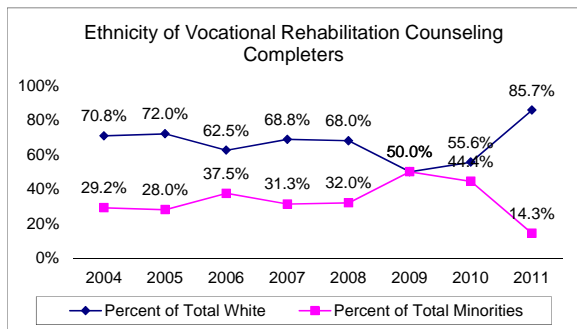
Vocational Rehabilitation Counseling (CIP 51.2310)



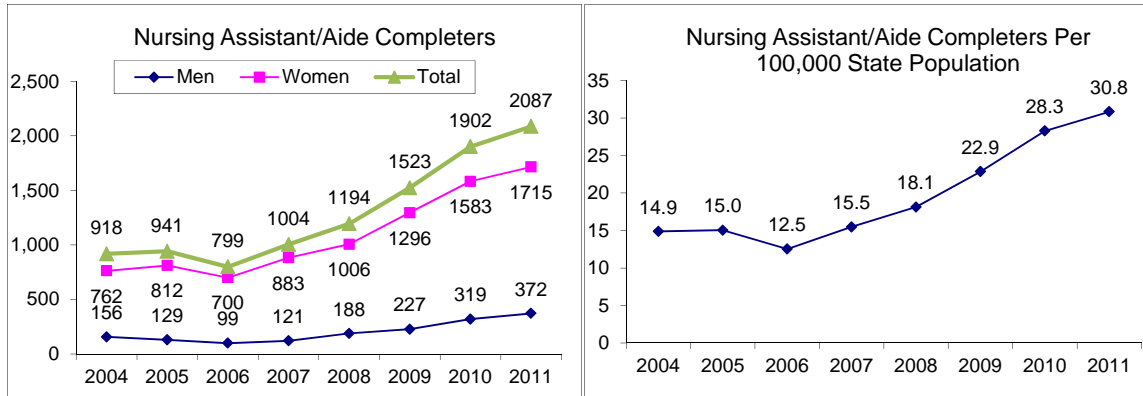
- One university and one community and technical college offered Vocational Rehabilitation Counseling programs in 2011
- Two types of Vocational Rehabilitation Counseling program credentials were offered in 2011.
- The number of program completions by type are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Associate	9	8	5	2	5	1	5	1
Master's	14	18	19	14	20	17	13	15
Less than two years	1							

- Total annual program completions decreased by 33.3 percent between 2004 and 2011.
- Completions per 100,000 population decreased by 39.2 percent from 2004 and 2011.
- 65.5 percent of program completers were female in 2011 compared to 75 percent and 2004



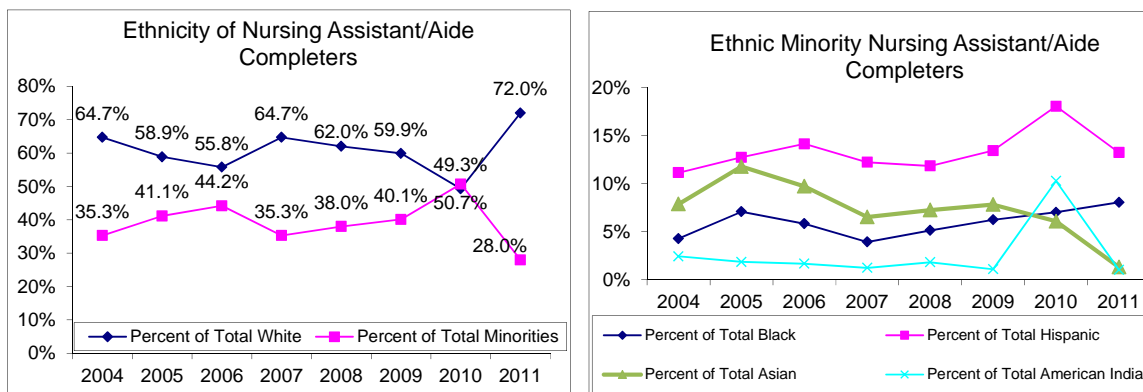
Nursing Assistant/Aide and Patient Care (51.3902)



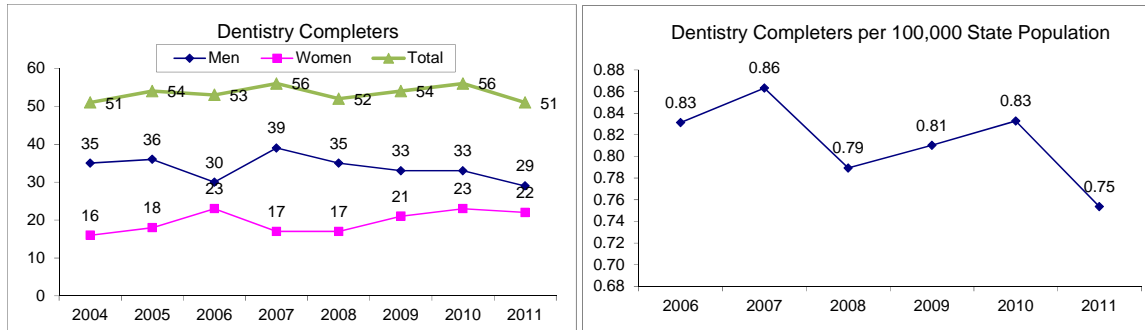
- Twenty-four educational institutions offered Nursing Assistant/Aide programs in 2010 down from 25 in 2010.
- The number of program completions from 2004-2011 are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Less than two years	918	941	799	1,004	1,194	1,523	1,902	2,087

- Total annual program completions increased by 127 percent between 2004 and 2011 and by 10 percent from 2010.
- Completions per 100,000 population increased by 107 percent from 2004 to 2011.
- 83.2 percent of program completers were female in 2011 compared to 85.2 percent in 2004.



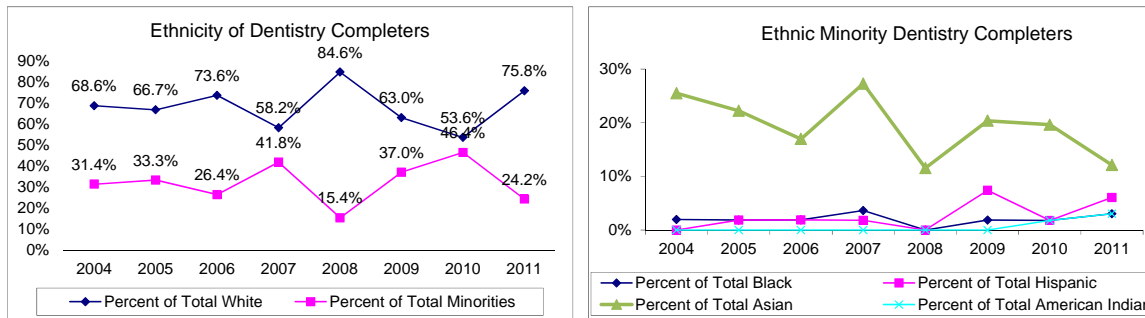
Dentistry (CIP 51.0401)



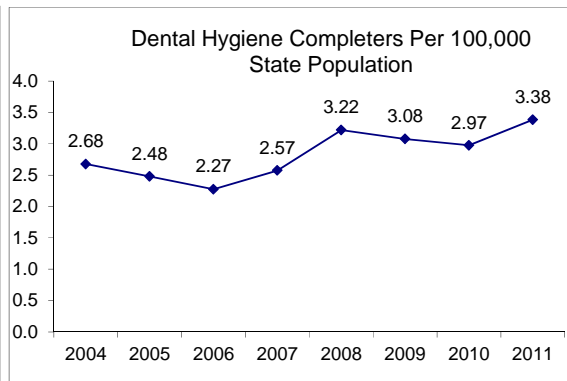
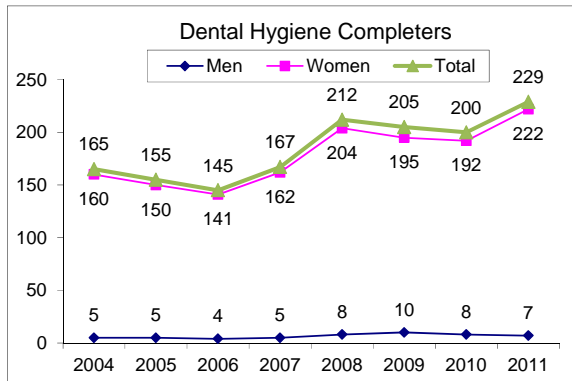
- One university offered a Dentistry program in 2011.
- The number of program completions from 2004-2011 are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Professional Degree	51	54	53	56	52	54	56	51

- Total annual program completions remained the same from 2004 and 2011 but decreased by 9.8 percent from 2010.
- Completions per 100,000 population decreased by 9 percent from 2004 to 2011.
- 43 percent of program completers were female in 2011 compared to 31 percent in 2004.



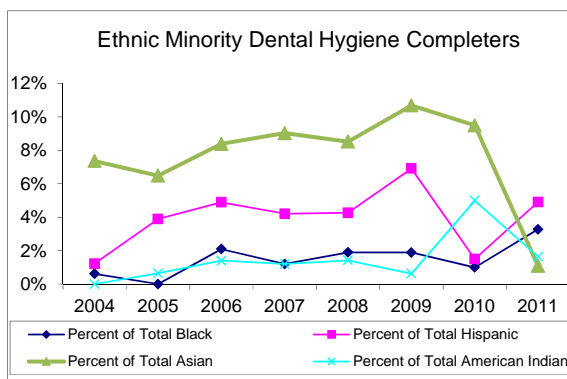
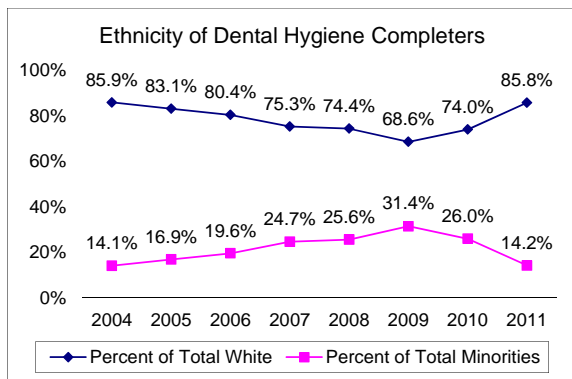
Dental Hygiene (CIP51.0602)



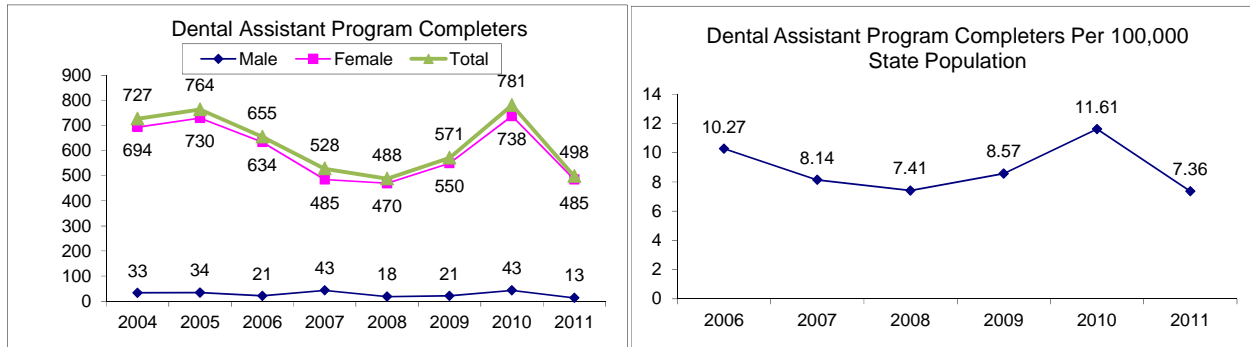
- Nine community, state colleges and universities offered Dental Hygiene programs in 2011.
- There have been two types of Dental Hygiene program credentials in Washington and in 2011 a Master's degree was added. The number of program completions from 2004-2011 by type are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Associate	119	98	95	109	146	152	148	146
Baccalaureate	46	57	50	58	66	53	52	81
Master's								2

- Total annual program completions increased by 39 percent between 2004 and 2011.
- Completions per 100,000 population increased by 26.5 percent from 2004 to 2011.
- 69.9 percent of program completers were female in 2011 compared to 97.0 percent in 2004.



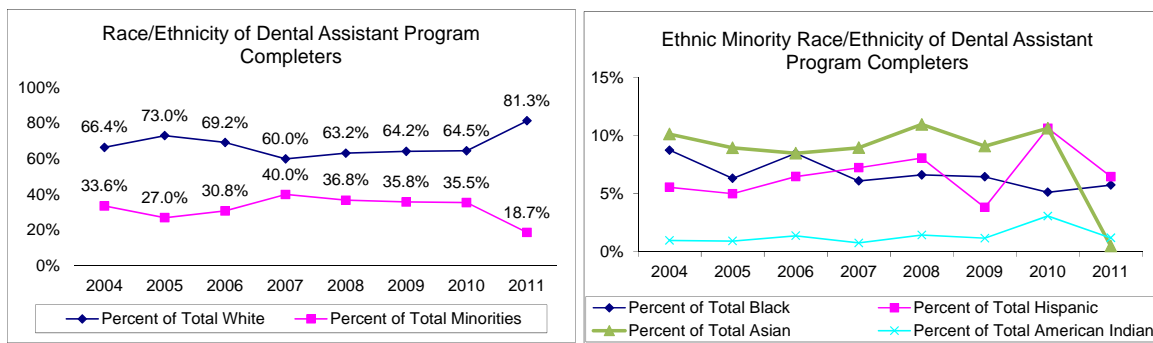
Dental Assistant (CIP 51.0601)



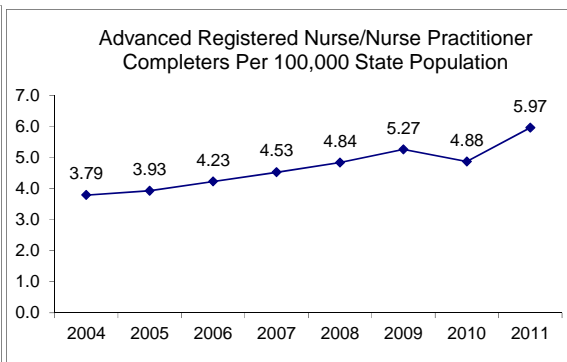
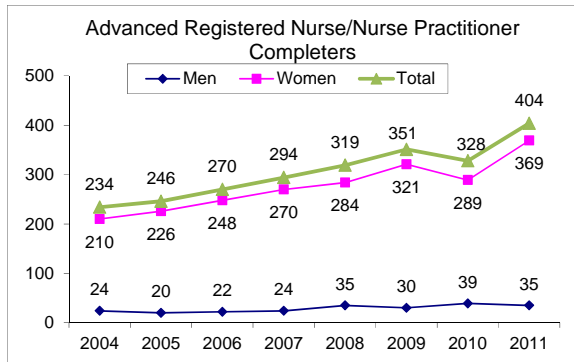
- Thirteen educational institutions offered Dental Assistant programs in 2011.
- There have been three types of Dental Assistant program credentials in Washington but from 2009 there have been only two types of completions. The number of program completions from 2004-2011 by type are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Less than two years	678	716	586	478	422	489	645	353
Associate	42	36	56	47	52	82	136	145
2 to 4 years	7	12	13	3	14	0	0	0

- Total annual program completions decreased by 31.5 percent between 2004 and 2011 and by 36 percent from 2010.
- Completions per 100,000 population decreased by 38 percent from 2004 to 2011.
- 97.4 percent of program completers were female in 2011 compared to 95.5 percent in 2004.



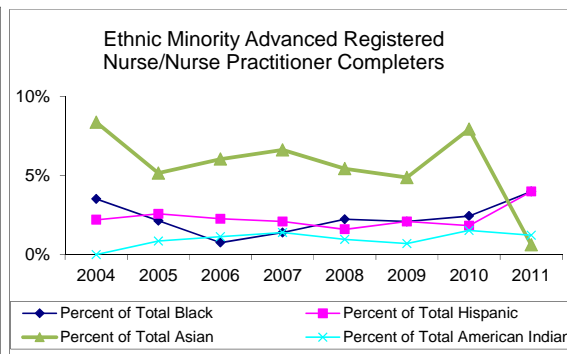
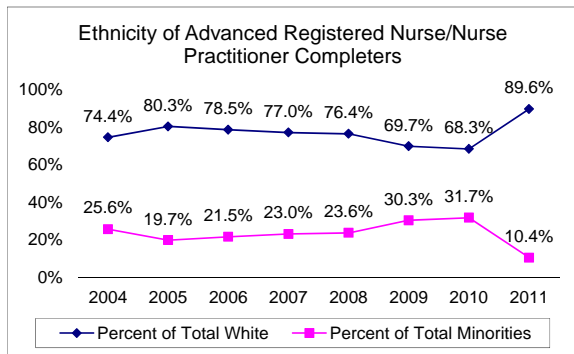
Advanced Registered Nurse Practitioner (51.3805 and 3801)



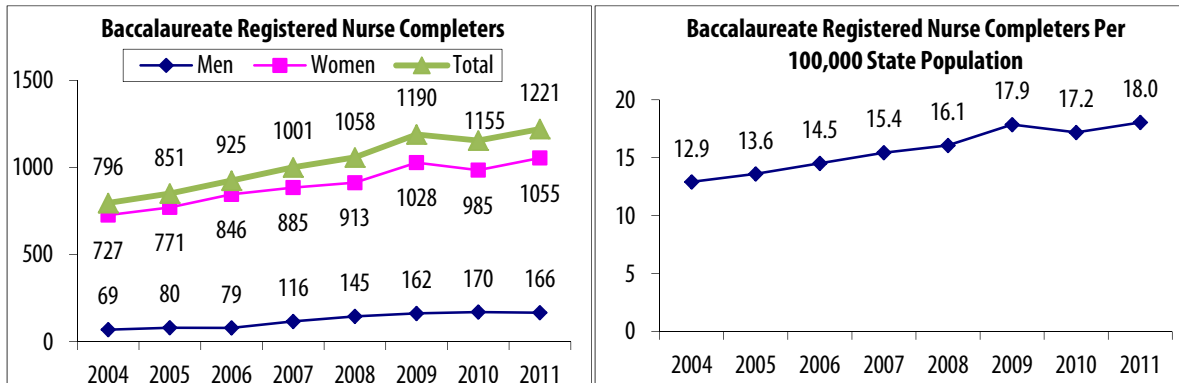
- Seven universities and branches offered Advanced Registered Nurse/ Nurse Practitioner programs in 2011.
- Nurse Practitioners and Registered Nurses having a degree or certificate at or above the master’s level were selected. Completion numbers are as follows:

Type of Program	Number of Program Completions								
	2004	2005	2006	2007	2008	2009	2010	2011	
Master's Degree	224	227	254	280	302	311	328	364	
Doctoral Degree	10	19	14	14	16	40	0	40	

- This category includes Family Practice Nurse Practitioners and Registered Nurses having a Master's or Higher Degree.
- Completions per 100,000 population increased by 57 percent from 2004 to 2011.
- 91 percent of program completers were female in 2011 compared to 90 percent in 2004.



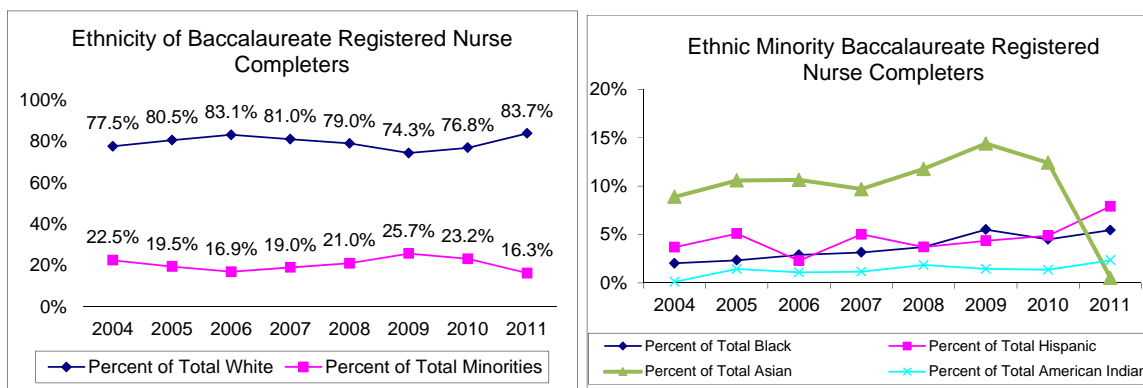
Baccalaureate Registered Nurse (51.3801)



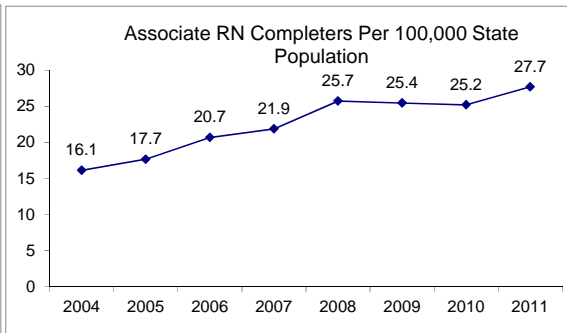
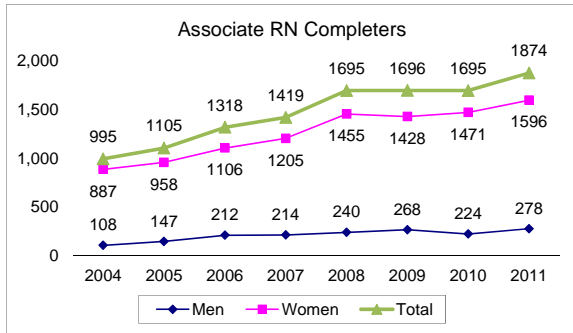
- Thirteen universities and colleges offered Registered Nurse programs at the Baccalaureate level in 2011.
- The number of program completions from 2004-2011 by type are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Baccalaureate	796	851	925	1001	1058	1190	1155	1221

- Total annual program completions for baccalaureate level RNs increased by 53.4 percent between 2004 and 2011.
- Completions per 100,000 population increased by 39.8 percent from 2004 to 2011.
- 86.4 percent of program completers were female in 2011 compared to 91.3 percent in 2004.



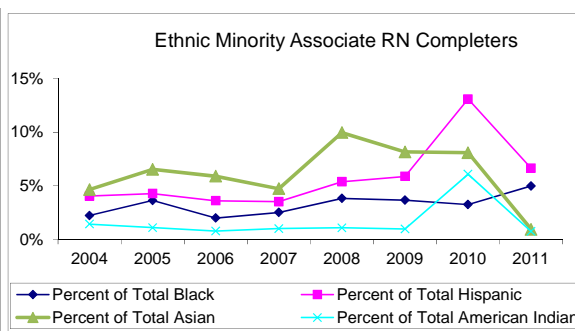
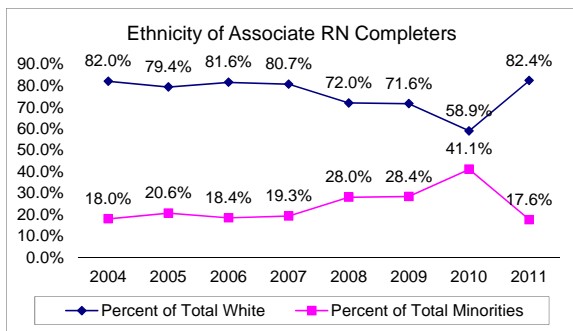
Associate Registered Nurse (51.3801)



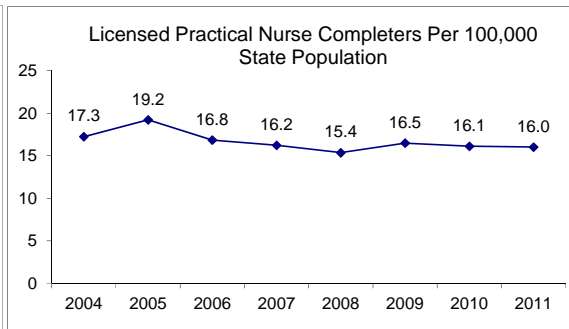
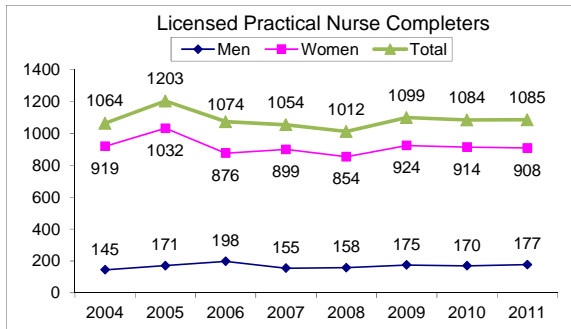
- Thirty-two community and technical colleges and universities offered Associate level Registered Nurse programs in 2011.
-

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Associate	995	1105	1318	1419	1695	1696	1695	1860
Less than two years	0	0	0	0	0	0	179	14

- Total annual program completions for associate level RNs increased by 88.3 percent between 2004 and 2011.
- Completions per 100,000 population increased by 71.6 percent from 2004 to 2011.
- 85 percent of program completers were female in 2011 compared to 89 percent in 2004.
- There was a 37 percent increase of males completing an associate level nursing program.



Licensed Practical Nurse (51.3901)

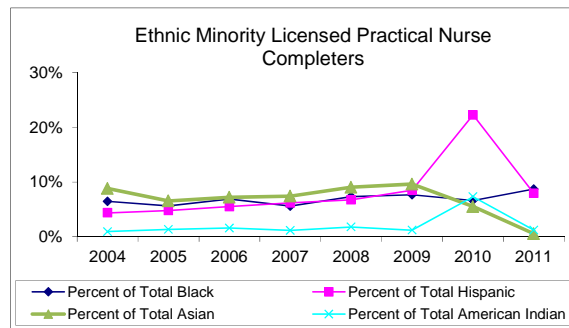
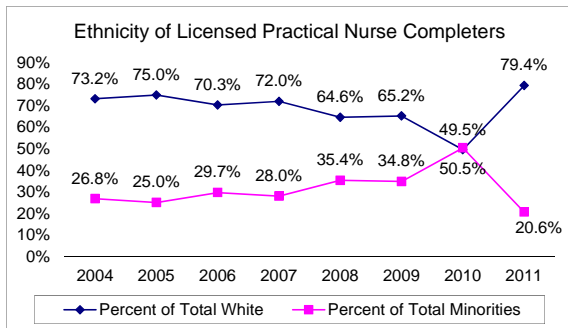


- Twenty-one community and technical colleges offered Licensed Practical Nurse programs in 2011 up from 20 in 2010
- There are three types of Licensed Practical Nurse program credentials in Washington. The number of program completions from 2004-2011 by type are as follows:

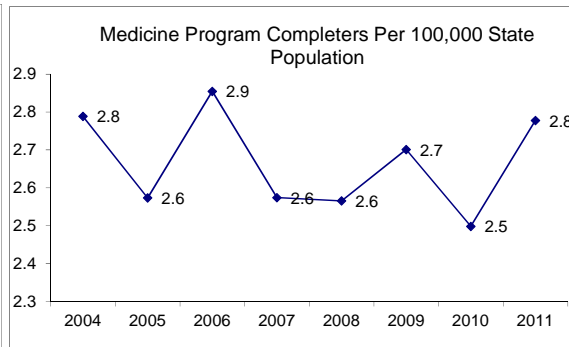
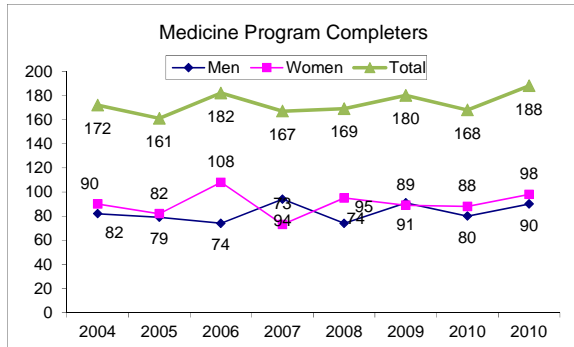
Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Less than two years	992	1110	1019	988	928	993	926	973
Associate	27	41	55	54	43	91	71	112
2 to 4 years*	45	52	0	12	41	15	13	0

*The completion number for 2 to 4 years was supplemented from SBCTC.

- Total annual program completions for LPNs increased by 2 percent between 2004 and 2011.
- Completions per 100,000 population decreased by 7.1 percent from 2004 to 2011.
- 84 percent of program completers were female in 2011 compared to 86 percent in 2004.
- There was a 20 percent increase in the number of males completing an LPN program.



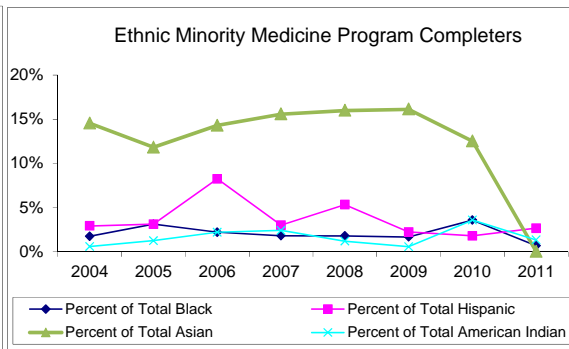
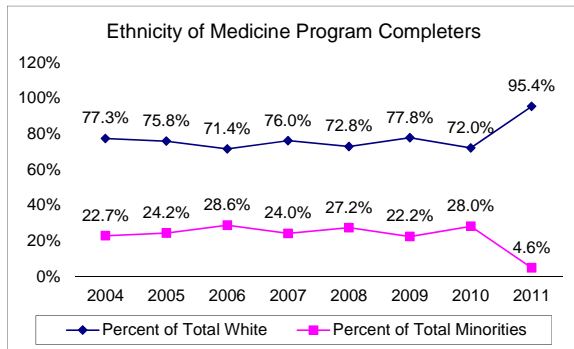
Medicine – MD (CIP 51.1201)



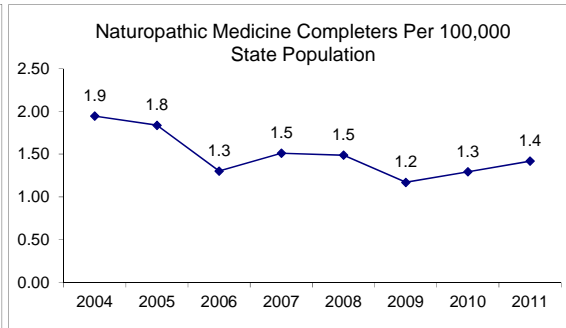
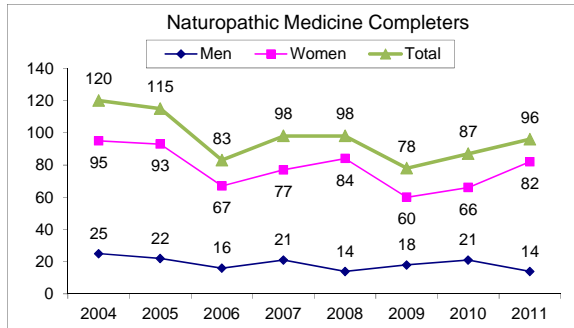
- One university offered a program in Medicine in 2011.

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Professional Degree	172	161	182	167	169	180	168	188

- Total annual program completions increased by 9.3 percent between 2004 and 2010.
- Completions per 100,000 population decreased by 0.4 percent from 2004 to 2011.
- 52.1 percent of program completers were female in 2011 compared to 52.3 percent in 2004.



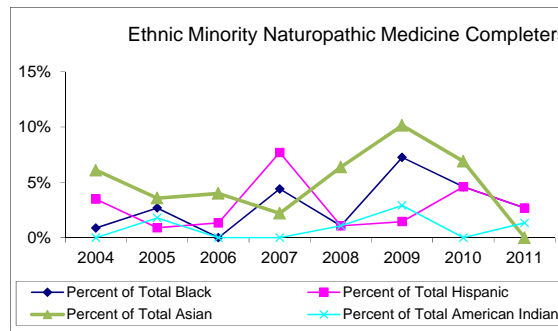
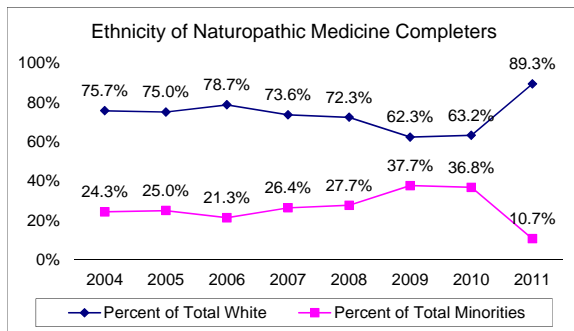
Naturopathic Medicine (CIP 51.3303)



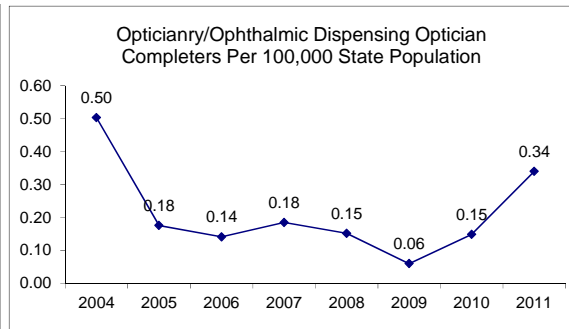
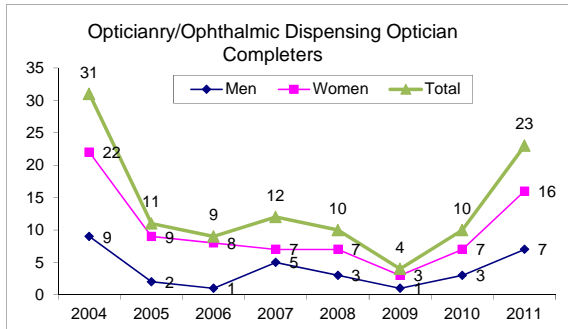
- One university offered a program in Naturopathic Medicine in 2011.

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
First-Professional Degree	120	115	83	98	98	78	87	96

- Total annual program completions decreased by 20 percent between 2004 and 2011, however increased by 10 percent from 2010.
- Completions per 100,000 population decreased by 27 percent from 2004 to 2011.
- 85 percent of program completers were female in 2011 compared to 79 percent in 2004.



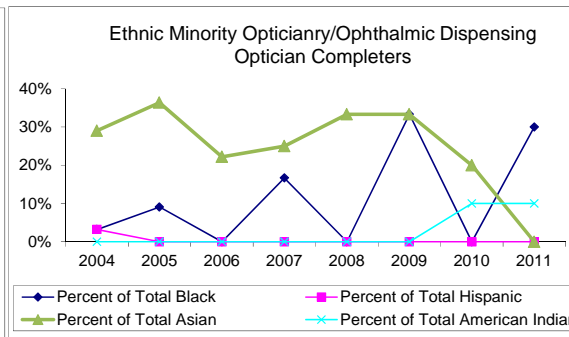
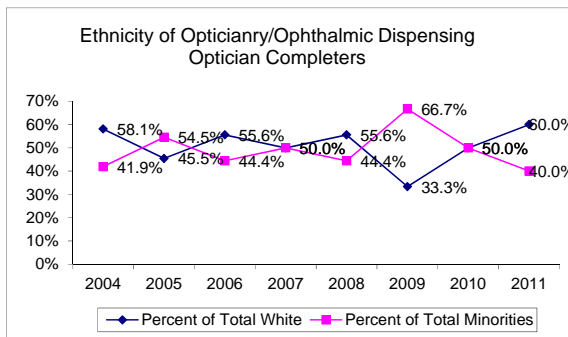
Opticianry/Ophthalmic Dispensing Optician (CIP 51.1801)



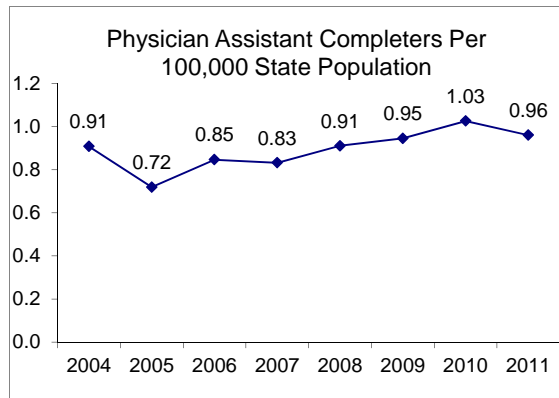
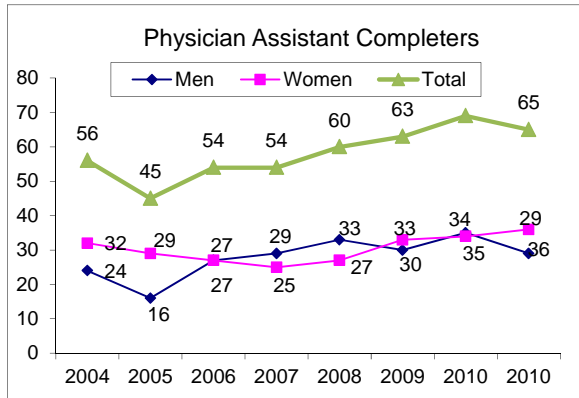
- One educational institution offered Opticianry/Ophthalmic Dispensing Optician programs in 2011.
- There have been two types of Opticianry/Ophthalmic Dispensing program credentials in Washington though only one reported completions since 2009. The number of program completions from 2004-2011 by type are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Less than two years	5	1	2	0	1	0	0	0
Associate	26	10	7	12	9	4	10	23

- Total annual program completions decreased by 26 percent (from 31 to 23) between 2004 and 2011.
- Completions per 100,000 population decreased by 32 percent from 2004 to 2011.
- 70 percent of program completers were female in 2011 compared to 71 percent in 2004.
- Since the number of completions per year are low, a small variance in any one year can give a false impression of the significance of the percent of change.



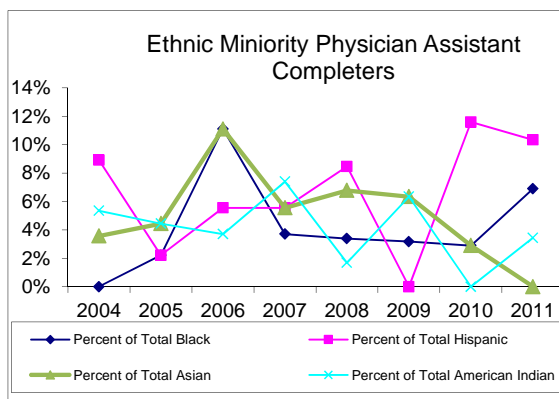
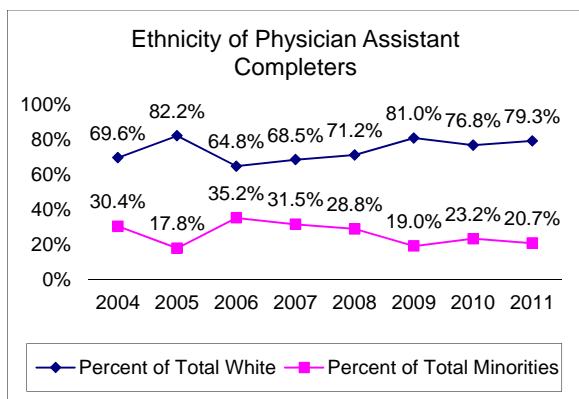
Physician Assistant (CIP 51.0912)



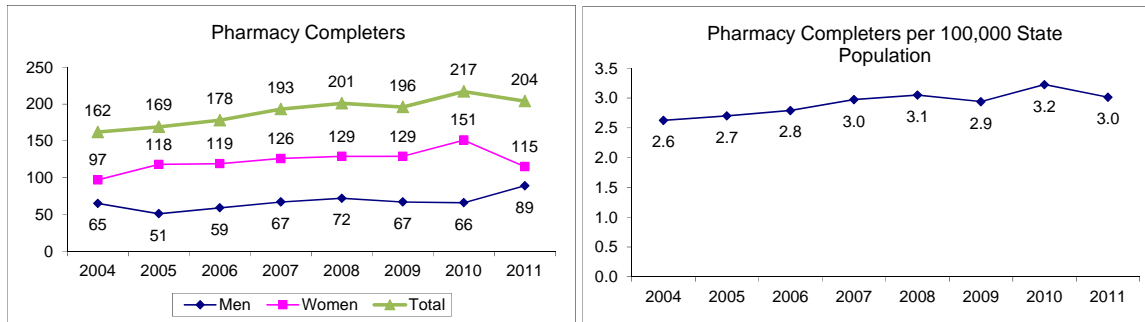
- One university offered a Physician Assistant program in 2011.

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Baccalaureate	56	45	54	54	60	63	69	69

- Total annual program completions increased by 16 percent between 2004 to 2011.
- Completions per 100,000 population increased by 5.8 percent from 2004 to 2011.
- 55 percent of program completers were female in 2011 compared to 57 percent in 2004.



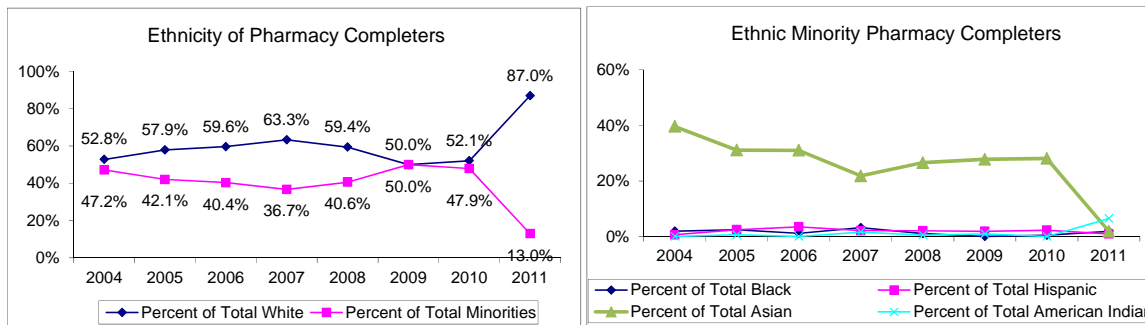
Pharmacy (CIP 51.2001)



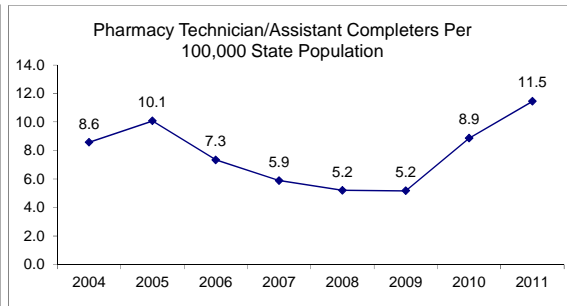
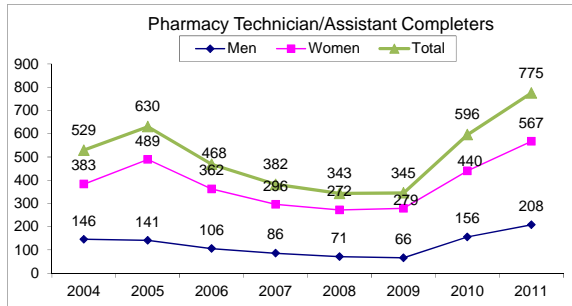
- Two universities offered a Pharmacy program in 2011.
- The number of program completions from 2003-2010 are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Professional degree	162	169	178	193	201	169	212	202
Master's	0	0	0	0	0	0	5	5

- Total annual program completions increased by 26 percent between 2004 and 2011.
- Completions per 100,000 population increased by 15 percent from 2004 to 2011.
- 56 percent of program completers were female in 2011 compared to 60 percent in 2004.



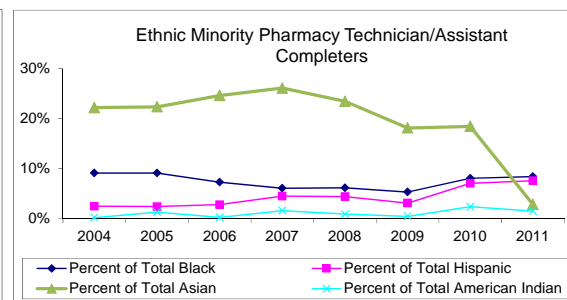
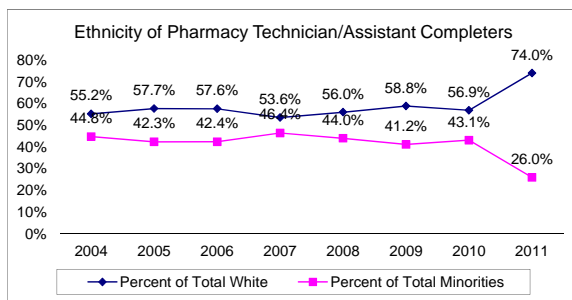
Pharmacy Technician/Assistant (CIP 51.0805)



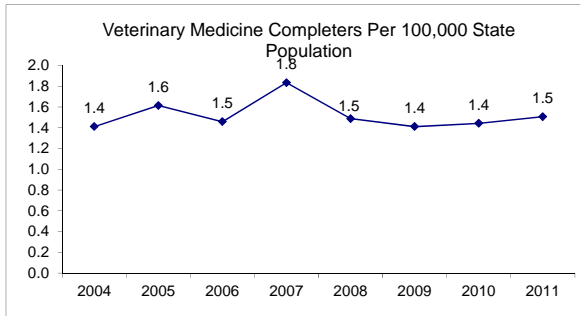
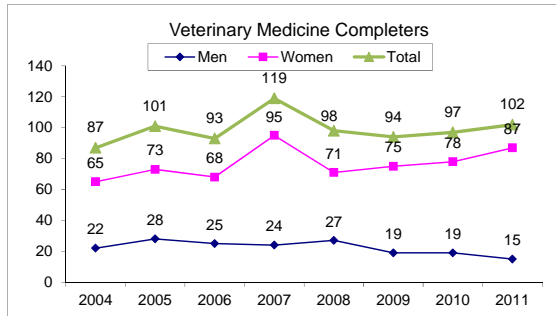
- Seventeen state, community and technical colleges offered Pharmacy Technician/Assistant programs in 2011, up from 14 in 2010.
- There are two types of Pharmacy Technician/Assistant Program credentials in Washington. The number of program completions from 2004-2011 by type are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Less than two years	496	609	450	348	306	301	571	736
Associate	33	21	18	34	37	44	25	39

- Total annual program completions increased by 46.5 percent between 2004 and 2011 and 30 percent from 2010.
- Completions per 100,000 population increased by 33.5 percent between 2004 and 2011.
- 73 percent of program completers were female in 2011 compared to 72 percent in 2004.



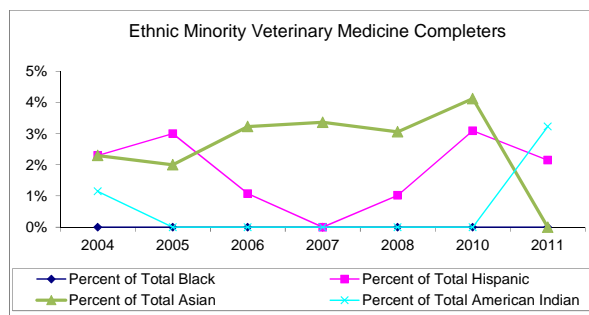
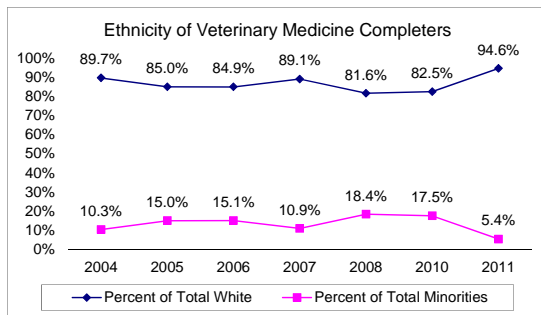
Veterinary Medicine (CIP 51.2401)



- One university offered a program in Veterinary Medicine in 2011.
- The number of program completions from 2004-2011 are as follows:

Type of Program	Number of Program Completions							
	2004	2005	2006	2007	2008	2009	2010	2011
Professional Degree	87	101	93	119	98	94	97	102

- Total annual program completions increased by 17 percent from 2004 to 2011.
- Completions per 100,000 population increased by 7 percent from 2004 to 2011.
- 85 percent of program completers were female in 2011 compared to 75 percent in 2004.



Note: The racial data for 2009 for this program was missing from IPEDS.

Completions by Workforce Development Areas

cip_code	CIP_Description	1 Olympic	2 Pac-Mt.	3 Nwst	4 Snohomish	5 Seattle/King	6 Pierce	7 Swest	8 N.Central	9 Tri-County	10 Eastern	11 Benton-Franklin	12- Spokane
51	Health Professions and Related Programs	982	530	979	2237	8008	1971	1093	401	357	1384	342	1757
51.0001	Health and Wellness, General					8					1		
51.0202	Audiology/Audiologist					30							
51.0203	Speech-Language Pathology/Pathologist			20		35							34
51.0204	Audiology/Audiologist&Speech-Language Pathology			22		78					59		
51.0299	Communication Disorders Sciences and Services, Other						3						
51.0401	Dentistry					51							
51.0503	Oral Biology and Oral and Maxillofacial Pathology					5							
51.0506	Endodontics/Endodontology					4							
51.0508	Orthodontics/Orthodontology					5							
51.0509	Pediatric Dentistry/Pedodontics					3							
51.051	Periodontics/Periodontology					3							
51.0511	Prosthodontics/Prosthodontology					1							
51.0601	Dental Assisting/Assistant		38	36	61	207	35			10			111
51.0602	Dental Hygiene/Hygienist			10	15	73		18		13		17	83
51.0603	Dental Laboratory Technology/Technician						9						
51.0699	Dental Services and Allied Professions, Other	81			119	95	121						
51.0701	Health/Health Care Administration/Management					57					10		26
51.0703	Health Unit Coordinator/Ward Clerk		1	3	80	13						8	8
51.0705	Medical Office Management/Administration	10			24	21			5	19			7
51.0707	Health Information/Medical Records Technology/Technician		13	13	43	66	58	13					17
51.0708	Medical Transcription/Transcriptionist	7	3		74	15	6	1		1			2
51.071	Health Care Administration/Management					22						13	34
51.0711	Medical/Health Management & Clinical Assistant/Specialist					42							
51.0712	Medical Reception/Receptionist	9		15	29	37	49	23					10
51.0713	Medical Insurance Coding Specialist/Coder	69	17	39	204	186	83	94		14		10	35
51.0714	Medical Insurance Specialist/Medical Biller				1	41	15						50
51.0716	Medical Admin./Executive Assistant & Medical Secretary	13	30	7	49	136	100	71		12	32	14	20
51.0799	Health and Medical Administrative Services, Other				22	72							6
51.0801	Medical/Clinical Assistant	247	26	56	494	1281	362	117	45	31	22	23	207
51.0802	Clinical/Medical Laboratory Assistant		1		40	19		4	13				
51.0803	Occupational Therapist Assistant					32							
51.0805	Pharmacy Technician/Assistant	66		15	173	285	96	38		10			92
51.0806	Physical Therapy Technician/Assistant	19		47		61							13
51.0808	Veterinary/Animal Health Technology/Tech. & Vet Asst.			9	19	325		2		13			37
51.0809	Anesthesiologist Assistant					17							
51.081	Medical/Clinical Assistant	45	1			30	62	3			49		
51.0812	Respiratory Therapy Technician/Assistant					34	12						12
51.0902	Electrocardiograph Technology/Technician				11								
51.0903	Electroneuropsychiatric/EKG/Technologist					0							
51.0904	Emergency Medical Tech/Technician (EMT Paramedic)					90	26			9		19	6
51.0905	Nuclear Medical Technology/Technologist					3							
51.0907	Medical Radiologic Technology/ Radiation Therapist			27		33	9	1		23			30
51.0908	Respiratory Care Therapy/Therapist					41							
51.0909	Surgical Technology/Technologist			8	18	71				6		27	12
51.091	Cardiovascular Technology/Technologist					36	12					2	24
51.0911	Radiologic Technology/Science - Radiographer	3				83		17	16	3		14	20
51.0912	Physician Assistant					65							
51.0913	Athletic Training/Trainer										11		23
51.0916	Radiation Protection/Health Physics Technician											2	
51.0917	Polysomnography					15							
51.0918	Hearing Instrument Specialist						5						14
51.0999	Allied Health Diagnostic, Intervention, Treatment				15	26		2				8	34
51.1004	Clinical/Medical Laboratory Technician					2							
51.1005	Clinical Lab Science/Medical Technology/Technologist					25							
51.1008	Histologic Technician				13								
51.1009	Phlebotomy Technician/Phlebotomist	16	1	14	49	434	99	42				33	
51.1099	Clinical/Medical Laboratory Science and Allied Professions					2							
51.1105	Pre-Nursing Studies									9			
51.1107	Pre-Occupational Therapy Studies										2		
51.1109	Pre-Physical Therapy Studies			40							3		
51.1199	Health/Medical Preparatory Programs, Other			38		8					18		
51.1201	Medicine					188							
51.1501	Substance Abuse/Addiction Counseling	40		20	42	60		8	8	12		8	40
51.1502	Psychiatric/Mental Health Services Technician				25								
51.1504	Community Health Services/Liaison/Counseling			19									19
51.1505	Marriage and Family Therapy/Counseling					29	17						
51.1508	Mental Health Counseling/Counselor			6		2							4
51.1599	Mental & Social Health Services and Allied Professions Other	4	30	6	23	151	185	1				5	34
51.1801	Opticianry/Ophthalmic Dispensing Optician					23							
51.1802	Optometric Technician/Assistant					28							12
51.1901	Osteopathic Medicine/Osteopathy									0			
51.2001	Pharmacy					110					94		
51.2002	Pharmacy Administration, Pharmacy Policy, Reg. Affairs					18							
51.2003	Pharmaceutics and Drug Design					12							
51.2004	Medicinal and Pharmaceutical Chemistry					6							
51.201	Pharmaceutical Sciences										3		
51.2201	Public Health, General					83							
51.2202	Environmental Health					43							
51.2207	Public Health Education and Promotion					37				19			

► Health Professions Education - Completions

cip_code	CIP_Description	1 Olympic	2 Pac-Mt.	3 Nwest	4 Snohomish	5 Seattle/King	6 Pierce	7 Swest	8 N.Central	9 Tri-County	10 Eastern	11 Benton-Franklin	12- Spokane
51.221	International Public Health/International Health					21							
51.2299	Public Health, Other					11							
51.2305	Music Therapy/Therapist					2							
51.2306	Occupational Therapy/Therapist						28						29
51.2307	Orthotist/Prosthetist					9							11
51.2308	Physical Therapy/Therapist					32	43						35
51.2309	Therapeutic Recreation/Recreational Therapy												11
51.231	Vocational Rehabilitation Counseling/Counselor			15	1								
51.2399	Rehabilitation and Therapeutic Professions, Other					27							
51.2401	Veterinary Medicine										102		
51.2501	Veterinary Sciences/Veterinary Clinical Sciences, General										19		
51.2509	Comparative and Laboratory Animal Medicine					1							
51.2699	Health Aides/Attendants/Orderlies, Other	3			2	23							30
51.2706	Medical Informatics					7							
51.3101	Dietetics/Dietitian					40				30			
51.3104	Dietitian Assistant				8								
51.3201	Bioethics/Medical Ethics										1		
51.3301	Acupuncture and Oriental Medicine					71							
51.3302	Traditional Chinese Medicine and Chinese Herbology					2							
51.3303	Naturopathic Medicine/Naturopathy					96							
51.3401	Direct Entry Midwifery					13							
51.3501	Massage Therapy/Therapeutic Massage	84		19	48	376	28	128					114
51.3599	Somatic Bodywork and Related Therapeutic Services, Other			5									
51.3702	Herbalism/Herbalist					16							
51.3801	Registered Nursing/Registered Nurse	108	115	114	159	1250	365	190	86	52	614	51	349
51.3802	Nursing Administration					28					1		
51.3805	Family Practice Nurse/Nursing					30	13				3		0
51.3808	Nursing Science										6		
51.381	Psychiatric/Mental Health Nurse/Nursing					5					4		
51.3811	Public Health/Community Nurse/Nursing					7							
51.3817	Nursing Education										1		
51.382	Clinical Nurse Leader						10						
51.3821	Geriatric Nurse/Nursing					8							
51.3901	Licensed Practical/Vocational Nurse Training	27	61	147	115	219	55	78	109	71	66	35	102
51.3902	Nursing Assistant/Aide and Patient Care Assistant/Aide	131	192	209	236	577	65	242	119		263	53	
51.9999	Health Professions and Related Clinical Sciences, Other		1		25	23							
Grand Total		1964	1060	1958	4474	16016	3942	2186	802	714	2768	684	3514

Gap Analysis

Below is a Gap Analysis prepared by the Workforce Training and Education Coordinating Board. This projection was created by comparing the number of graduates prepared for the listed health care occupations in 2011 to the projected annual net job openings for 2015 through 2020. The demand data is derived from the federal Bureau of Labor Statistics for the state of Washington. Negative numbers in the far right column indicate the gap in supply. A positive number indicates an oversupply.

Occupation	2011 - New Supply	Projected Annual Net Job Openings 2015 - 2020	Annual Difference Between Supply & Projected Demand
Home Health Aides *	58	436	-378
Physicians and Surgeons, All Specialties	173	545	-372
Vocational Rehabilitation Counselors	17	385	-368
Registered Nurses **	2411	2588	-177
Medical, Clinical Lab Technologists	45	175	-130
Mental Health Counselors	48	176	-128
Medical Scientists, Except Epidemiologists	103	216	-113
Dentists, General and All Specialties	88	200	-112
Physical Therapists	108	198	-90
Occupational and Vocational Therapists	56	106	-50
Respiratory Therapists	40	89	-49
Radiologic Technologists/Radiographer	152	199	-47
Medical and Clinical Lab Assistants & Technician	74	120	-46
Physician Assistants	64	109	-45
Dental Lab Technicians	16	56	-40
Med Transcriptionists	105	144	-39
Dental Hygienists	220	255	-35
Pharmacists	240	266	-26
Recreational Therapists	11	26	-15
Nuclear Medicine Technologists	4	18	-14
Medical Records & Health Information Techs	230	243	-13
Dietetic Technicians/Assistants	8	20	-12
Marriage and Family Therapists	45	50	-5
Dietitians and Nutritionists	69	72	-3
Emergency Medical Technicians and Paramedics	144	144	0
Counselors, All Other	26	17	9
Opticianry/Ophthalmic Dispensing Optician	68	59	9
Psychiatric, Mental Health Technicians	47	35	12
Athletic Trainers	33	20	13
Orthotist /Prosthetists	20	6	14
Occupational Therapy Assistants	40	25	15
Audiologists	29	13	16
Dental Assistants	478	444	34
Surgical Technology/Technologists	136	102	34
Cardiovascular Technicians	84	46	38
Veterinarians	122	80	42
Respiratory Therapy Technician/Assistant	58	6	52
Epidemiologist	68	8	60
Physical Therapy Assistants	134	62	72
Radiation Therapists	123	15	108
Speech-Language Pathologists	246	115	131

Veterinary Technologists/Technicians/Assistants	389	200	189
Health Diagnosing and Treating Practitioners, All	265	46	219
Substance Abuse/Addiction Counselors	342	99	243
Mental Health & Substance Abuse Social Workers	421	77	344
Medical Secretaries	1027	642	385
Pharmacy Technicians and Assistants	747	311	436
Massage Therapists	770	330	440
Licensed Practical and Vocational Nurses	1042	448	594
Insurance Claims and Policy Processing Clerks	920	235	685
Nursing Assistants, Nurse Aids	2004	940	1064
Medical Assistants	2993	517	2476

*Includes Department of Health licensed Home care aids, but not Medicaid home care aids.

**Demand for nurses is currently down as result of the recession and aftermath but is expected to grow as recovery strengthens.

These demand estimates are from occupational projections for Washington that were developed by the Employment Security Department under a contract from the U.S. Department of Labor. This national methodology relies heavily on recent trends and on national averages. Therefore, it may underestimate emerging overall changes or effects specific to Washington. In general, this methodology tends to be conservative in predicting changes to recent trends.

Accurately predicting future changes in health care labor demand resulting from national health care reform is very challenging. It will be important to carefully monitor changes in the health care system for labor market effects that were not predicted in the official projections.