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**Health Professions Education
in Washington State:
1996-2000 Program
Completion Statistics**

by

Davis G. Patterson, M.A.

Susan M. Skillman, M.S.



UW University of Washington



School of Medicine

Department of Family Medicine

ABOUT THE WORKFORCE CENTER

The WWAMI Center for Health Workforce Studies at the University of Washington Department of Family Medicine is one of five regional centers funded by the National Center for Health Workforce Analysis (NCHWA) of the federal Bureau of Health Professions (BHPr), Health Resources and Services Administration (HRSA). Major goals are to conduct high-quality health workforce research in collaboration with the BHPr and state agencies in Washington, Wyoming, Alaska, Montana, and Idaho (WWAMI); to provide methodological expertise to local, state, regional, and national policy makers; to build an accessible knowledge base on workforce methodology, issues, and findings; and to widely disseminate project results in easily understood and practical form to facilitate appropriate state and federal workforce policies.

The Center brings together researchers from medicine, nursing, dentistry, public health, the allied health professions, pharmacy, and social work to perform applied research on the distribution, supply, and requirements of health care providers, with emphasis on state workforce issues in underserved rural and urban areas of the WWAMI region. Workforce issues related to provider and patient diversity, provider clinical care and competence, and the cost and effectiveness of practice in the rapidly changing managed care environment are emphasized.

The WWAMI Rural Health and Health Workforce Research Center Working Paper Series is a means of distributing prepublication articles and other working papers to colleagues in the field. Your comments on these papers are welcome and should be addressed directly to the authors. Questions about the WWAMI Center for Health Workforce Studies should be addressed to:

L. Gary Hart, PhD, Director and Principal Investigator
Susan Skillman, MS, Deputy Director
Roger Rosenblatt, MD, MPH, Co-Investigator
Laura-Mae Baldwin, MD, MPH, Co-Investigator
Denise Lishner, MSW, Center Research Coordinator
Eric Larson, PhD, Senior Researcher
Heather Deacon, Program Coordinator
University of Washington
Department of Family Medicine
Box 354696
Seattle, WA 98195-4696
Phone: (206) 685-0401, ext. 3
Fax: (206) 616-4768
E-mail: hdeacon@fammed.washington.edu
Web Site: <http://www.fammed.washington.edu/CHWS/>

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ABOUT THE AUTHORS

Davis G. Patterson, MA, is a Graduate Research Assistant in the Department of Family Medicine, University of Washington School of Medicine.

Susan M. Skillman, MS, is the Deputy Director of the WWAMI Center for Health Workforce Studies, Department of Family Medicine, University of Washington School of Medicine.

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Davis G. Patterson, M.A.
Research Assistant

Susan M. Skillman, M.S.
Deputy Director

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Introduction

This report documents completions of postsecondary health career educational programs throughout Washington State. 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 (e.g., registered nurses, dentists) as well as completion of a course of study leading to a nondegreed credential (e.g., home health aides, nurse assistants). This report covers the period from 1996-1997 through 1999-2000, the most recent year available from the primary data source, the Integrated Postsecondary Education Data System (IPEDS), from the National Center for Education Statistics. Trend data include absolute numbers of program completions by gender and population-adjusted completion rates. Race and ethnicity of completers are provided for 1999-2000. Throughout the report, each academic year is referred to by the calendar year in which the academic year ended, e.g., 1999-2000 is referred to as 2000.

Data Sources

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 in the state may be underestimated for some professions, such as nurse aides (for whom training is also provided by hospitals and long-term care facilities). IPEDS completions data for 1998-1999 are not available at the state level and thus are not included in this report. More information about the IPEDS is available at <http://nces.ed.gov/ipeds/> and <http://www.nsf.gov/sbe/srs/sipeds/>.

State population data are derived from the U.S. Bureau of the Census.

Race and Ethnicity

The following U.S. Bureau of the Census data on race and ethnicity of the Washington State population are presented for comparison with the corresponding IPEDS data for each occupation. The Census changed its methods for collecting race and ethnicity data in 2000, preventing direct category-by-category comparisons between the census population race/ethnicity data and the IPEDS completers' race/ethnicity data.

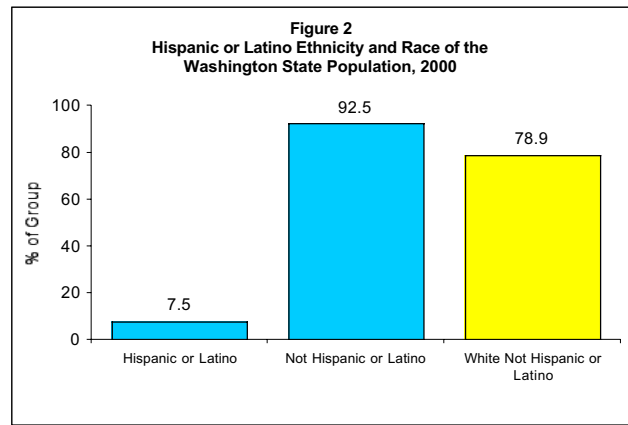
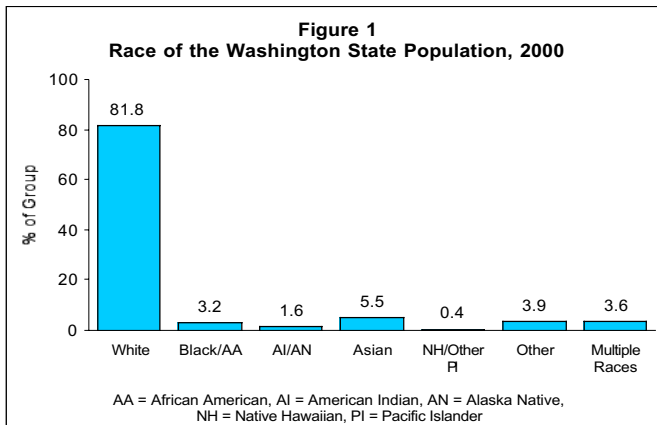
IPEDS categorizes students into one and only one of the following racial/ethnic designations (or “unknown”):

- White, non-Hispanic.
- Hispanic.
- Black, non-Hispanic.
- Asian or Pacific Islander.
- American Indian or Alaskan Native.

The 2000 U.S. census asked for race and ethnicity separately and for the first time allowed respondents to report more than one race. The question on Hispanic ethnicity was modified to “Hispanic or Latino.” Racial categories were also amended: “Asian or Pacific Islander” was disaggregated into “Asian” and “Native Hawaiian and Other Pacific Islander.”

The 2000 state population demographics below reflect the Census changes in data collection and reporting. Figure 1 presents the total population distribution for those reporting just one race from the five main census categories, some other race, and more than one race.

Figure 2 presents the proportions of the Washington State population reporting Hispanic or Latino ethnicity and the single racial/ethnic combination of those who reported their race as “White” only but not Hispanic or Latino ethnicity. Summary figures for other racial/ethnic combinations (such as Black Not Hispanic or Latino) are not currently available.



Race and ethnicity data for each health profession on the pages that follow are reported using the IPEDS categorization, and the lack of strict comparability with these 2000 census figures must be borne in mind.

Limitations of the Data

The data presented in this report are subject to the following conditions that may cause some undercounting of program completions. IPEDS attempts to conduct a complete census of all postsecondary educational organizations. Coverage is thought to be high, with yearly verification using accreditation lists, but it is not known how many institutions are missed. Response rates of known institutions ranged from 91 percent to 94 percent nationally during the years covered in this report. IPEDS imputes for nonresponses using the prior year’s data when available. The extent of the undercount for missing institutions, nonresponses, and specific health occupations where training is available outside of educational institutions is unknown.

The University of Washington Center for Health Workforce Studies

The WWAMI Center for Health Workforce Studies was established in 1998 at the University of Washington with funding from the U.S. Health Resources and Services Administration (HRSA), Bureau of Health Professions. The overall aim of the Center is to facilitate the production and distribution of an appropriate health care workforce that can meet the health care needs of the population in terms of access, quality, and cost, with an emphasis on primary care service provision to the underserved. The Center for Health Workforce Studies' objectives are:

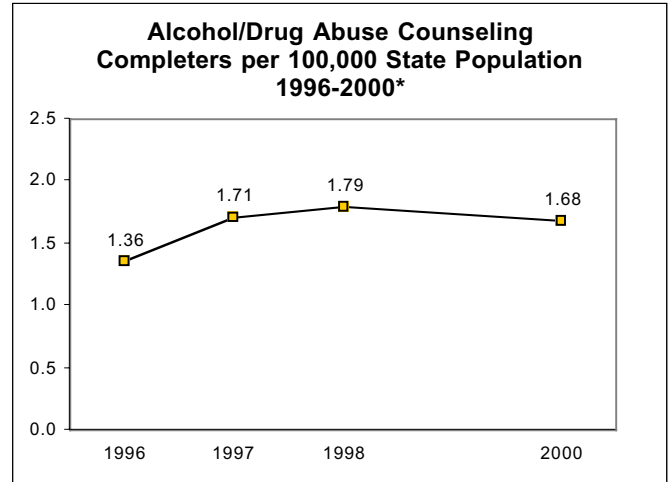
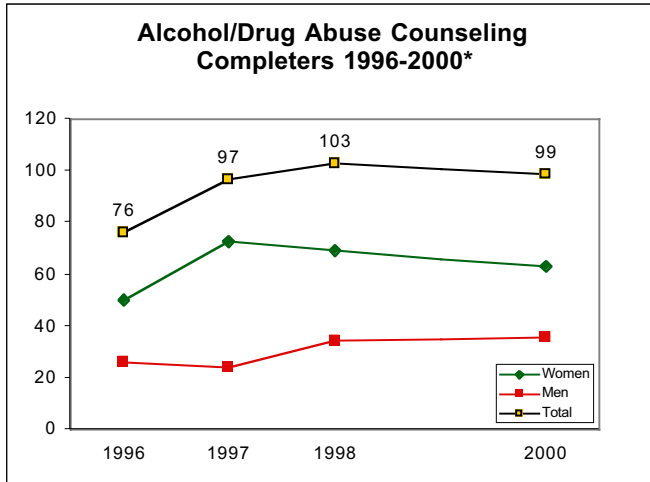
- To conduct relevant health workforce research and policy analysis in collaboration with federal and state agencies;
- To provide consultation to local, state, regional and national policy makers on health workforce issues;
- To develop and refine analytical methods for measuring health workforce supply and requirements;
- To contribute to the understanding of health workforce issues and findings; and
- To disseminate project results to a wide audience.

The Center brings together a multidisciplinary team of researchers who collaboratively perform health workforce analyses and who work in close collaboration with the states, regional and national health policy makers. L. Gary Hart, PhD, is the Center's Director. In carrying out its mission, Center staff work cooperatively with the National Center for Health Workforce Analysis at the Bureau of Health Professions to develop a research agenda focused on improving the distribution, diversity, supply, and competence of the nation's health workforce.

The Center will produce updates to this report as new data are released by the National Center for Education Statistics. Suggestions for edits or additions to this report are welcomed. Please send comments to chws@fammed.washington.edu or call 206-685-0401 extension 3.

Health Professions Education in Washington State

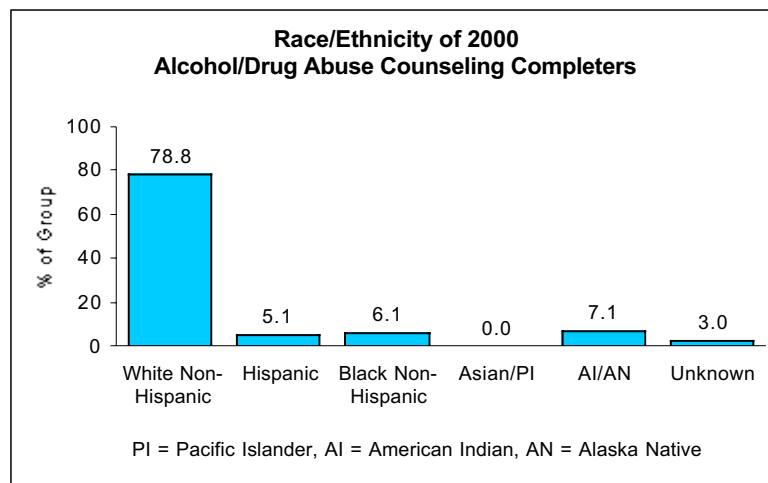
Alcohol/Drug Abuse Counseling Program Completers



- Fourteen community and technical colleges and universities in the state offered alcohol/drug abuse counseling programs in 2000.
- There are several types of alcohol/drug abuse programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Less than two years	41	46	49	32
Associate	35	51	54	64
Other				3

- Total annual program completions increased by 30.3% from 1996 to 2000.
- Completions per 100,000 population increased by 23.5% over the same time period.
- 65.8% of program completers were female in 1996 compared to 65.6% in 2000.

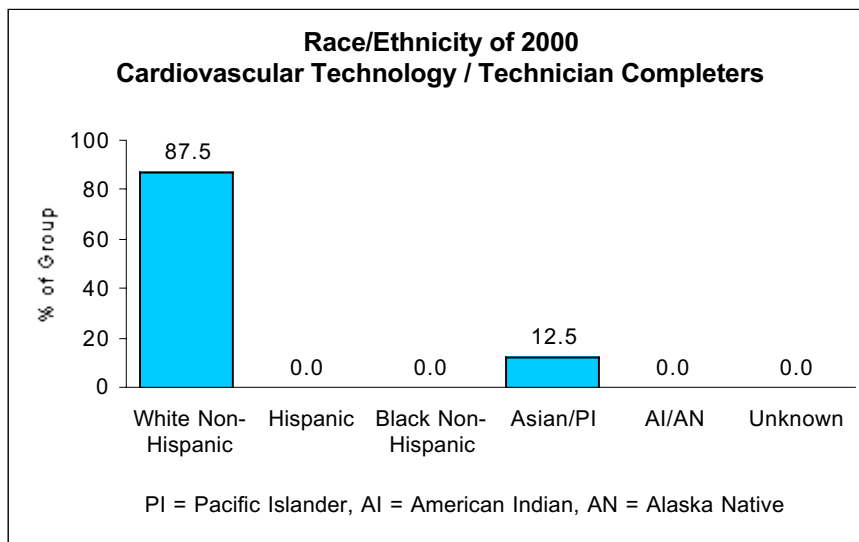


Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

Cardiovascular Technology/Technician Program Completers

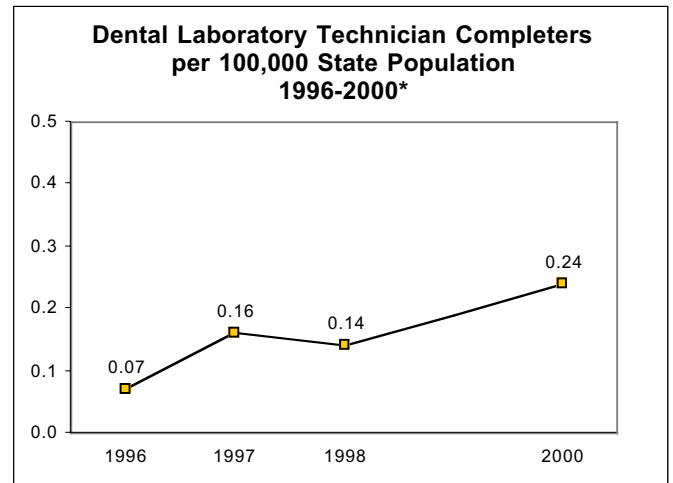
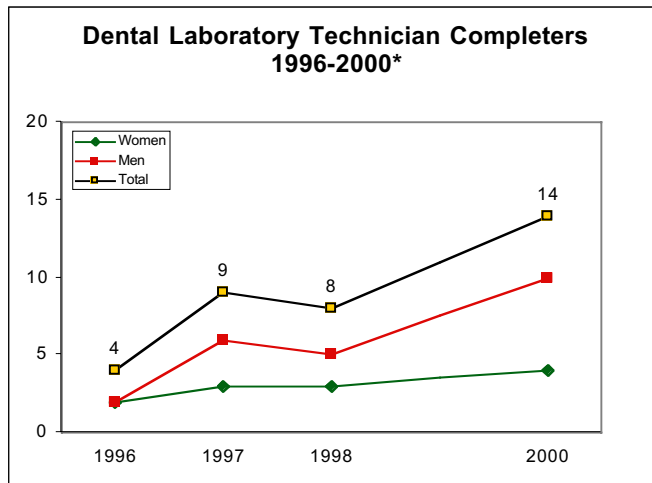
- The state had one cardiovascular technology/technician program at Spokane Community College in 2000 at the associate degree level. No programs were reported in the state prior to 2000.
- There were nine total program completions in 2000.
- There were 0.16 completions per 100,000 population in 2000.
- 33.3% of program completers were female in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
* Data not reported for 1999.

Health Professions Education in Washington State

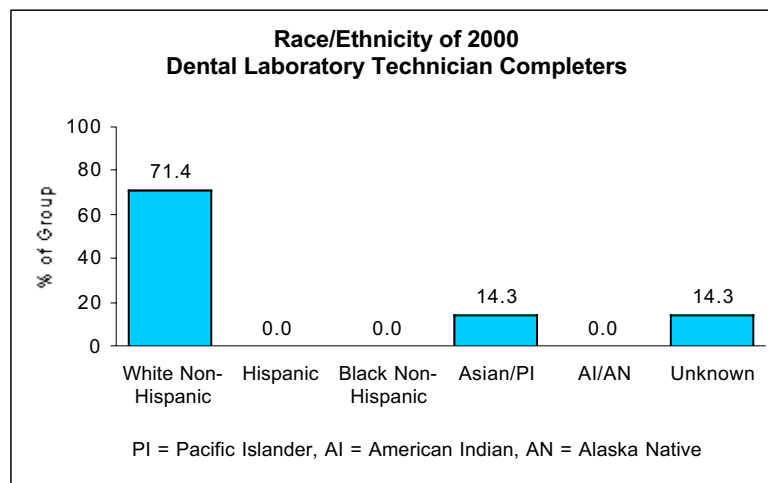
Dental Laboratory Technician Program Completers



- The state had one dental laboratory technician program at Bates Technical College in 2000.
- There are several types of dental laboratory technician programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Less than two years				1
Associate		9	8	2
Other	4			11

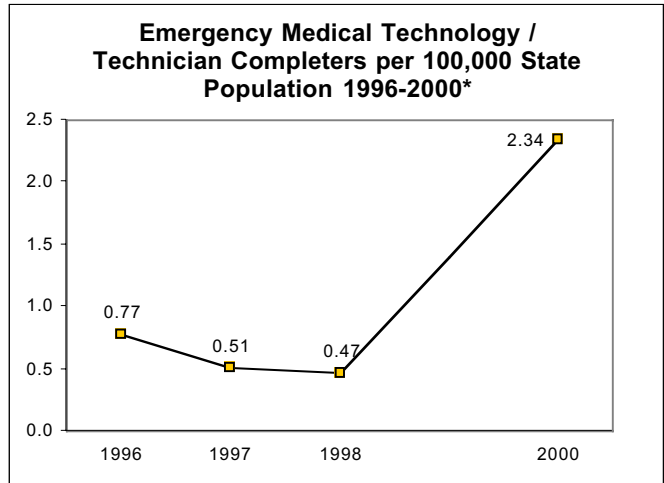
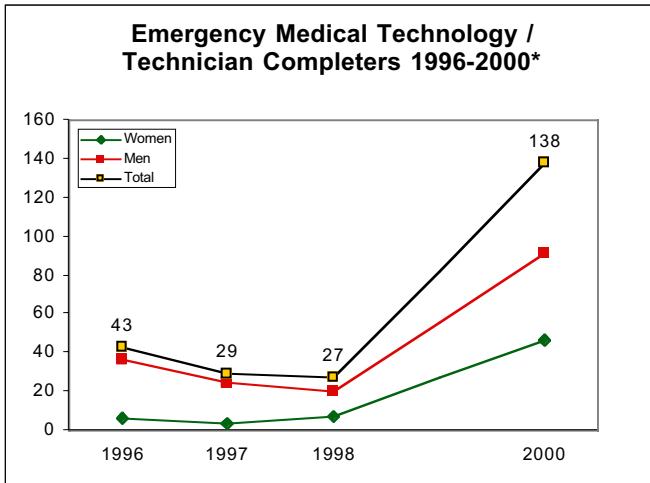
- Total annual program completions increased by 250% from 1996 to 2000.
- Completions per 100,000 population increased by 243% over the same time period.
- 50.0% of program completers were female in 1996 compared to 28.6% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

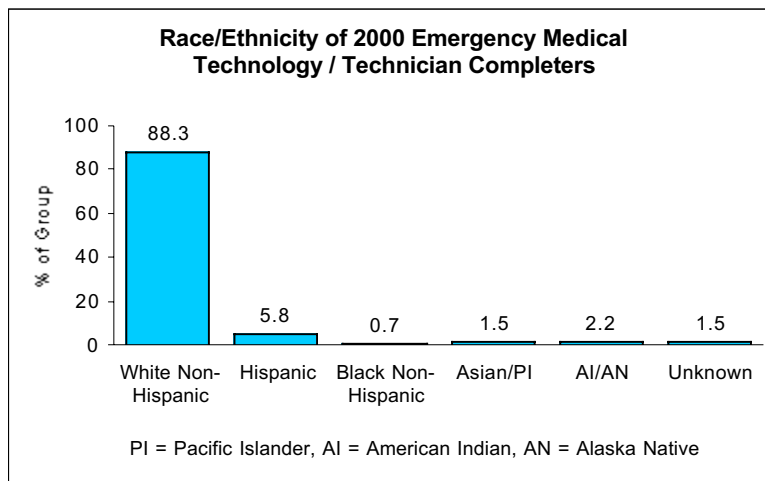
Emergency Medical Technology/Technician Program Completers



- Three community and technical colleges and one university in the state offered emergency medical technology/technician programs in 2000.
- There are several types of emergency medical technology/technician programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Less than two years	27	17	5	122
Associate	2	3	1	7
Baccalaureate	14	9	21	9

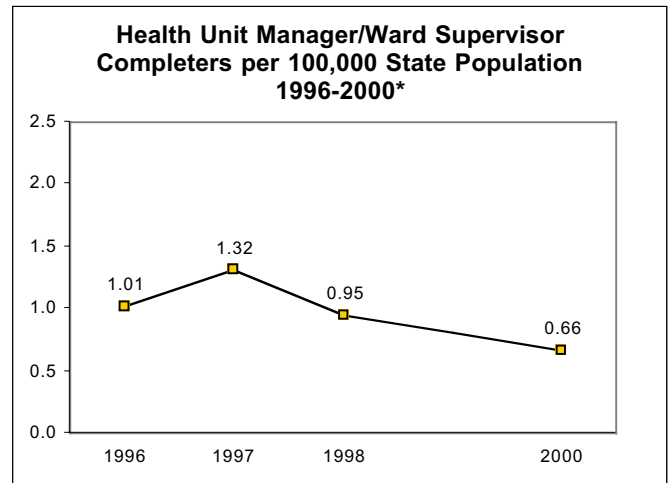
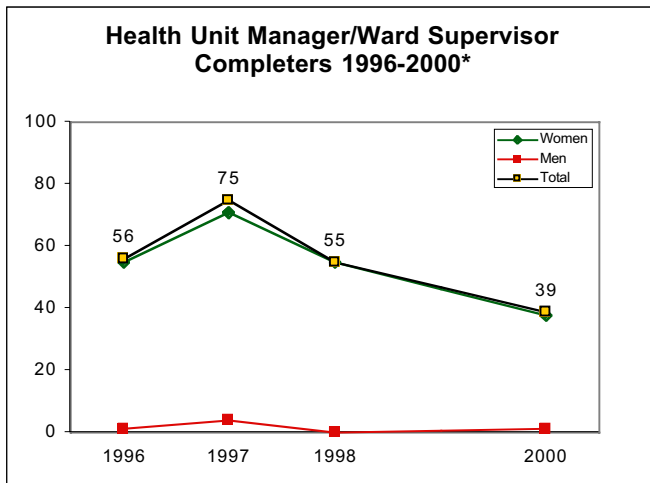
- Total annual program completions increased by 221% from 1996 to 2000.
- Completions per 100,000 population increased by 204% over the same time period.
- 14.0% of program completers were female in 1996 compared to 34.1% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

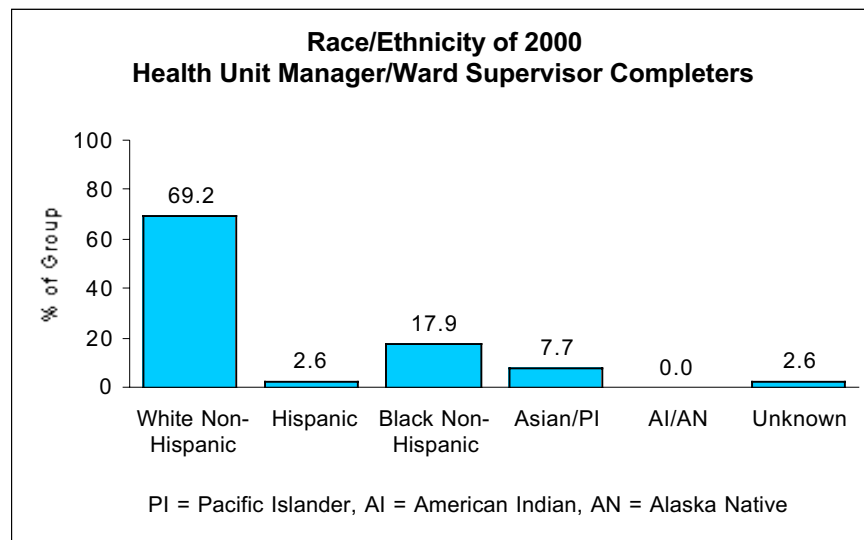
Health Unit Manager/Ward Supervisor Program Completers



- Three community and technical colleges in the state offered health unit manager/ward supervisor programs in 2000.
- There are two types of health unit manager/ward supervisor programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Less than two years	49	69	45	34
Associate	7	6	10	5

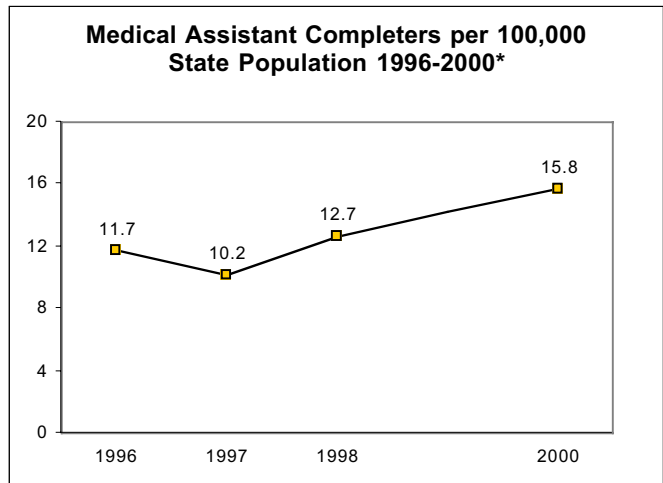
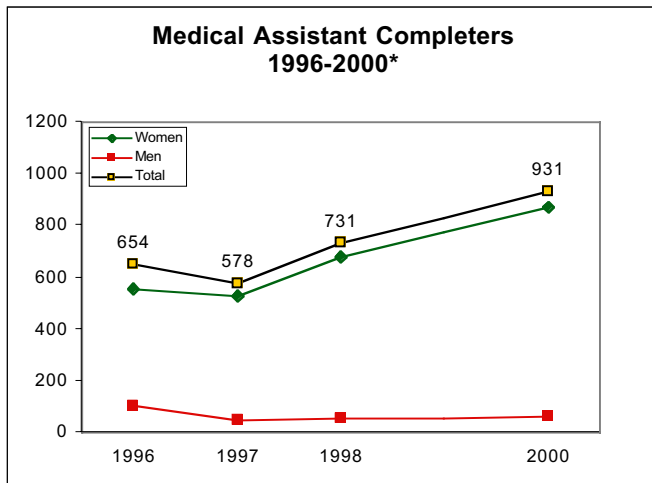
- Total annual program completions decreased by 30.4% from 1996 to 2000.
- Completions per 100,000 population decreased by 34.7% over the same time period.
- 98.2% of program completers were female in 1996 compared to 97.4% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

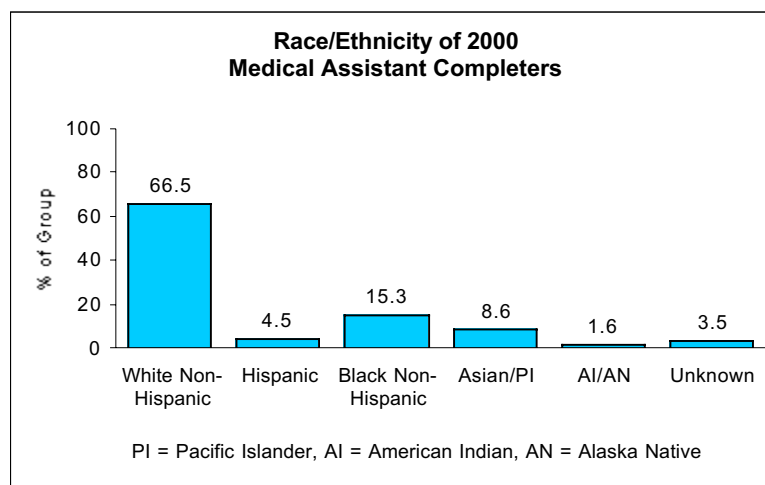
Medical Assistant Program Completers



- Nineteen community and technical colleges and institutes in the state offered medical assistant programs in 2000.
- There are several types of medical assistant programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Less than two years	575	501	626	876
Associate	69	68	73	46
Other	10	9	32	9

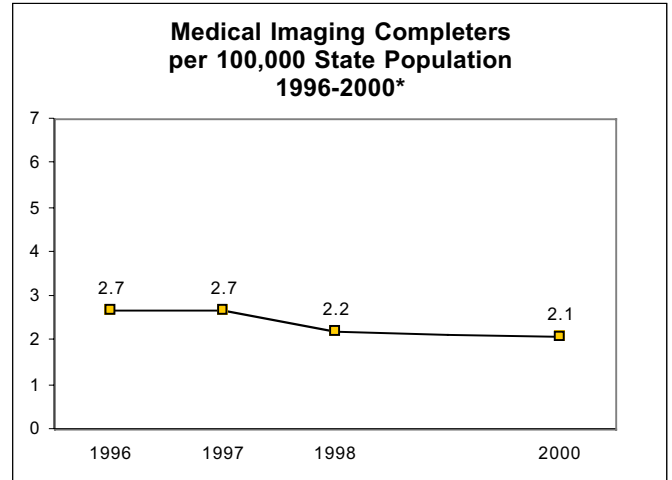
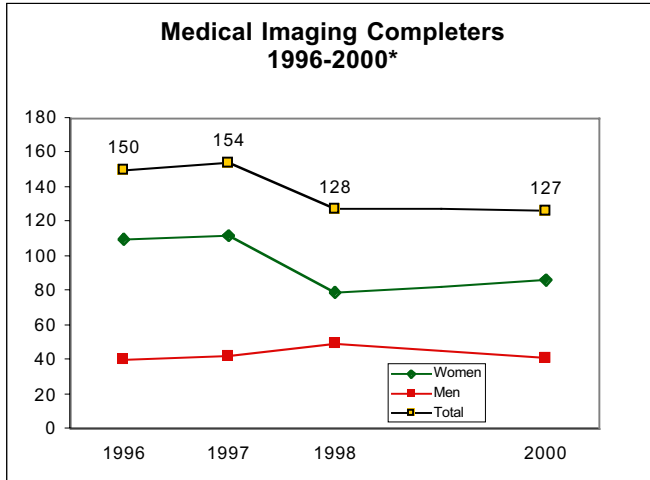
- Total annual program completions increased by 42.4% from 1996 to 2000.
- Completions per 100,000 population increased by 35.0% over the same time period.
- 84.7% of program completers were female in 1996 compared to 93.6% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

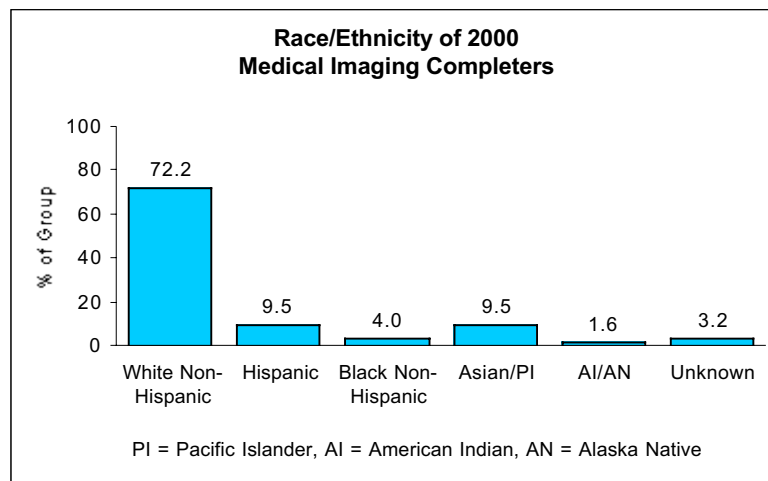
Medical Imaging Program Completers



- Six community and technical colleges and institutes in the state offered medical imaging programs in 2000. Medical imaging included medical radiologic technology/technician and diagnostic medical sonography technician programs.
- There are several types of medical imaging programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Less than two years	17	21	18	18
Associate	107	116	103	96
Baccalaureate	18	17	7	13

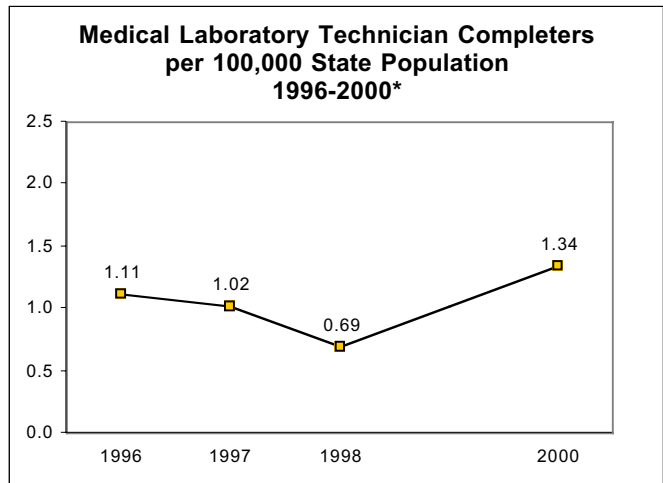
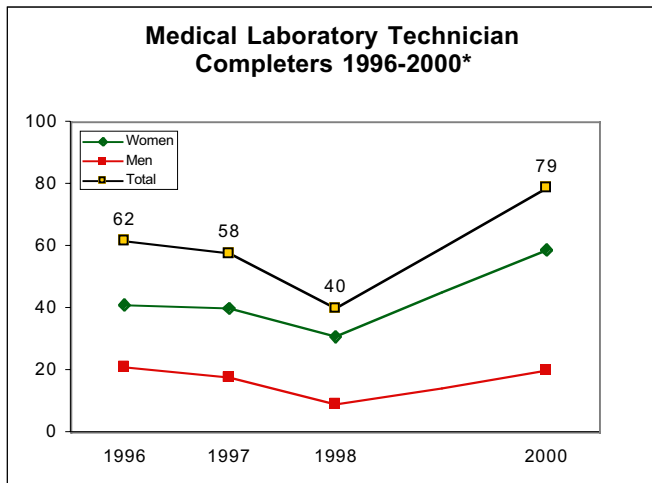
- Total annual program completions decreased by 15.3% from 1996 to 2000.
- Completions per 100,000 population decreased by 22.2% over the same time period.
- 73.3% of program completers were female in 1996 compared to 68.3% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

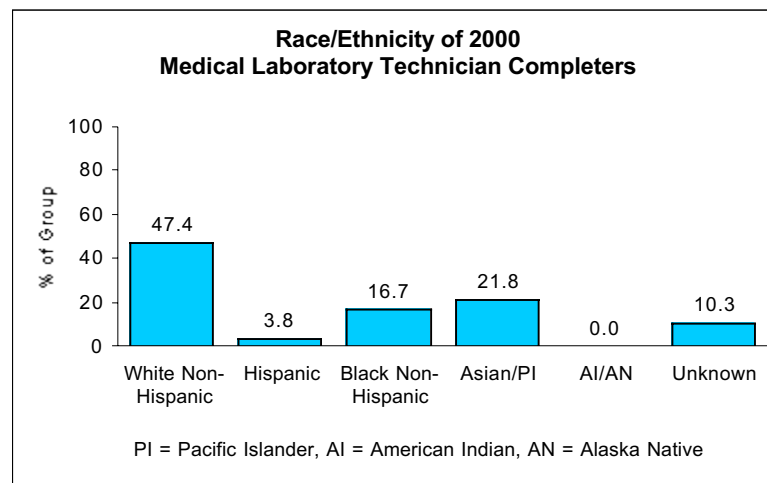
Medical Laboratory Technician Program Completers



- Seven community and technical colleges and institutes in the state offered medical laboratory technician programs in 2000.
- There are two types of medical laboratory technician programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Less than two years	10		3	51
Associate	52	58	37	28

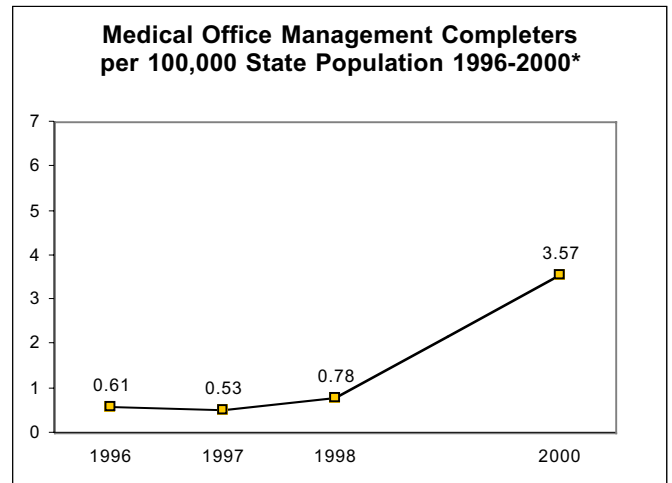
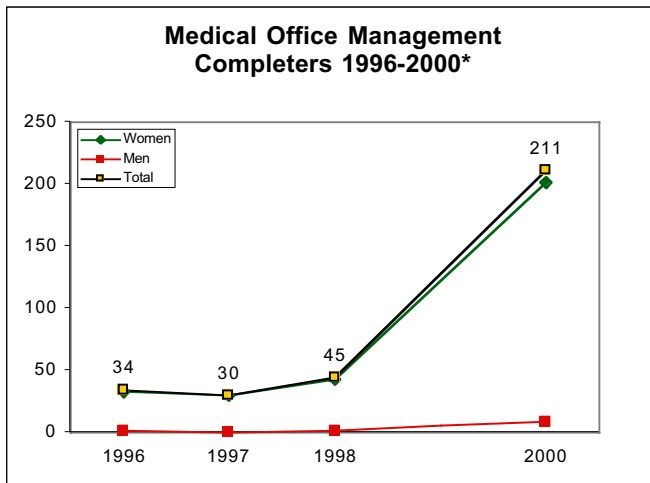
- Total annual program completions increased by 27.4% from 1996 to 2000.
- Completions per 100,000 population increased by 20.7% over the same time period.
- 66.1% of program completers were female in 1996 compared to 74.7% in 2000.



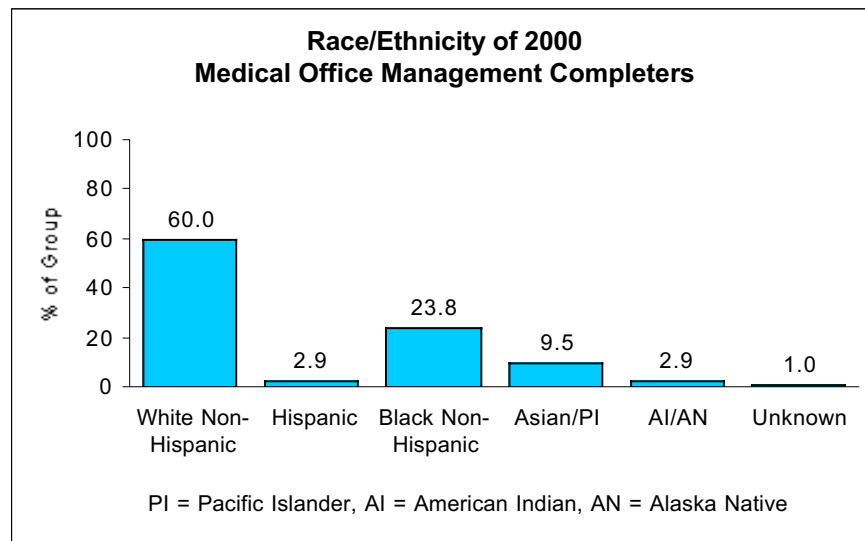
Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
* Data not reported for 1999.

Health Professions Education in Washington State

Medical Office Management Program Completers



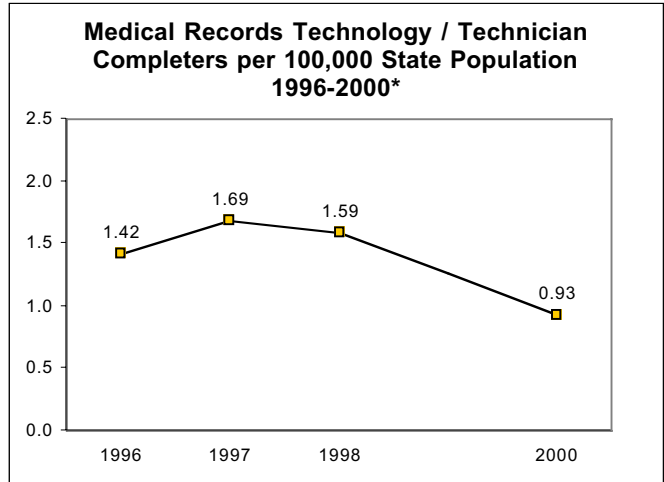
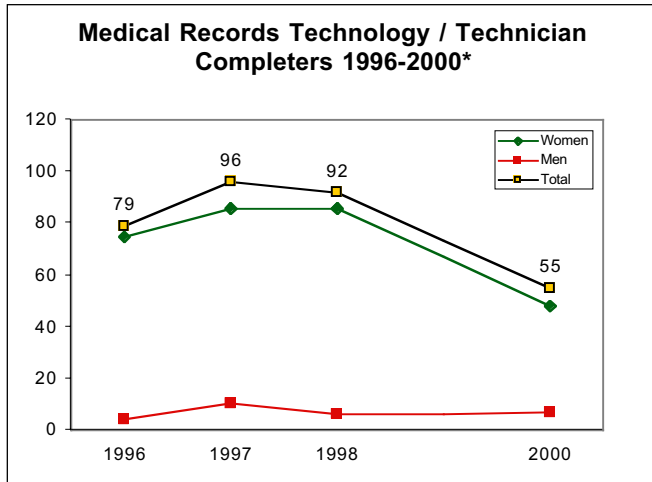
- Six community and technical colleges in the state offered medical office management programs of less than two years in 2000.
- Total annual program completions increased by 521% from 1996 to 2000.
- Completions per 100,000 population increased by 485% over the same time period.
- 97.1% of program completers were female in 1996 compared to 96.7% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

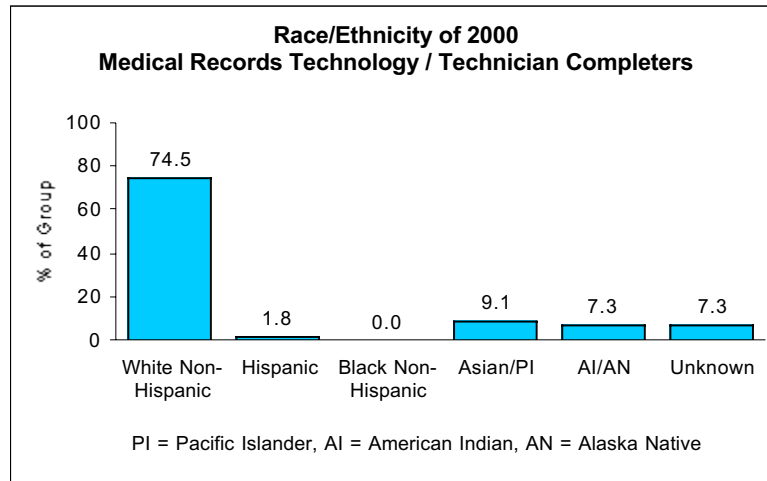
Medical Records Technology/Technician Program Completers



- Six community and technical colleges in the state offered medical records technology/technician programs in 2000.
- There are two types of medical records technology/technician programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Less than two years	31	39	26	24
Associate	48	57	66	31

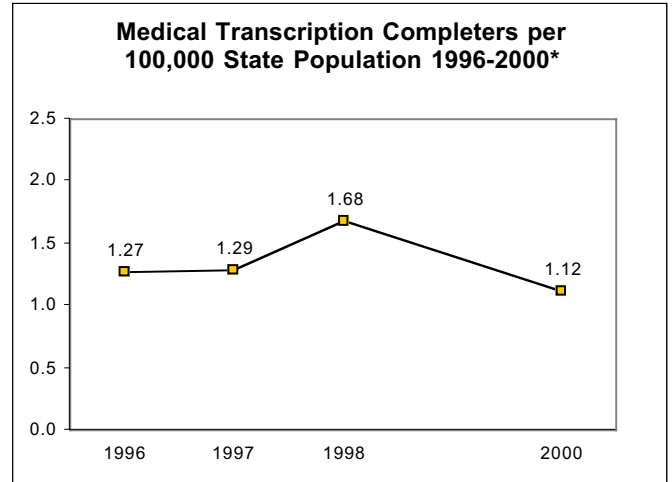
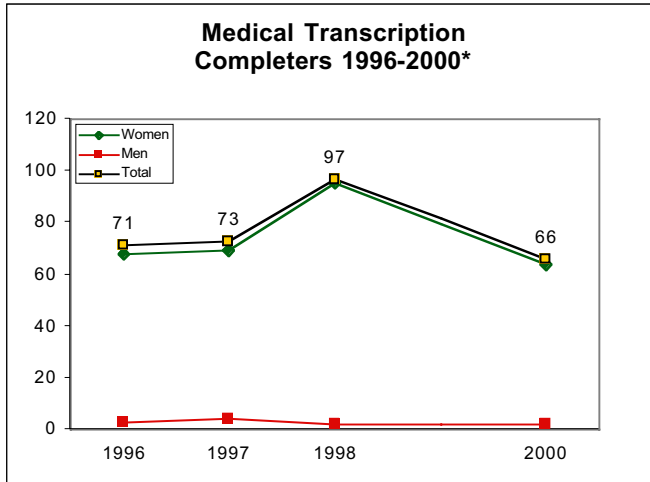
- Total annual programs completed decreased by 30.4% from 1996 to 2000.
- Completions per 100,000 population decreased by 34.5% over the same time period.
- 94.9% of program completers were female in 1996 compared to 87.3% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
* Data not reported for 1999.

Health Professions Education in Washington State

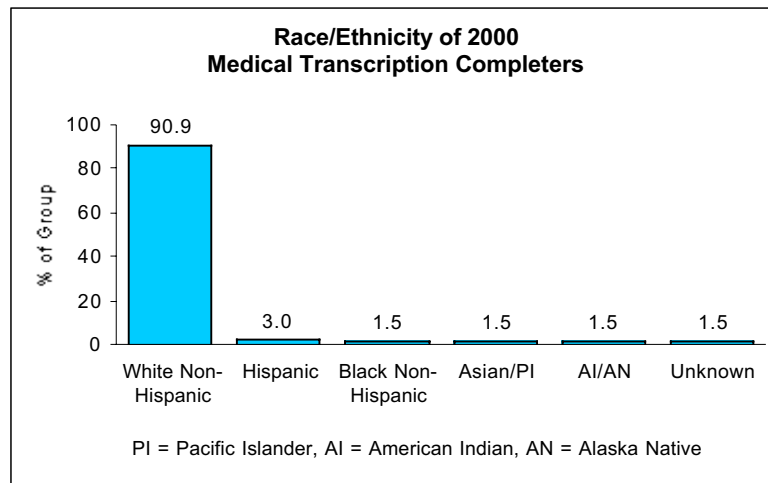
Medical Transcription Program Completers



- Twelve community and technical colleges in the state offered medical transcription programs in 2000.
- There are two types of medical transcription programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Less than two years	71	73	95	66
Associate			2	

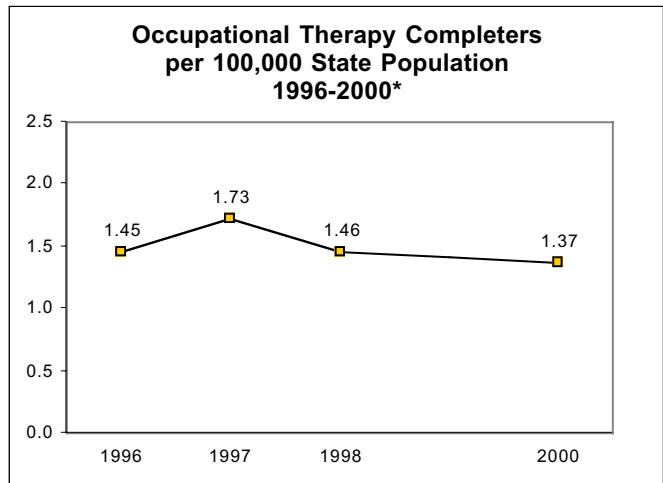
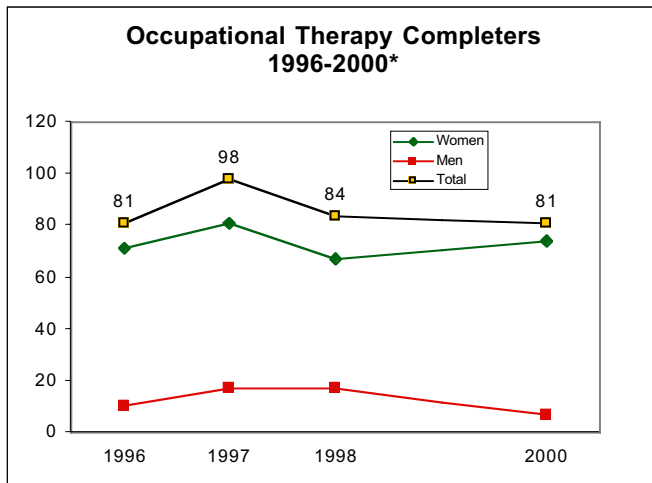
- Total annual program completions decreased by 7.0% from 1996 to 2000.
- Completions per 100,000 population decreased by 11.8% over the same time period.
- 95.8% of program completers were female in 1996 compared to 97.0% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

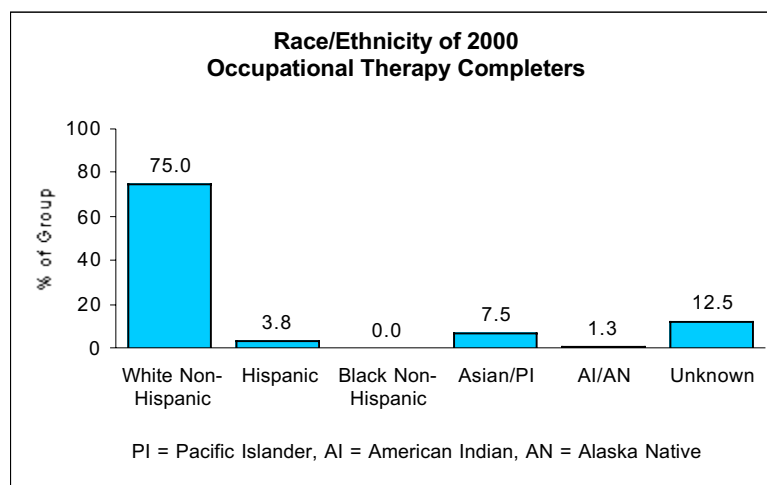
Occupational Therapy Program Completers



- Two universities in the state offered occupational therapy programs in 2000.
- There are two types of occupational therapy programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Baccalaureate	70	78	70	64
Master's	11	20	14	17

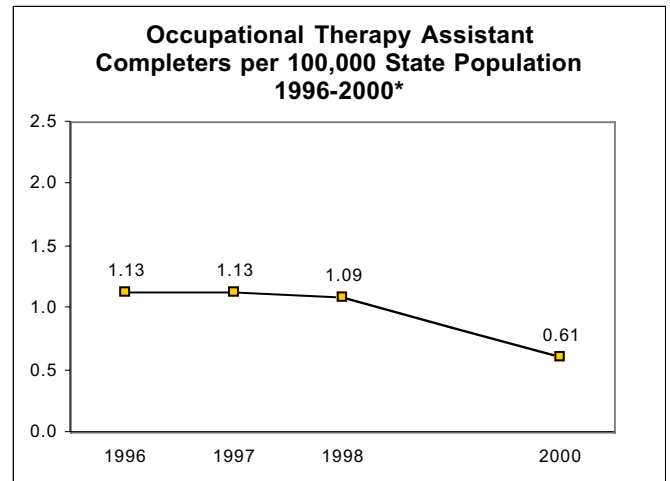
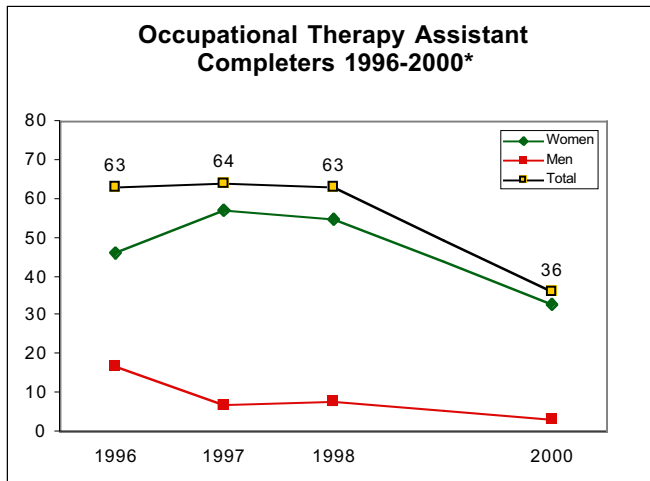
- Total annual program completions remained unchanged from 1996 to 2000.
- Completions per 100,000 population decreased by 5.5% over the same time period.
- 87.7% of program completers were female in 1996 compared to 91.4% in 2000.



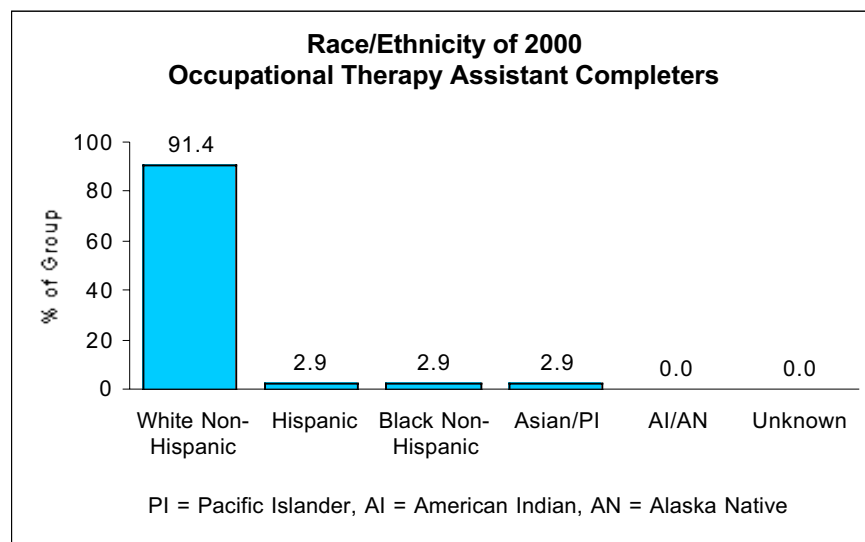
Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

Occupational Therapy Assistant Program Completers



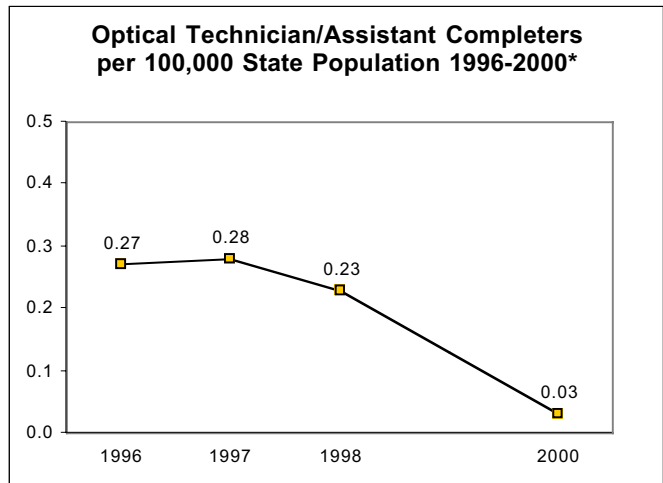
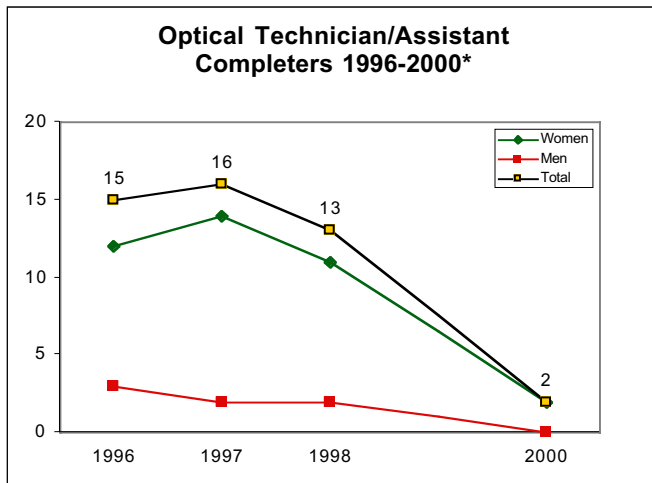
- Two community colleges in the state offered occupational therapy assistant programs at the associate degree level in 2000.
- Total annual program completions decreased by 42.9% from 1996 to 2000.
- Completions per 100,000 population decreased by 46.0% over the same time period.
- 73.0% of program completers were female in 1996 compared to 91.7% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

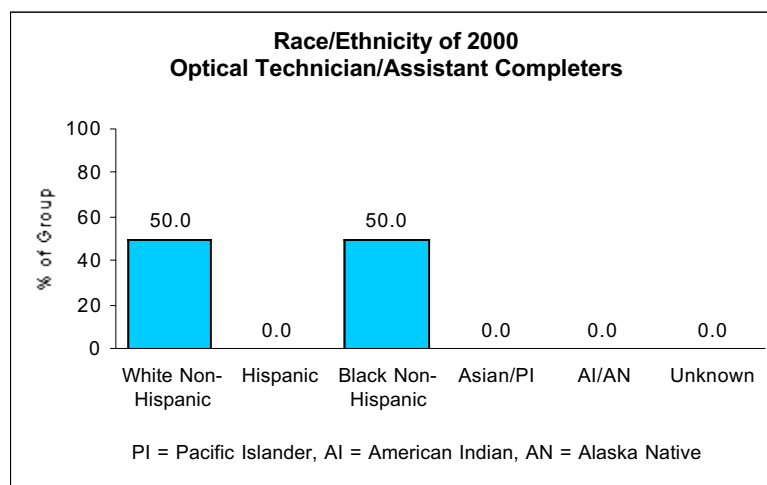
Optical Technician/Assistant Program Completers



- The state had one optical technician/assistant program at Spokane Community College in 2000.
- There are two types of optical technician/assistant programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Less than two years	11	6	10	2
Associate	4	10	3	

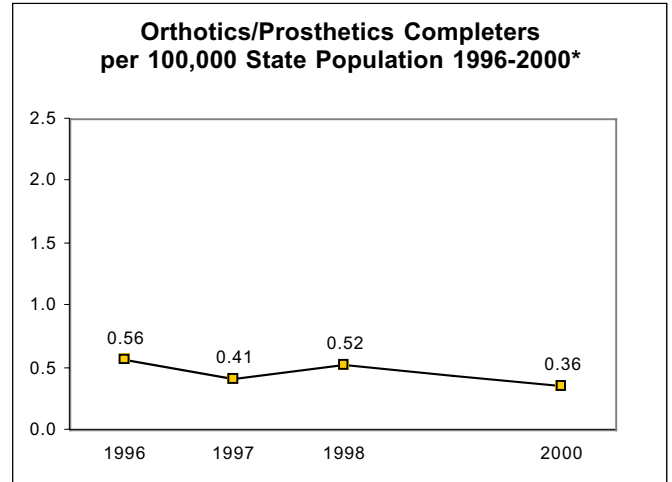
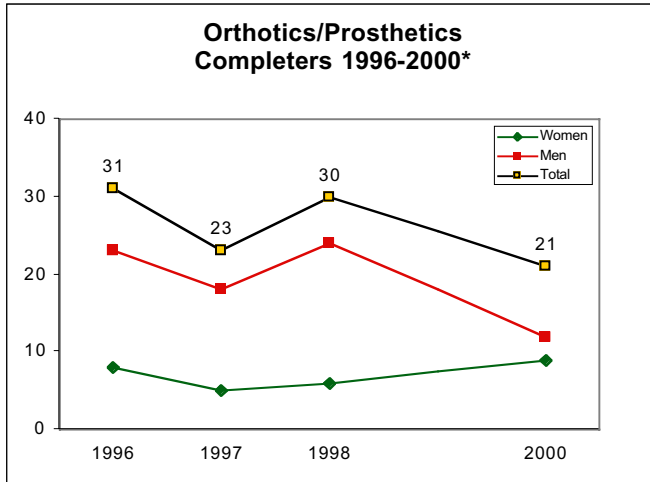
- Total annual program completions decreased by 86.7% from 1996 to 2000.
- Completions per 100,000 population decreased by 88.9% over the same time period.
- 80.0% of program completers were female in 1996 compared to 100% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

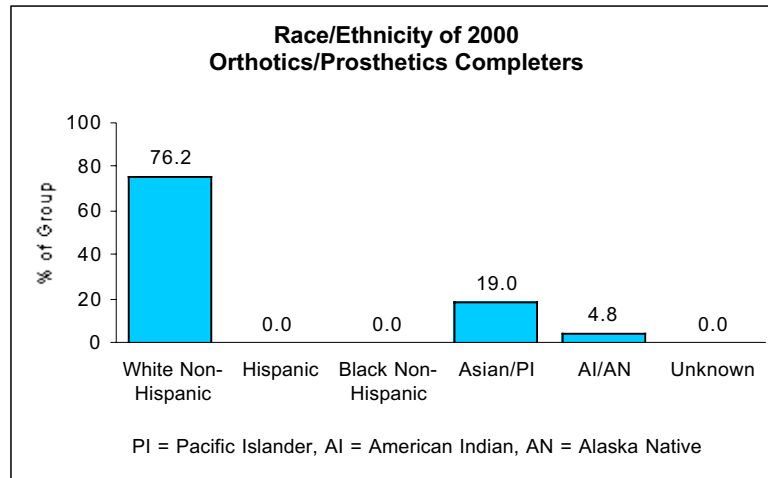
Orthotics/Prosthetics Program Completers



- One community college and one university in the state offered orthotics/prosthetics programs in 2000.
- There are several types of orthotics/prosthetics programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Less than two years	10	8	8	1
Associate	7	4	9	10
Baccalaureate	14	11	13	10

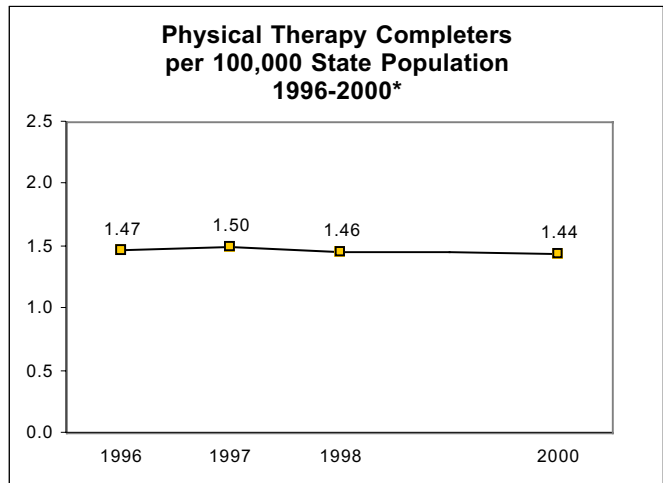
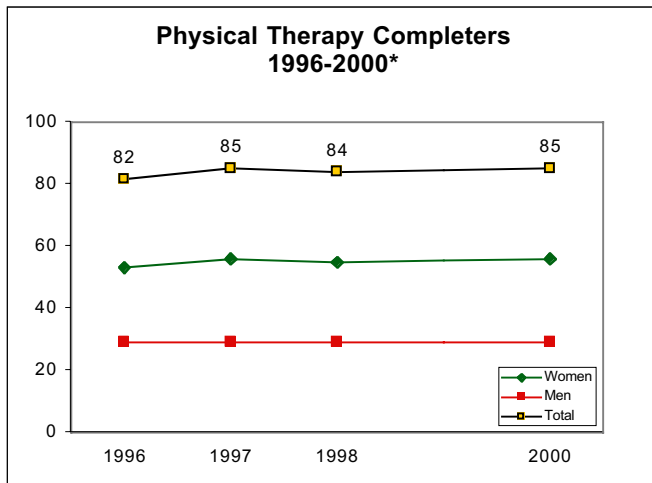
- Total annual program completions decreased by 32.2% from 1996 to 2000.
- Completions per 100,000 population decreased by 35.7% over the same time period.
- 34.8% of program completers were female in 1996 compared to 42.9% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

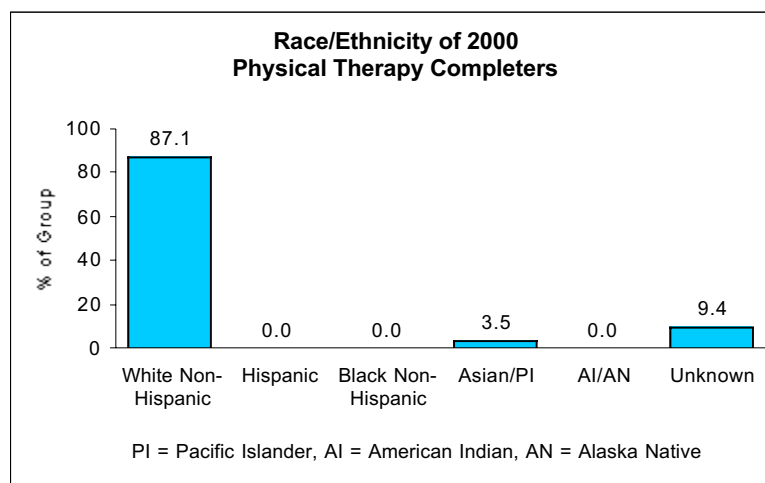
Physical Therapy Program Completers



- Three universities in the state offered physical therapy programs in 2000.
- There are two types of physical therapy programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Baccalaureate	54	53	24	24
Master's	28	32	60	61

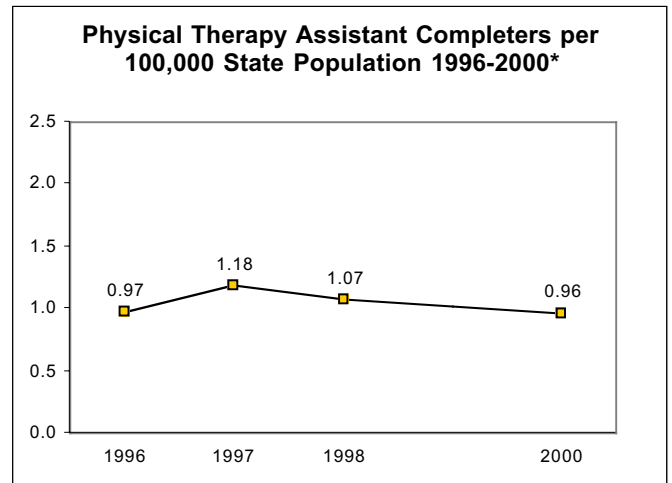
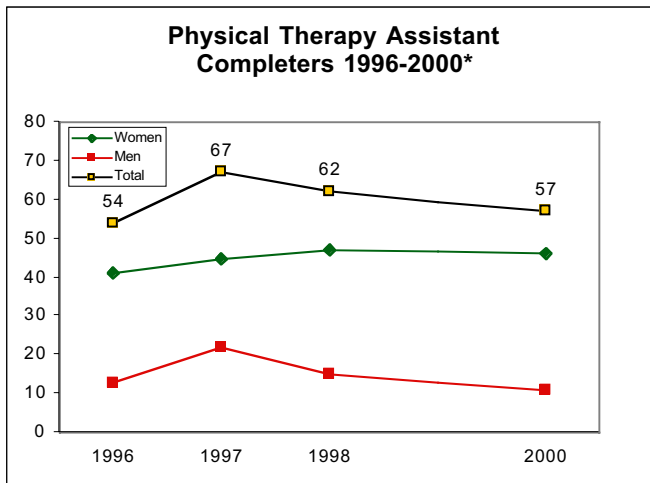
- Total annual program completions remained virtually unchanged from 1996 to 2000.
- Completions per 100,000 population remained virtually unchanged over the same time period.
- 64.6% of program completers were female in 1996 compared to 65.9% in 2000.



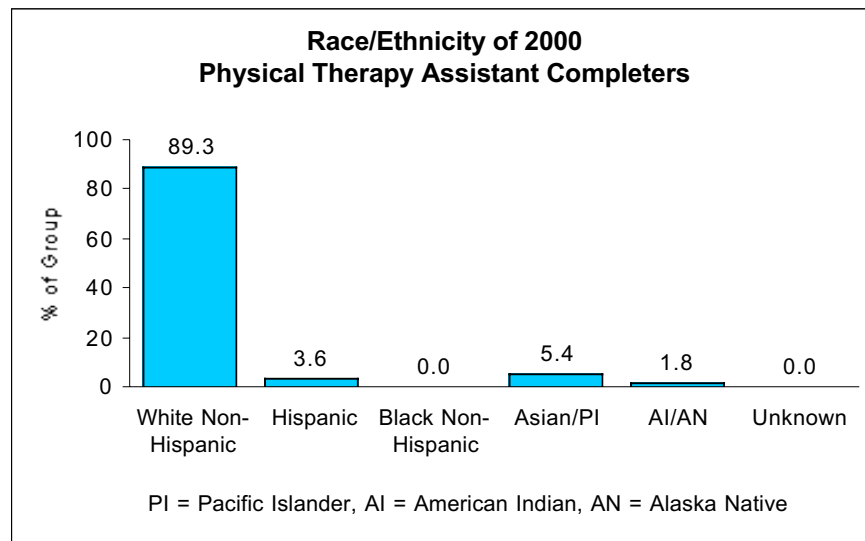
Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

Physical Therapy Assistant Program Completers



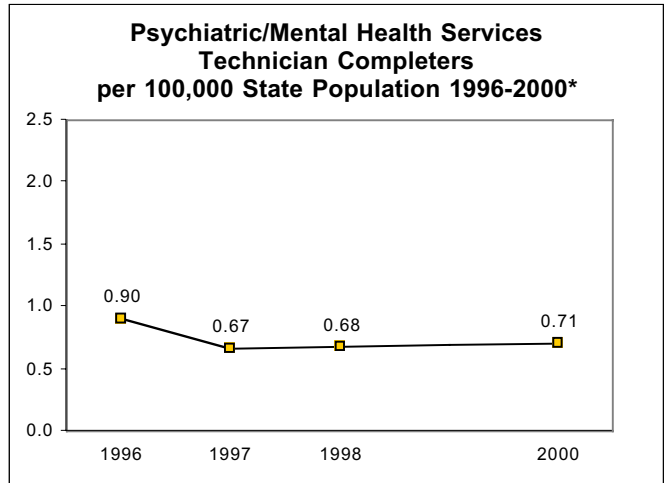
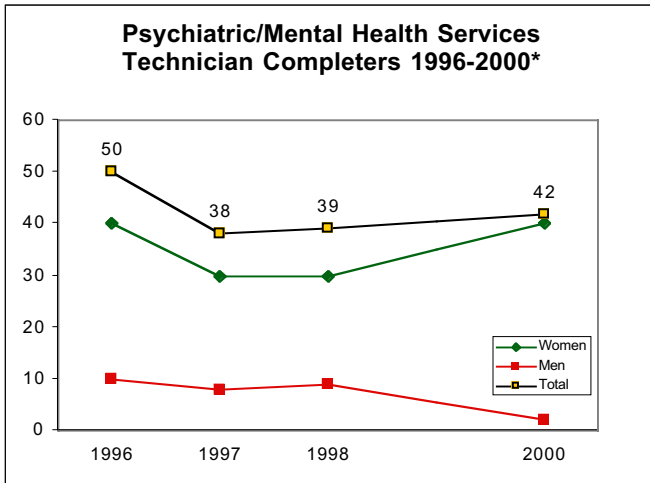
- Three community colleges in the state offered physical therapy assistant programs at the associate degree level in 2000.
- Total annual program completions increased by 5.6% from 1996 to 2000.
- Completions per 100,000 population decreased by 1.0% over the same time period.
- 75.9% of program completers were female in 1996 compared to 80.7% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

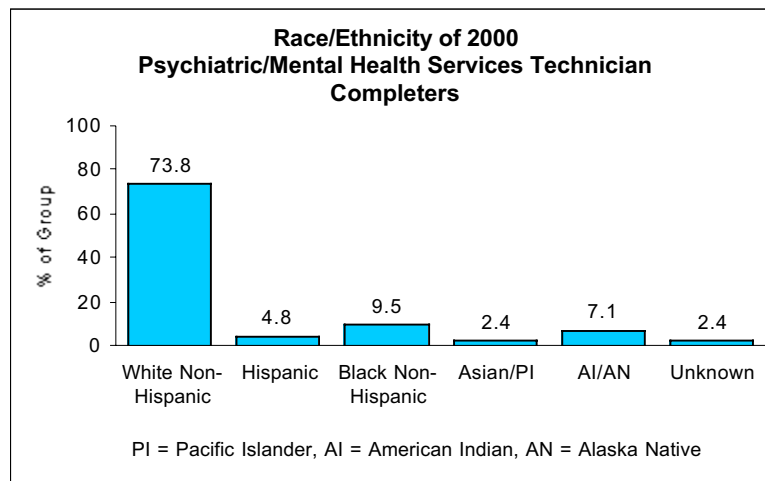
Psychiatric/Mental Health Services Technician Program Completers



- Three community colleges and universities in the state offered psychiatric/mental health services technician programs in 2000.
- There are several types of psychiatric/mental health services technician programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Less than two years	36	28	29	18
Associate	6	8	2	1
Baccalaureate	8	2	8	23

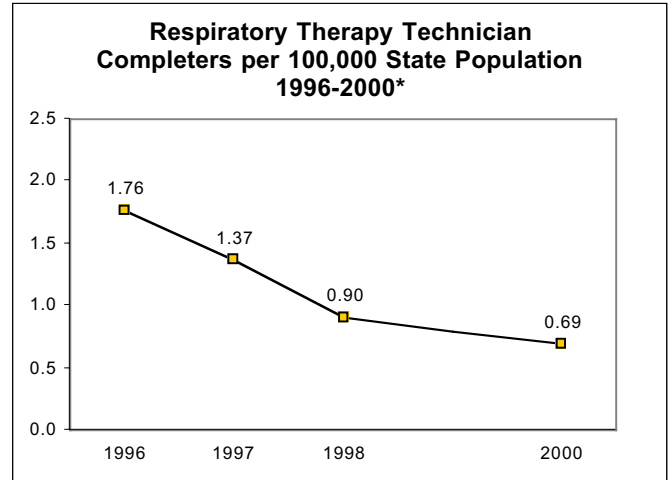
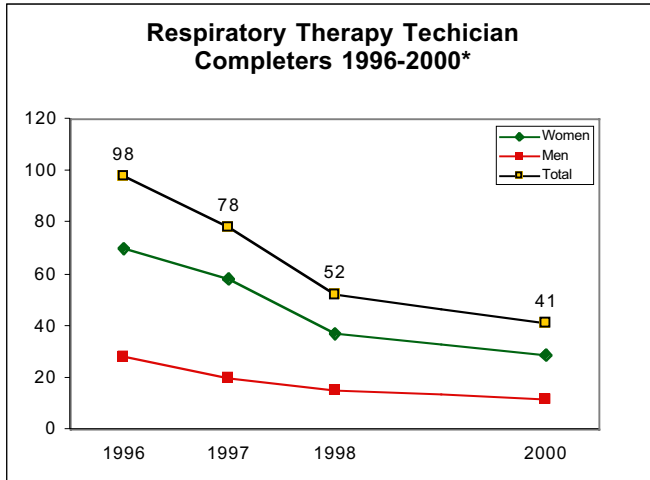
- Total annual program completions decreased by 16.0% from 1996 to 2000.
- Completions per 100,000 population decreased by 21.1% over the same time period.
- 80.0% of program completers were female in 1996 compared to 95.2% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

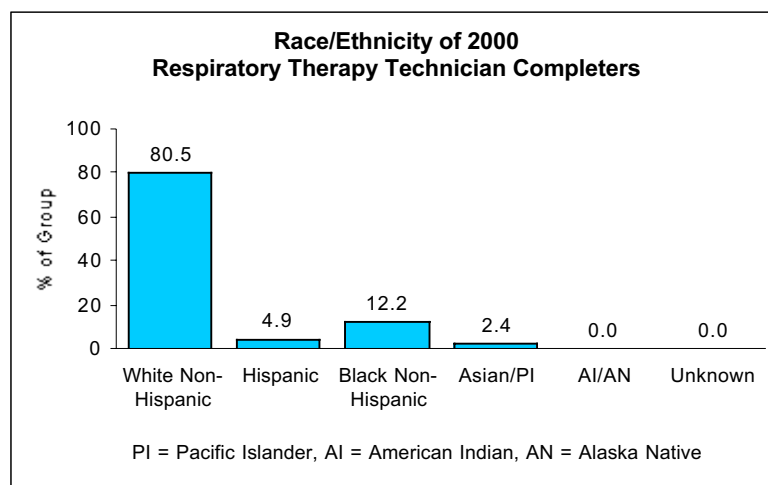
Respiratory Therapy Technician Program Completers



- Four community colleges in the state offered respiratory therapy technician programs in 2000.
- There are two types of respiratory therapy technician programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Less than two years	24	30	14	13
Associate	74	48	38	28

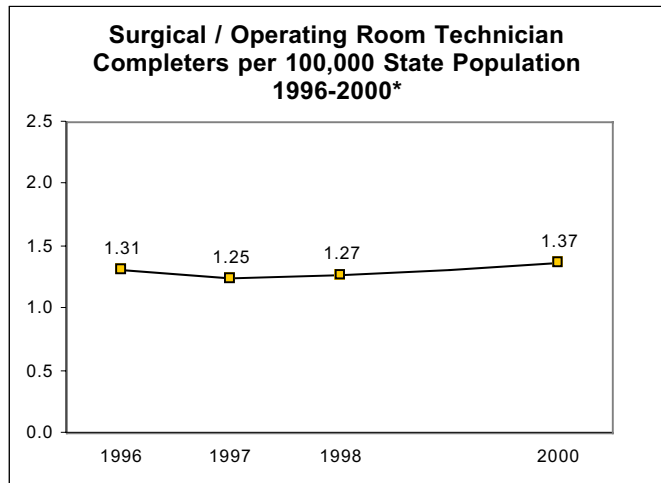
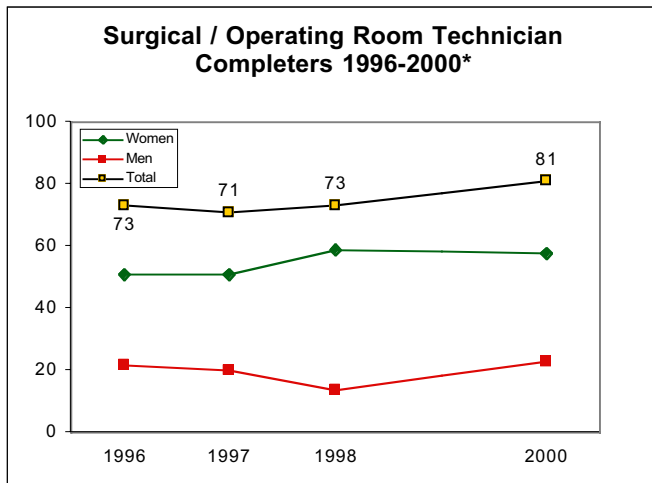
- Total annual program completions decreased by 58.2% from 1996 to 2000.
- Completions per 100,000 population decreased by 60.8% over the same time period.
- 71.4% of program completers were female in 1996 compared to 70.7% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

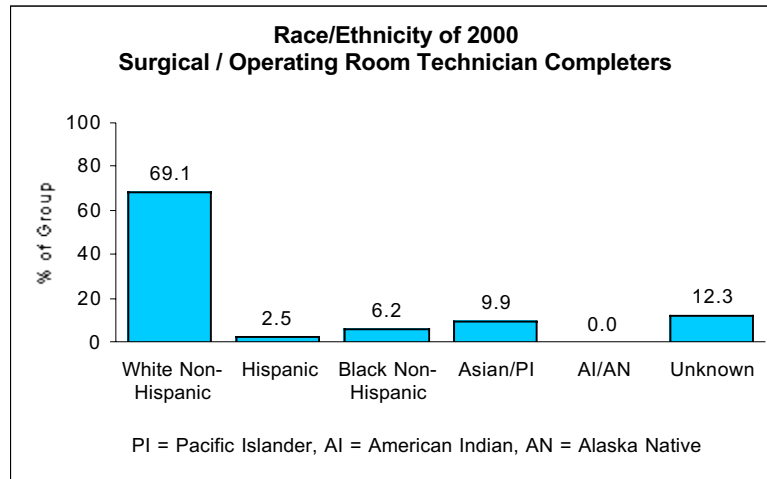
Surgical/Operating Room Technician Program Completers



- Four community and technical colleges in the state offered surgical/operating room technician programs in 2000.
- There are two types of surgical/operating room technician programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Less than two years	58	56	55	63
Associate	15	15	18	18

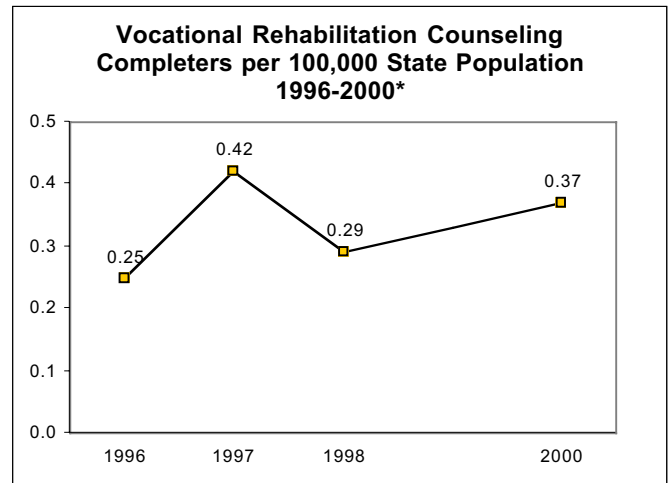
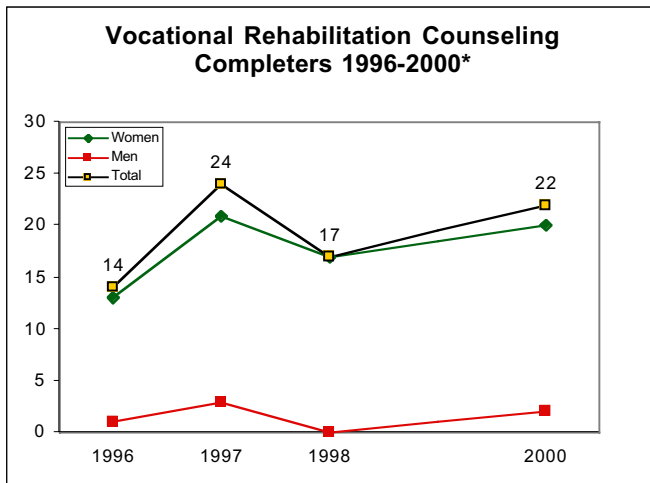
- Total annual program completions increased by 11.0% from 1996 to 2000.
- Completions per 100,000 population increased by 4.5% over the same time period.
- 69.9% of program completers were female in 1996 compared to 71.6% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
* Data not reported for 1999.

Health Professions Education in Washington State

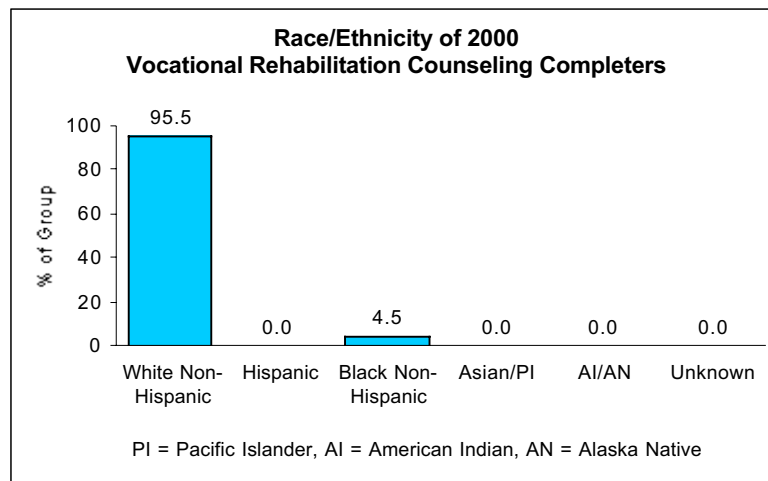
Vocational Rehabilitation Counseling Program Completers



- Three community colleges and universities in the state offered vocational rehabilitation counseling programs in 2000.
- There are several types of vocational rehabilitation counseling programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Less than two years	8	14	5	7
Associate	6	10	12	12
Master's				3

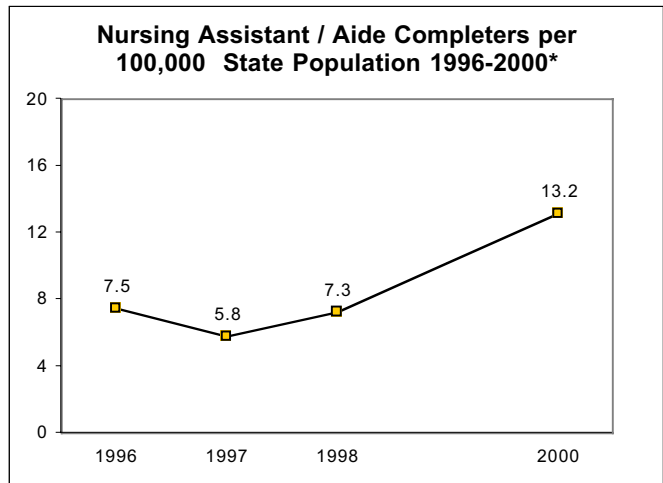
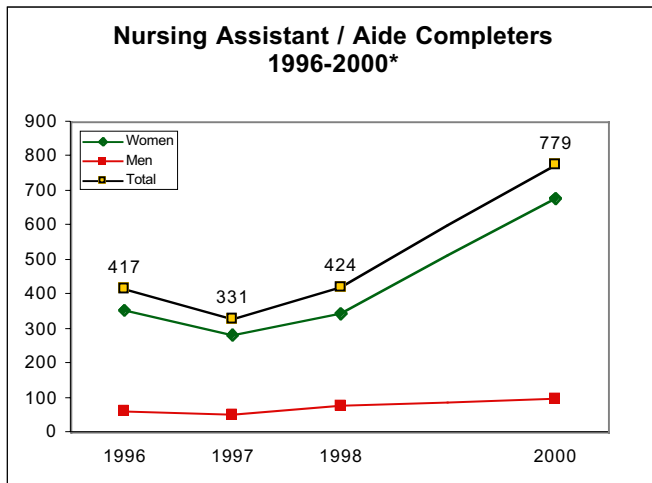
- Total annual program completions increased by 57.1% from 1996 to 2000.
- Completions per 100,000 population increased by 48.0% over the same time period.
- 92.9% of program completers were female in 1996 compared to 90.9% in 2000.



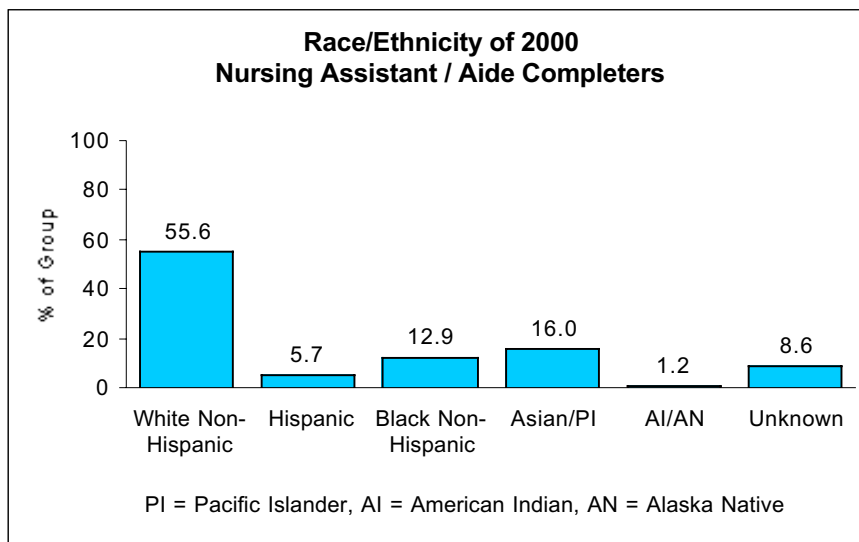
Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

Nursing Assistant/Aide Program Completers



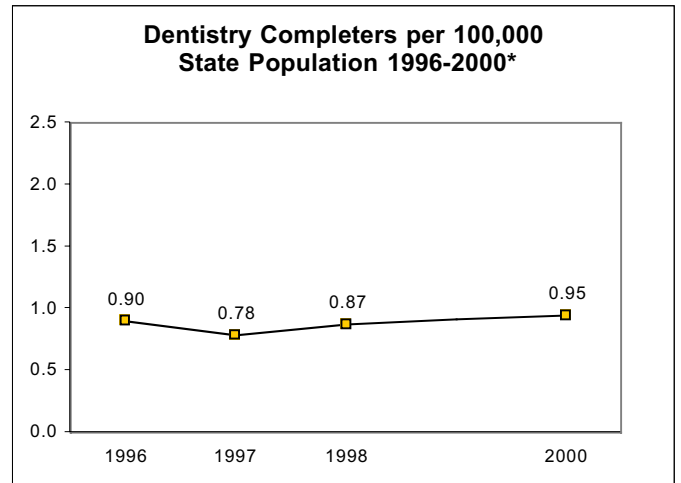
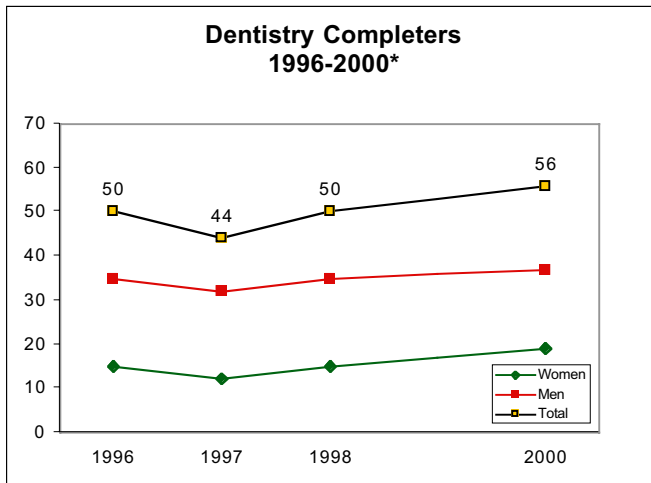
- Statistics are reported only for postsecondary nursing assistant/aide programs in the state; nine community and technical colleges and institutes offered programs of less than two years in 2000. Health care facility or high school programs are not included.
- Total annual program completions increased by 86.8% from 1996 to 2000.
- Completions per 100,000 population increased by 76.0% over the same time period.
- 84.9% of program completers were female in 1996 compared to 87.3% in 2000.



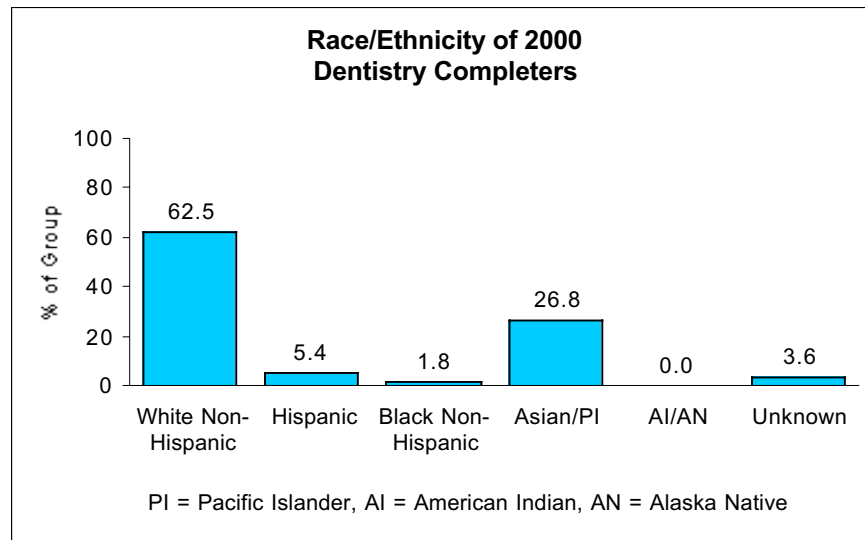
Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

Dentistry Program Completers



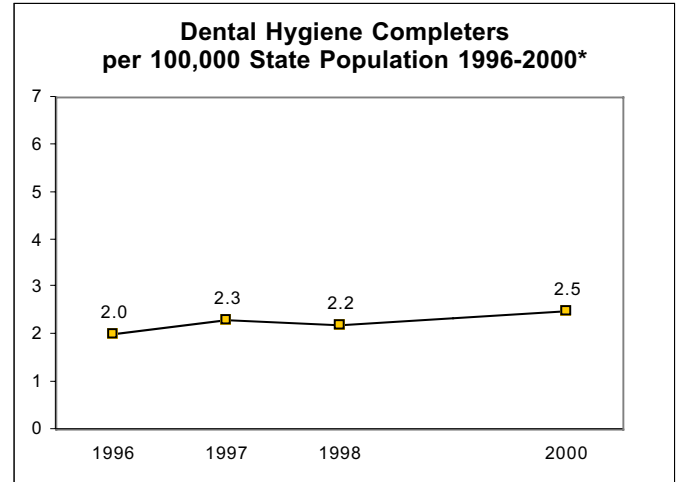
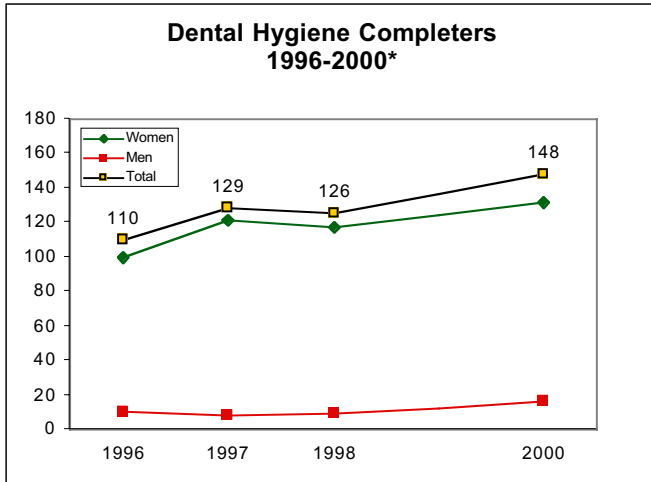
- The state has one dental school, the University of Washington School of Dentistry.
- Total annual completions increased by 12.0% from 1996 to 2000.
- Completions per 100,000 population increased by 5.6% over the same time period.
- 30.0% of program completers were female in 1996 compared to 33.9% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

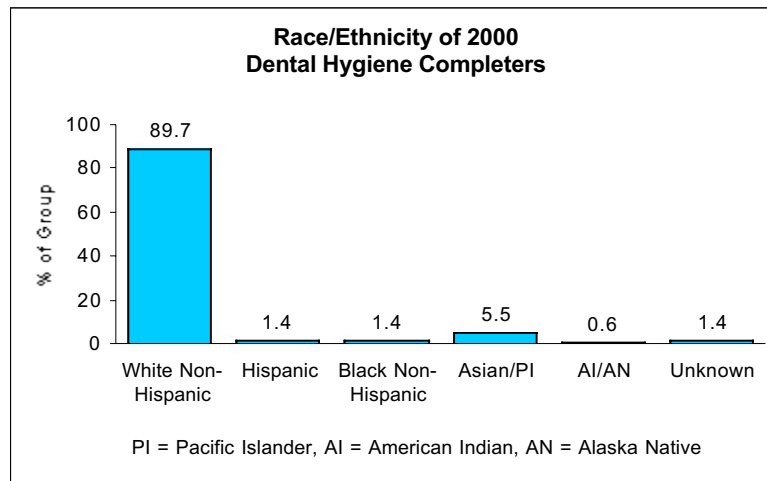
Dental Hygiene Program Completers



- Eight community and technical colleges and two universities in the state offered dental hygiene programs in 2000.
- There are several types of dental hygiene programs in Washington. Baccalaureate degrees may have a clinical or population health focus. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Less than two years				4
Associate	83	94	95	107
Baccalaureate	27	35	31	28
Other				9

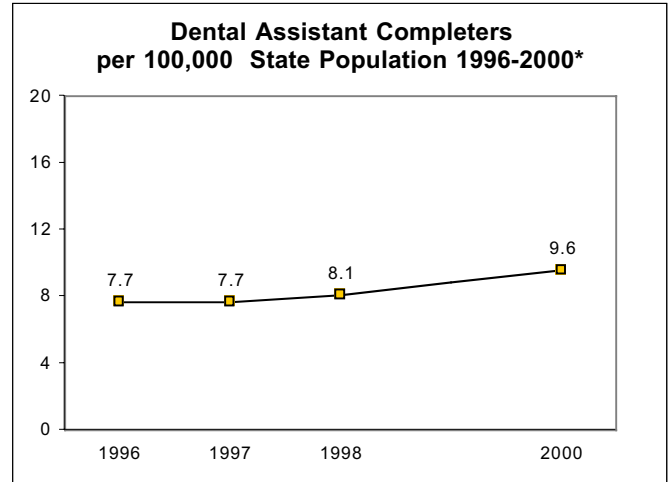
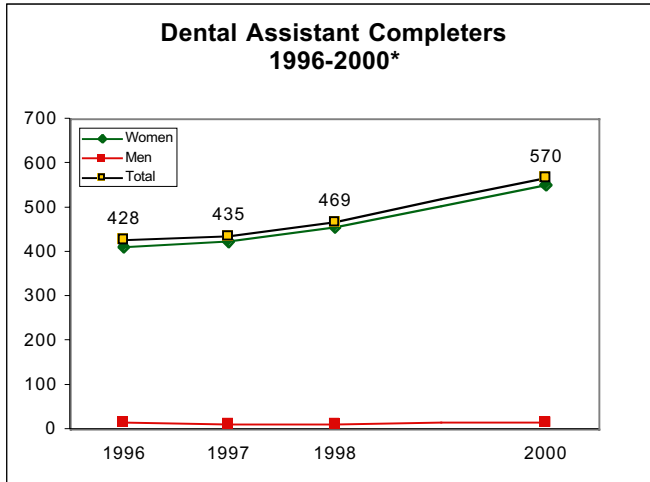
- Total annual completions increased by 34.5% from 1996 to 2000.
- Completions per 100,000 population increased by 26.9% over the same time period.
- 90.9% of program completers were female in 1996 compared to 89.2% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

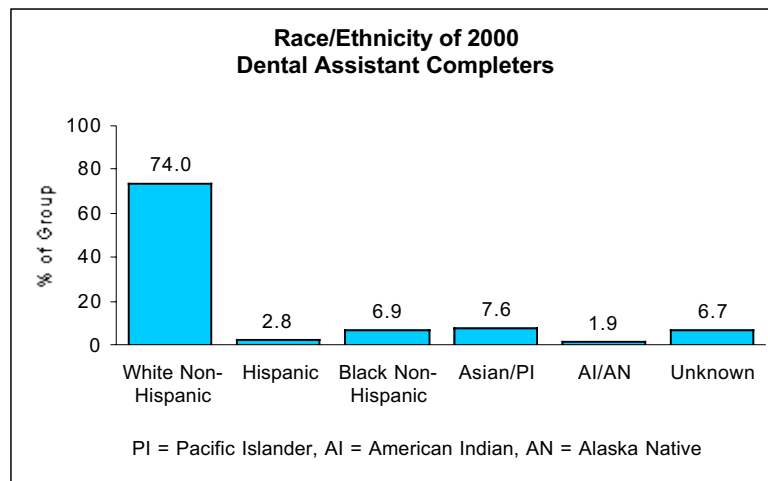
Dental Assistant Program Completers



- Fourteen community and technical colleges and institutes in the state offered dental assistant programs in 2000.
- There are several types of dental assistant programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Less than two years	373	390	376	481
Associate	20	25	35	34
Baccalaureate	22			
Other	13	20	58	55

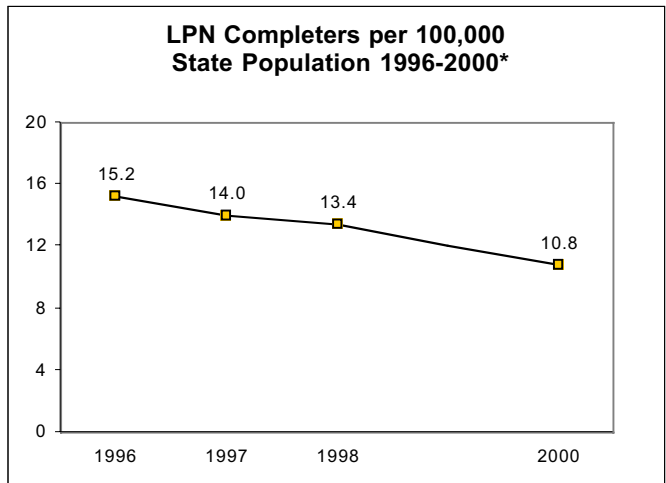
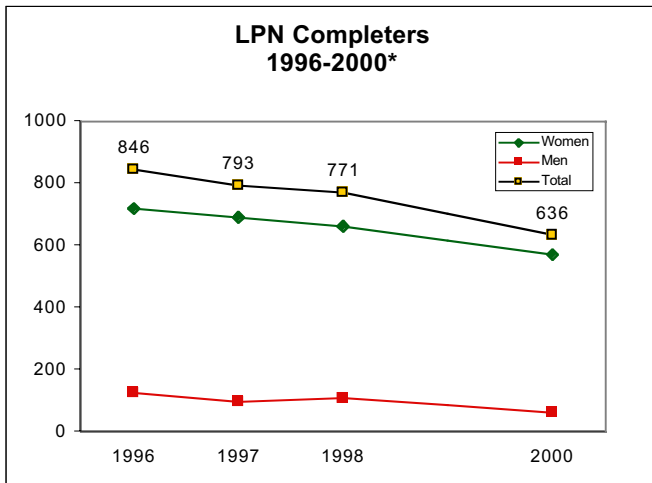
- Total annual program completions increased by 33.2% from 1996 to 2000.
- Completions per 100,000 population increased by 24.7% over the same time period.
- 96.3% of program completers were female in 1996 compared to 96.8% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

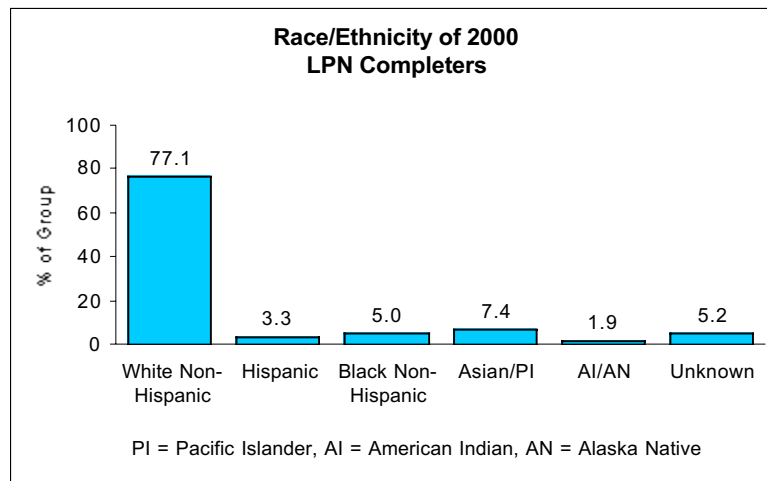
Licensed Practical Nurse Program Completers



- Twenty community and technical colleges in the state offered licensed practical nurse programs in 2000.
- There are several types of licensed practical nurse programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Less than two years	830	770	729	525
Associate	16	23	24	29
Other			18	82

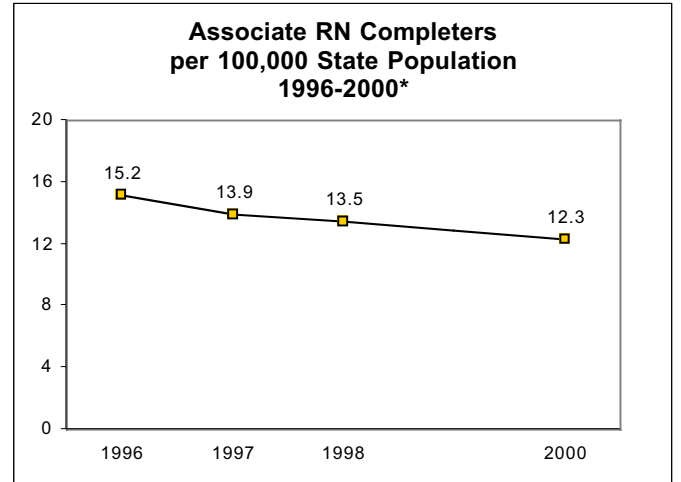
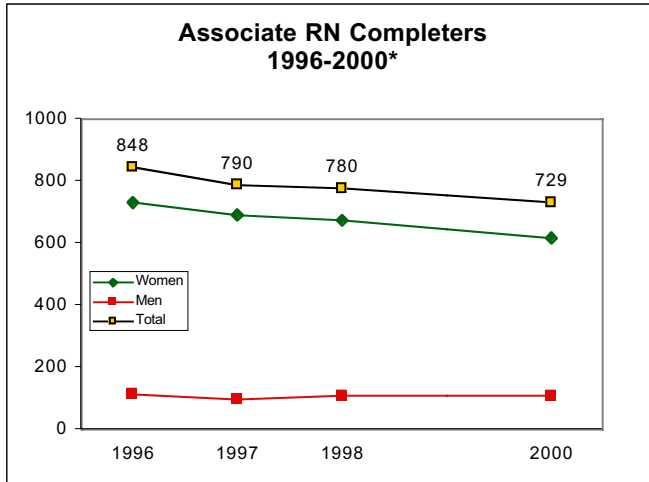
- Total annual program completions awarded decreased by 24.8% from 1996 to 2000.
- Completions per 100,000 population decreased by 28.9% over the same period.
- 84.9% of program completers were female in 1996 compared to 90.0% in 2000.



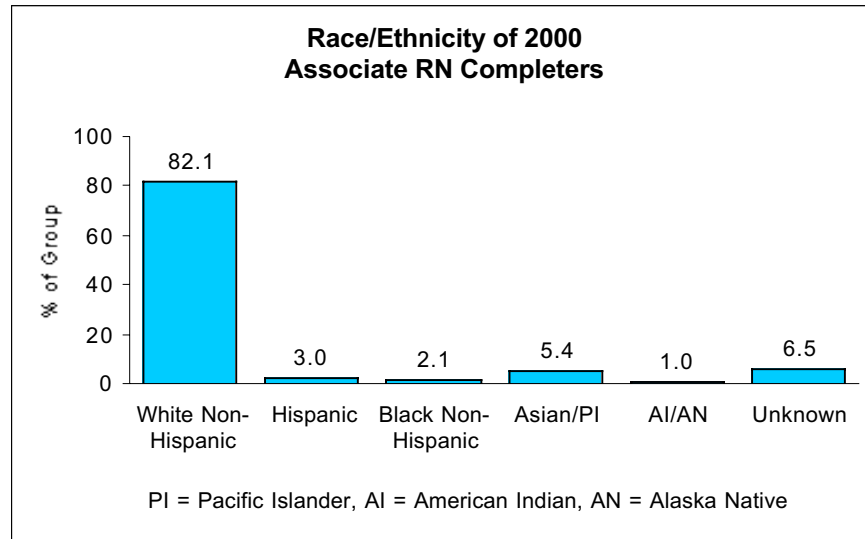
Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

Associate Registered Nurse Program Completers



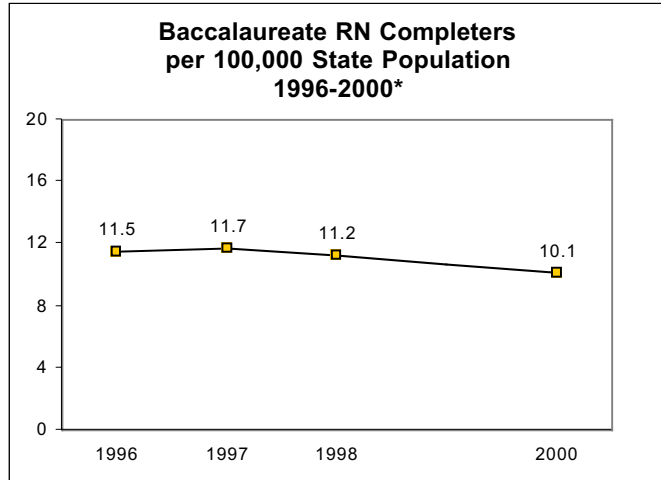
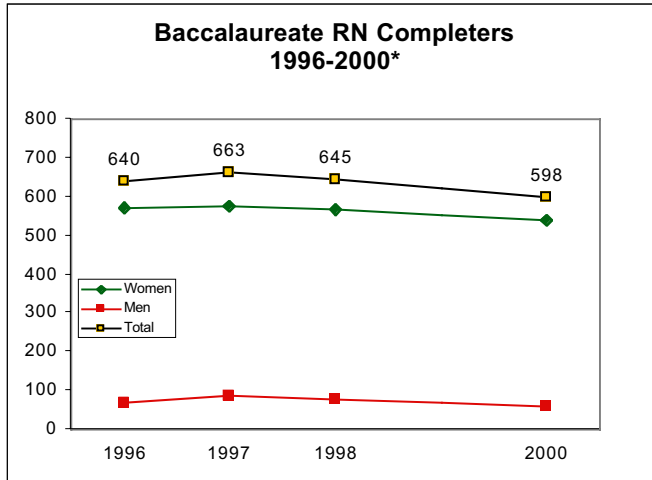
- Eighteen community and technical colleges in the state offered associate registered nurse programs in 2000. Some students complete the course of study but do not apply for the associate degree. These students may not be counted as completers (and are therefore not reflected in these figures) but may become licensed RNs.
- Total annual program completions decreased by 14.0% from 1996 to 2000.
- Completions per 100,000 population decreased by 19.1% over the same time period.
- 86.6% of program completers were female in 1996 compared to 84.9% in 2000.



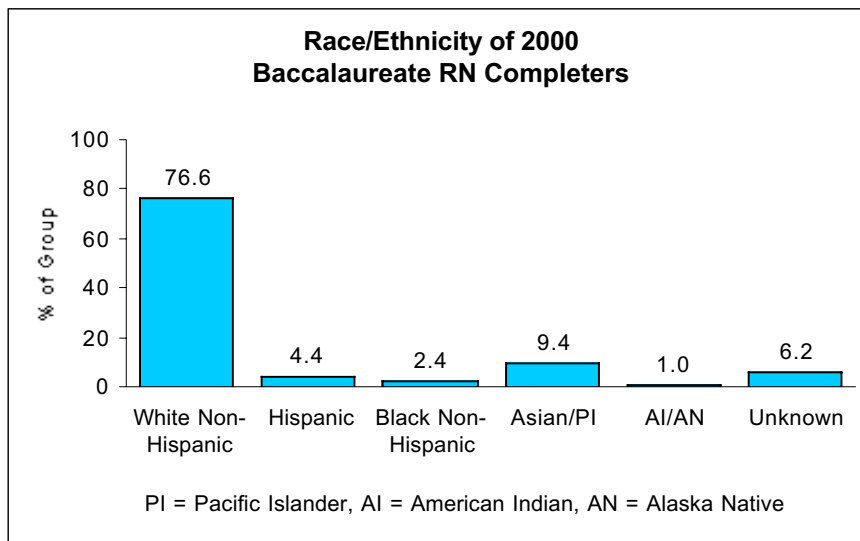
Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

Baccalaureate Registered Nurse Program Completers



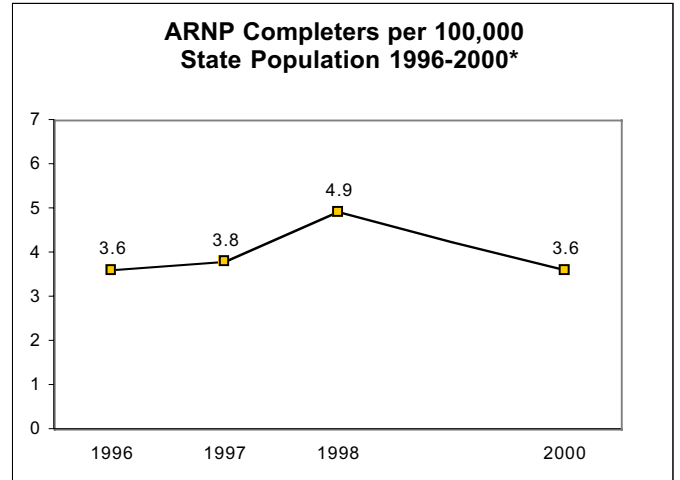
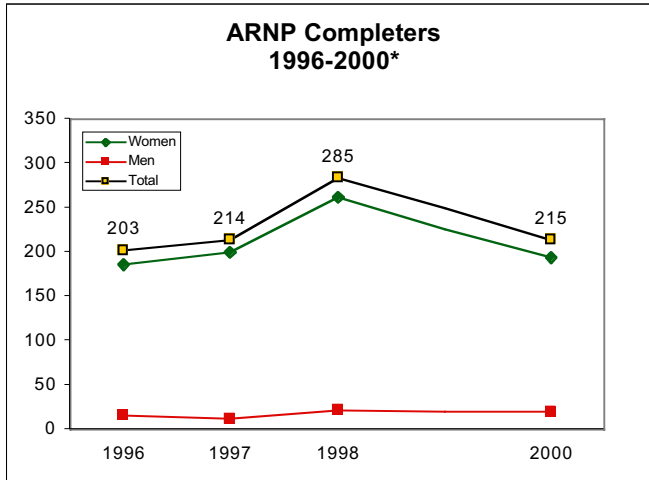
- Twelve universities and colleges in the state offered baccalaureate registered nurse programs in 2000.
- Total annual program completions decreased by 6.6% from 1996 to 2000.
- Completions per 100,000 population decreased by 12.2% over the same time period.
- 89.1% of program completers were female in 1996 compared to 90.1% in 2000.



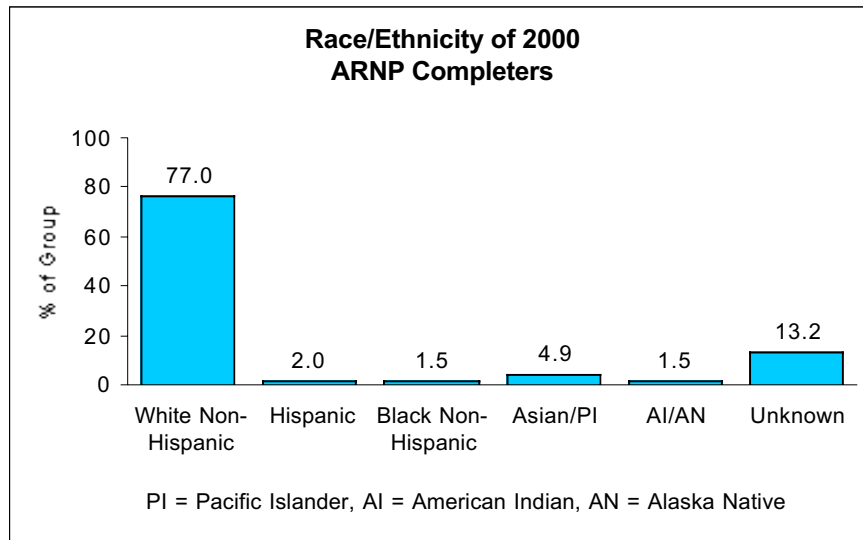
Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

Advanced Registered Nurse Practitioner Program Completers



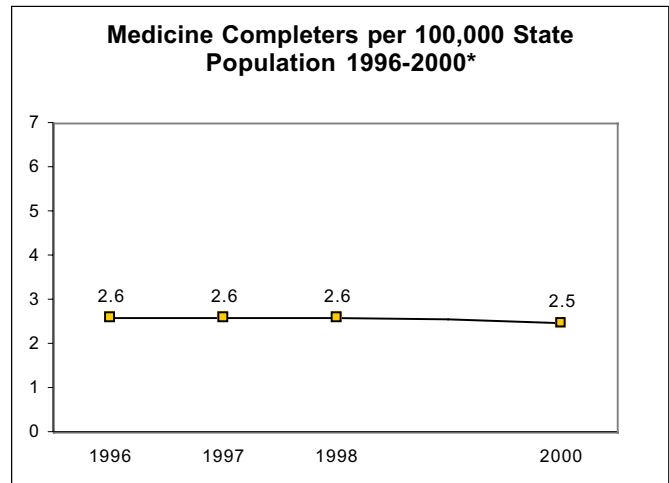
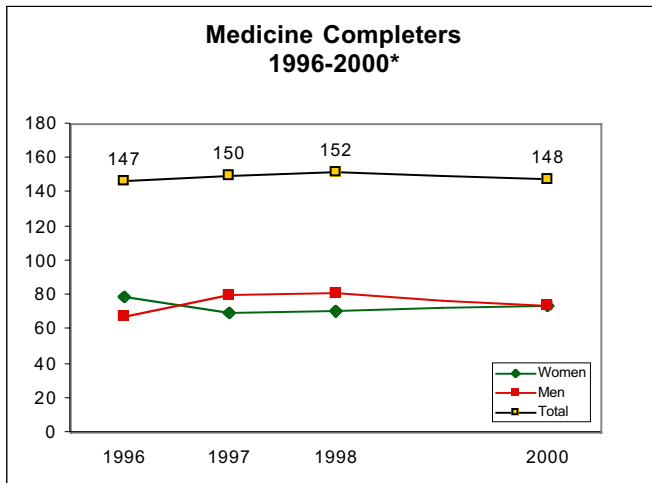
- Nine universities in the state offered advanced registered nurse practitioner programs in 2000.
- Total annual program completions increased by 5.9% from 1996 to 2000.
- Completions per 100,000 population remained unchanged over the same time period.
- 92.1% of program completers were female in 1996 compared to 90.7% in 2000.



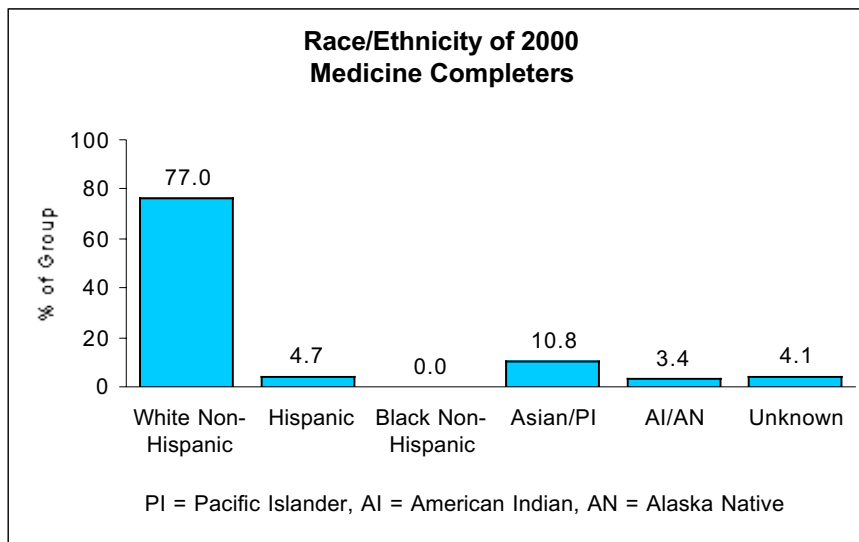
Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

Medicine Program Completers



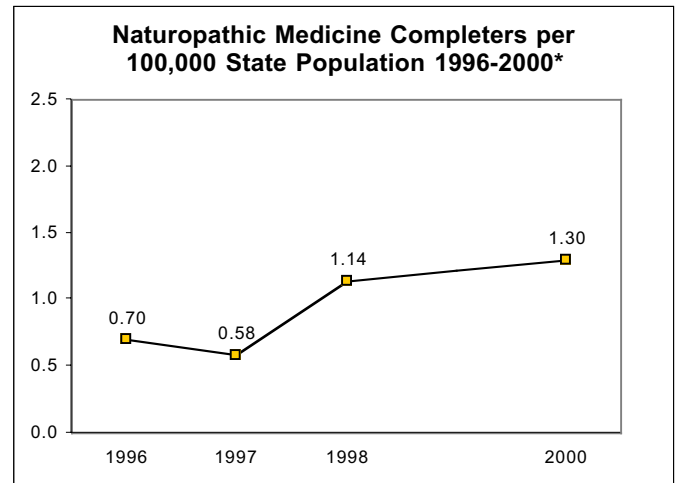
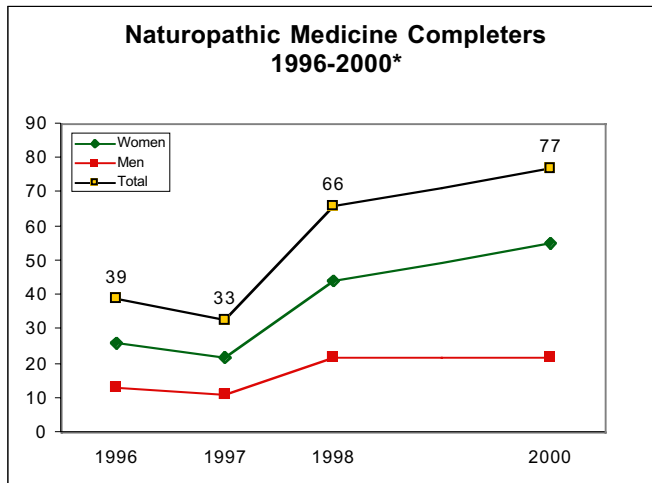
- The state has one medical school, the University of Washington School of Medicine.
- Total annual completions remained virtually unchanged from 1996 to 2000.
- Completions per 100,000 population decreased by 3.8% over the same time period.
- 53.7% of program completers were female in 1996 compared to 50.0% in 2000.



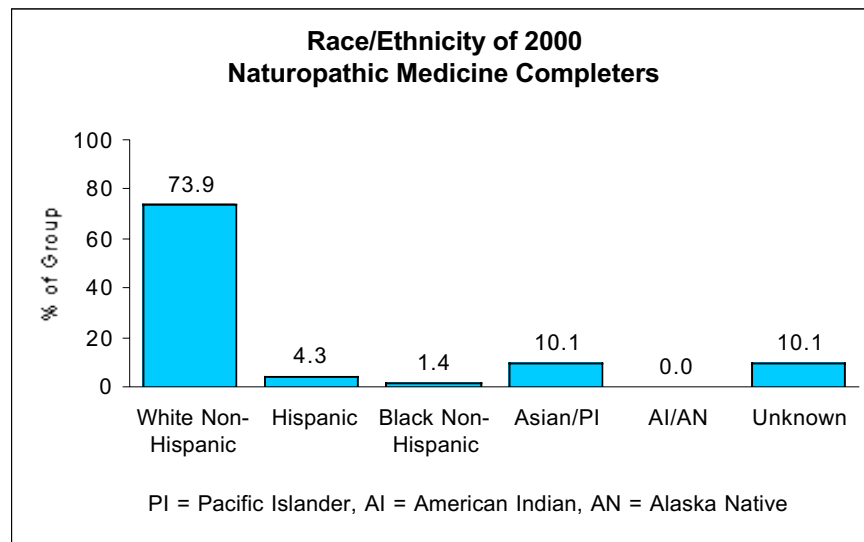
Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

Naturopathic Medicine Program Completers



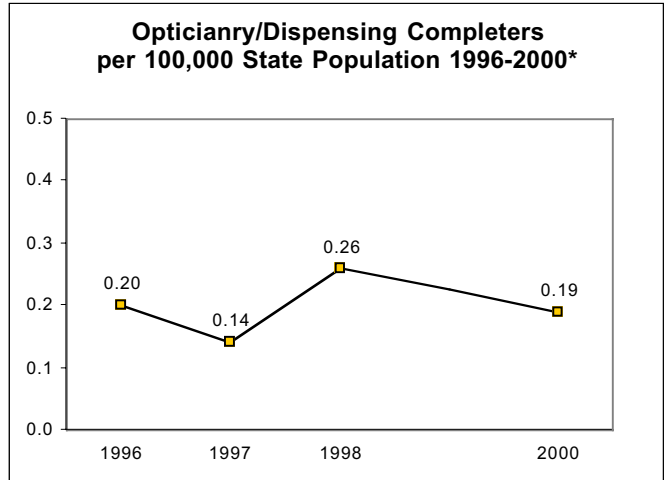
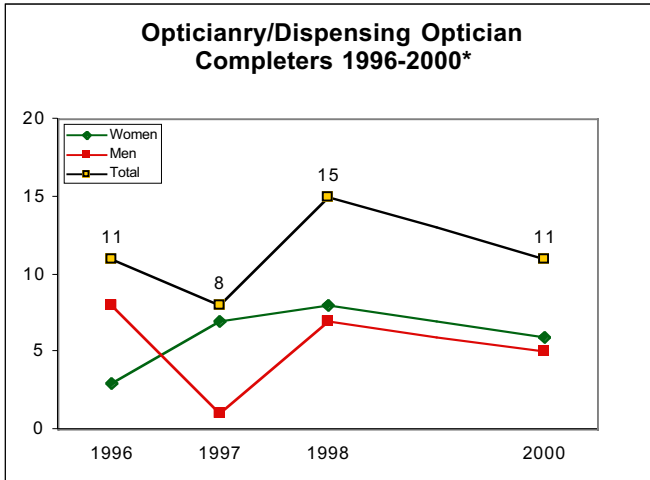
- The state has one naturopathic medicine school, Bastyr University.
- Total annual program completions increased by 97.4% from 1996 to 2000.
- Completions per 100,000 population increased by 85.7% over the same time period.
- 66.7% of program completers were female in 1996 compared to 71.4% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

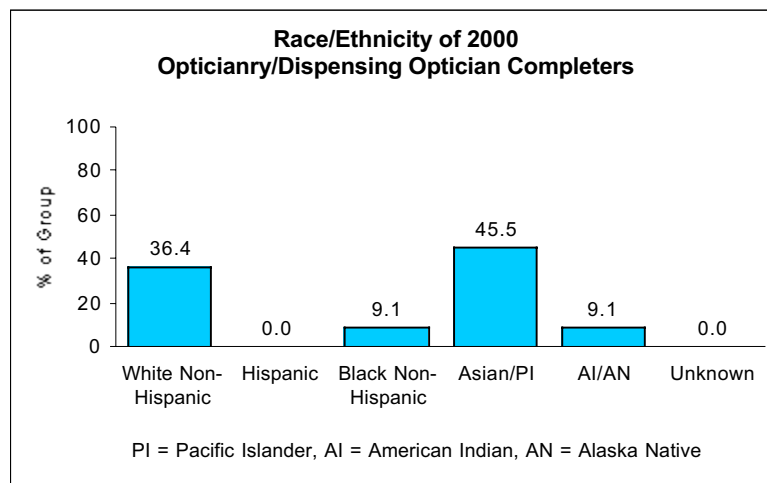
Opticianry/Dispensing Optician Program Completers



- Two community colleges in the state offered opticianry/dispensing optician programs in 2000.
- There are two types of opticianry/dispensing optician programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Less than two years				1
Associate	11	8	15	10

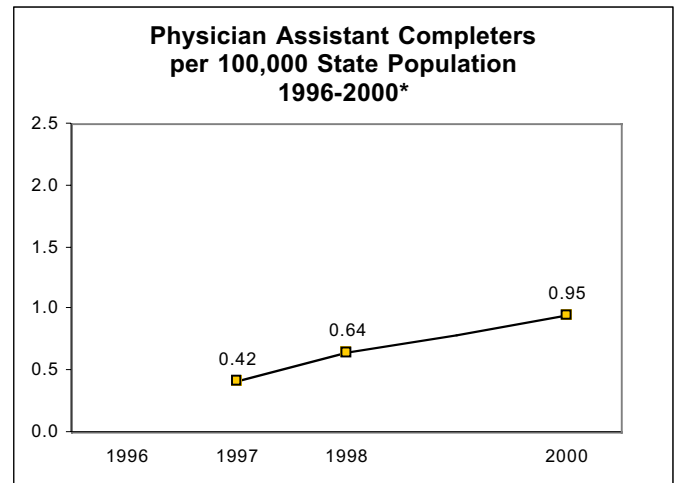
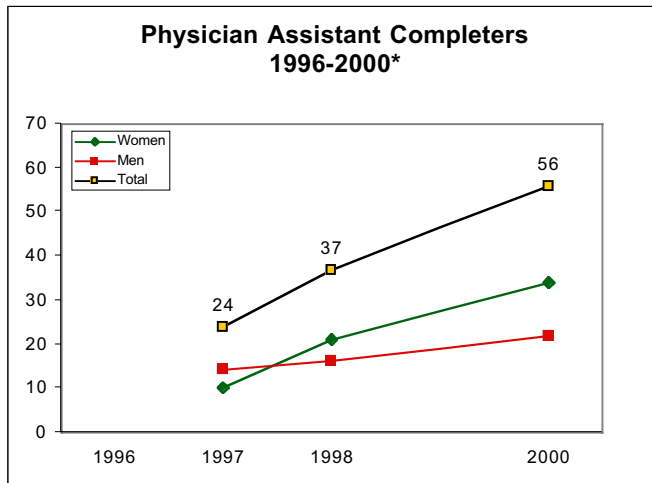
- Total annual program completions remained unchanged from 1996 to 2000.
- Completions per 100,000 population decreased by 5.0% over the same period.
- 27.3% of program completers were female in 1996 compared to 54.5% in 2000.



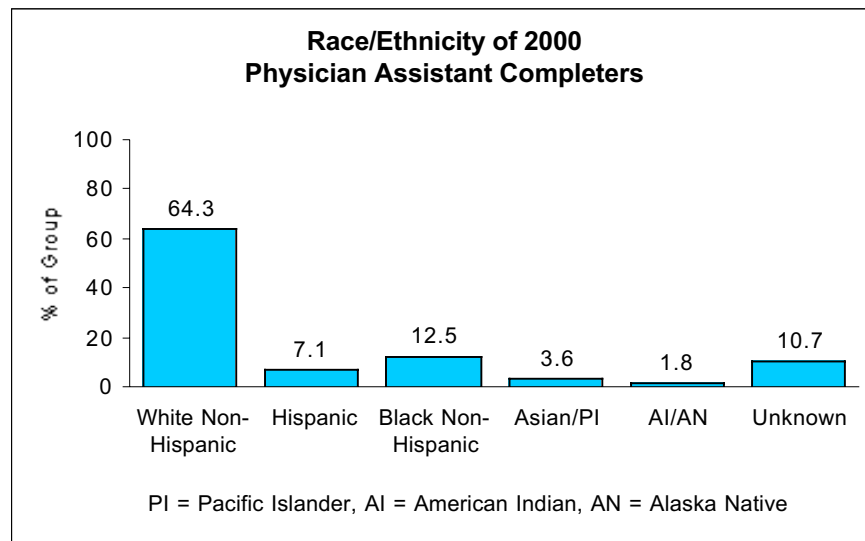
Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

Physician Assistant Program Completers



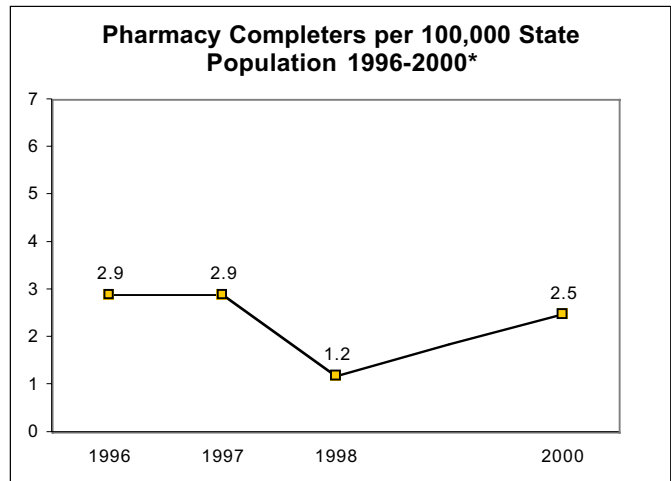
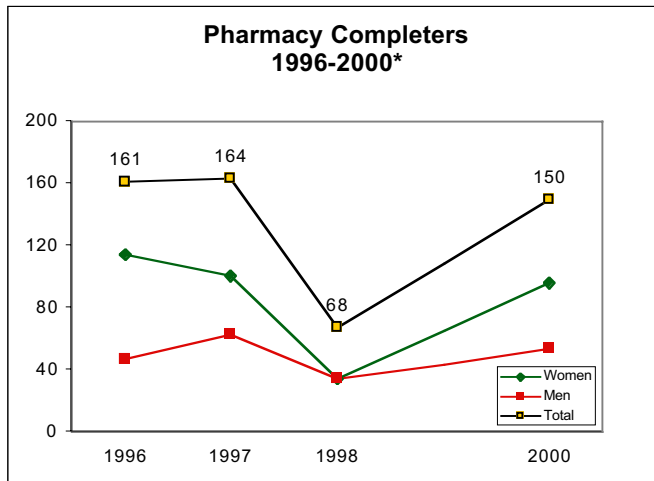
- The state has one physician assistant program at the baccalaureate level at the University of Washington (there is also a two-year certificate option). No data were reported in 1996.
- Total annual completions increased by 133% from 1997 to 2000.
- Completions per 100,000 population increased by 124% over the same time period.
- 41.7% of program completers were female in 1997 compared to 60.7% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

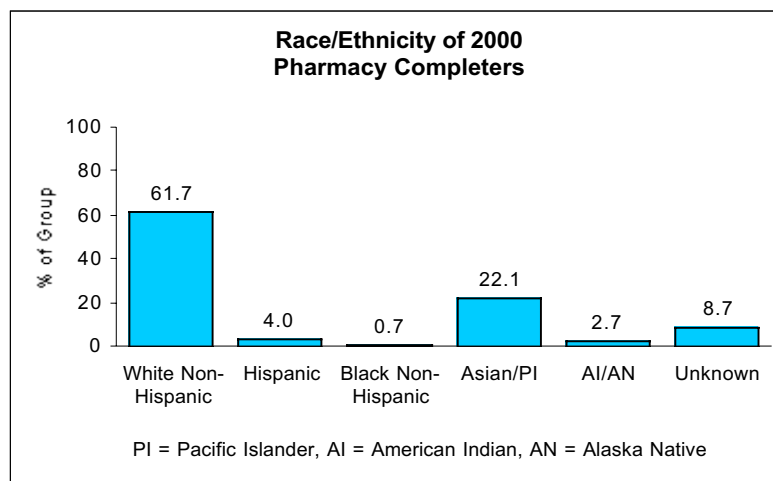
Pharmacy Program Completers



- Two universities in the state offered pharmacy programs in 2000.
- 1998 was a transition year from the three-year baccalaureate degree to the four-year Pharm.D., resulting in a temporarily low number of graduates. All post-1998 graduates receive the Pharm.D. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Baccalaureate	147	151	43	
Pharm.D.	14	13	25	150

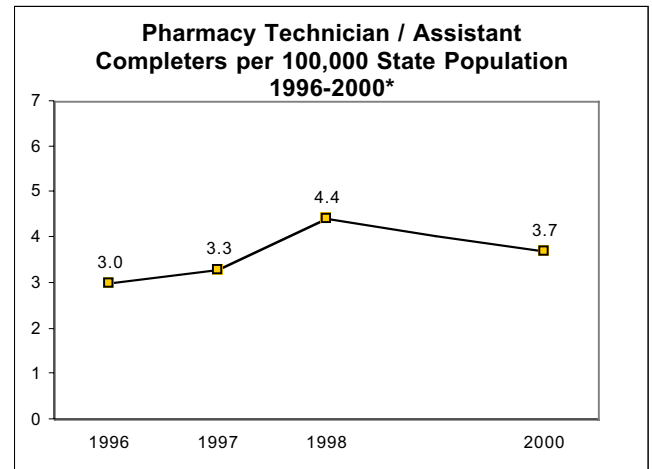
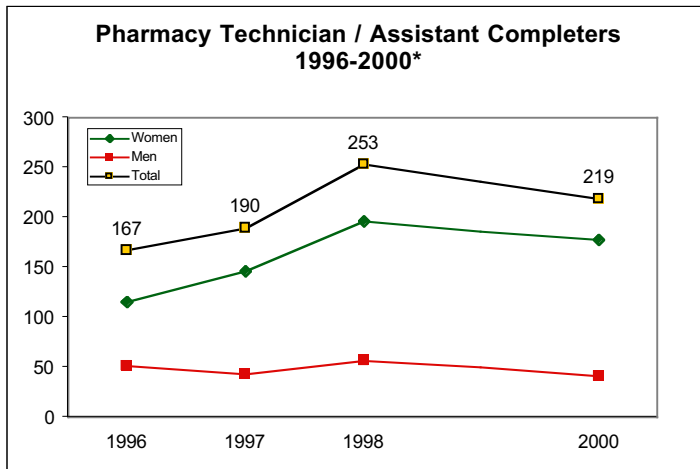
- Total annual program completions decreased by 6.8% from 1996 to 2000 (although, as described above, this decrease may not represent a long-term trend).
- Completions per 100,000 population decreased by 13.8% over the same time period.
- 70.8% of program completers were female in 1996 compared to 64.0% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
* Data not reported for 1999.

Health Professions Education in Washington State

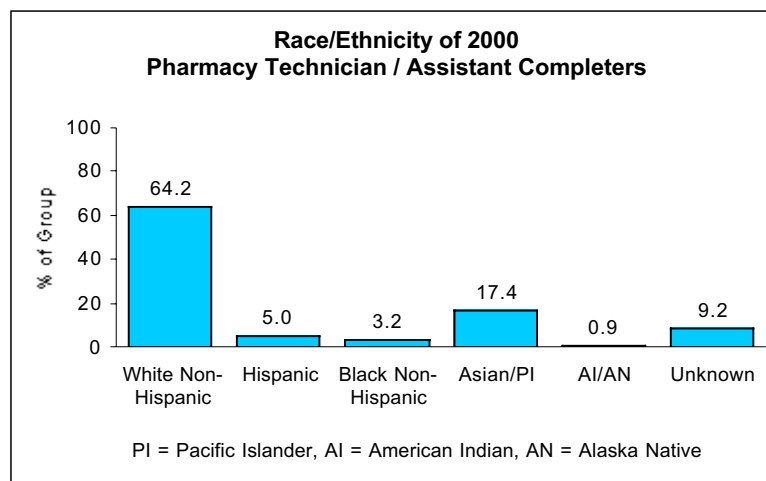
Pharmacy Technician/Assistant Program Completers



- Eleven community and technical colleges and institutes in the state offered pharmacy technician assistant programs in 2000.
- There are two types of pharmacy technician/assistant programs in Washington. The number of program completions from 1996-2000 by type of program is as follows:

Type of Program	Number of Program Completions*			
	1996	1997	1998	2000
Less than two years	165	189	248	201
Associate	2	1	5	18

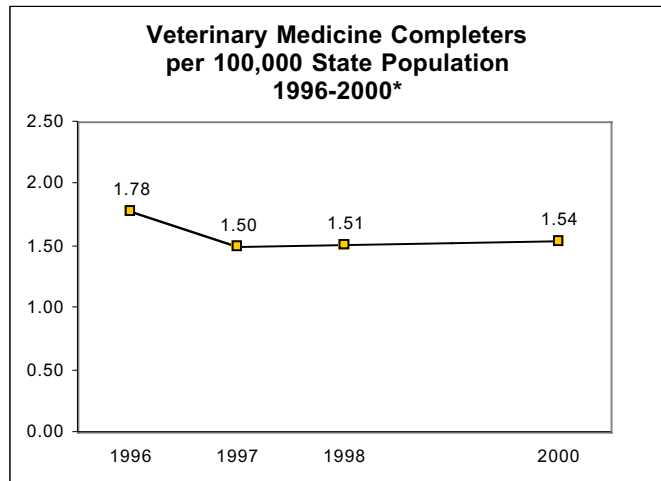
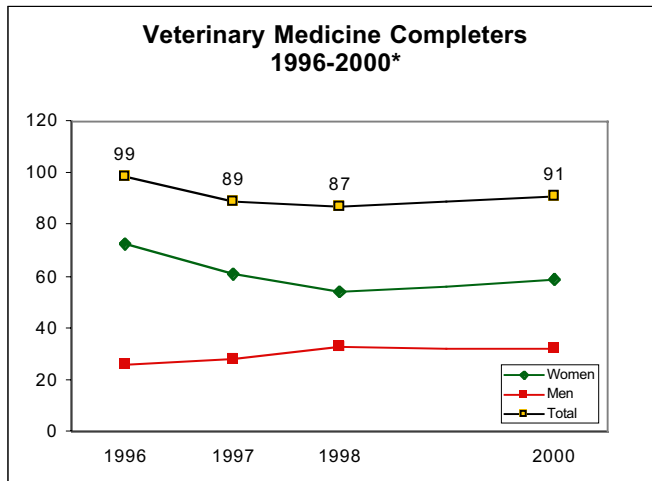
- Total annual program completions increased by 31.1% from 1996 to 2000.
- Completions per 100,000 population increased by 23.3% over the same time period.
- 68.9% of program completers were female in 1996 compared to 80.8% in 2000.



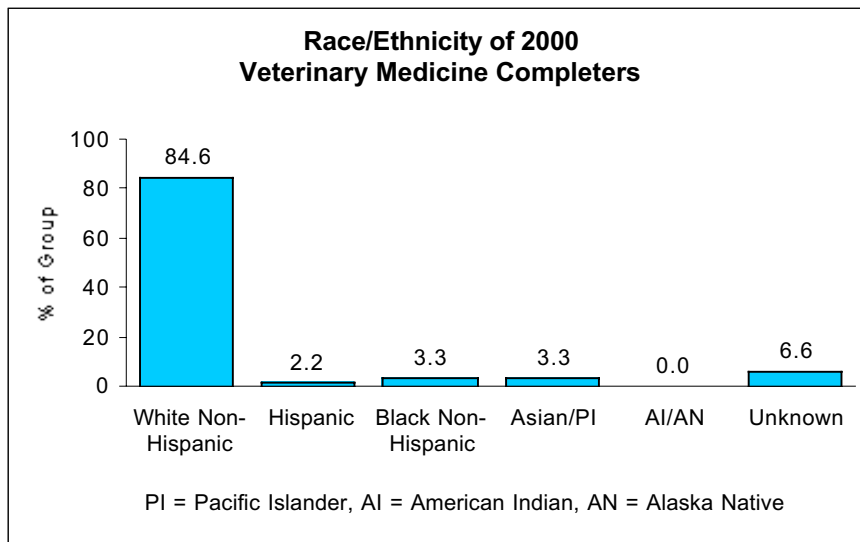
Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Health Professions Education in Washington State

Veterinary Medicine Program Completers



- The state has one veterinary school, the Washington State University College of Veterinary Medicine.
- Total annual program completions decreased by 8.1% from 1996 to 2000.
- Completions per 100,000 population decreased by 13.5% over the same time period.
- 73.7% of program completers were female in 1996 compared to 64.8% in 2000.



Data sources: National Center for Education Statistics, Integrated Postsecondary Education Data System; Bureau of the Census.
 * Data not reported for 1999.

Previous WWAMI Center for Health Workforce Studies and Rural Health Research Center Working Papers

The WWAMI Rural Health Research Center was established in 1988. The WWAMI Center for Health Workforce Studies was established in 1998.

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3. Amundson, Bruce A. and Hughes, Robert D. Are Dollars Really the Issue for the Survival of Rural Health Services? June 1989.
4. Nesbitt, Thomas S.; Rosenblatt, Roger A.; Connell, Frederick A.; and Hart, L. Gary. Access to Obstetrical Care in Rural Areas: Effect on Birth Outcomes. July 1989.
5. Schleuning, Dianne; Rice, George; and Rosenblatt, Roger A. Addressing Barriers to Rural Perinatal Care: A Case Study of the Access to Maternity Care Committee in Washington State. October 1989.
6. Rosenblatt, Roger A.; Whelan, Amanda; and Hart, L. Gary. Rural Obstetrical Access in Washington State: Have We Attained Equilibrium? January 1990.
7. Rosenblatt, Roger A.; Weitkamp, Gretchen; Lloyd, Michael; Schafer, Bruce; Winterscheid, Loren C.; Vaughn, J. Daniel; and Hart, L. Gary. Are Rural Family Physicians Less Likely to Stop Practicing Obstetrics Than Their Urban Counterparts: The Impact of Malpractice Claims. April 1990.
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9. Hart, L. Gary; Pirani, Michael; and Rosenblatt, Roger A. Causes and Consequences of Rural Small Hospital Closures from the Perspectives of Mayors. September 1990.
10. Welch, H. Gilbert; Larson, Eric H.; Hart, L. Gary; and Rosenblatt, Roger A. Readmission Following Surgery in Washington State Rural Hospitals. January 1991.
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14. Larson, Eric H.; Hart, L. Gary; and Rosenblatt, Roger A. Is Rural Residence Associated with Poor Birth Outcome? June 1991.
15. Williamson, Harold A.; Rosenblatt, Roger A.; Hart, L. Gary. Physician Staffing of Small Rural Hospital Emergency Departments: Rapid Change and Escalating Cost. September 1991.
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22. Geyman, John P.; Hart, L. Gary. Primary Care at a Crossroads: Progress, Problems and Policy Options. May 1993.

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25. Baldwin, Laura-Mae; Hart, L. Gary; West, Peter A.; Norris, Tom E.; Gore, Edmond. Two Decades of Experience in the University of Washington Family Medicine Residency Network: Practice Differences Between Graduates in Rural and Urban Locations. November 1993.
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30. Rosenblatt, Roger A.; Mattis, Rick; Hart, L. Gary. Access to Legal Abortions in Rural America: A Study of Rural Physicians in Idaho. November 1994.
31. West, Peter A.; Norris, Thomas E.; Gore, Edmond J.; Baldwin, Laura-Mae; Hart, L. Gary. The Geographic and Temporal Patterns of Residency-Trained Family Physicians: University of Washington Family Practice Residency Network. February 1995.
32. Hart, L. Gary; Dobie, Sharon A.; Baldwin, Laura-Mae; Pirani, Michael J.; Fordyce, Meredith; Rosenblatt, Roger A. Rural and Urban Differences in Physician Resource Use for Low-Risk Obstetrics. March 1995.
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35. Melzer, Sanford M.; Grossman, David C.; Hart, L. Gary; Rosenblatt, Roger A. Hospital Services for Rural Children in Washington State: Where Do They Go for Care and Who Takes Care of Them? October 1995.
36. Larson, Eric H.; Hart, L. Gary; Rosenblatt, Roger A. Is Rural Residence a Risk Factor for Poor Birth Outcome? A National Study. December 1995.
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38. Lishner, Denise M.; Richardson, Mary; Levine, Phyllis, Patrick Donald. Access to Primary Health Care Among Persons with Disabilities in Rural Areas: A Summary of the Literature. April 1996.
39. Dunbar, Peter J.; Mayer, Jonathan D.; Fordyce, Meredith A.; Lishner, Denise M.; Hagopian, Amy; Spanton, Ken; Hart, L. Gary. A Profile of Anesthesia Provision in Rural Washington and Montana. May 1996.
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53. Lishner, Denise M.; Rosenblatt, Roger A.; Baldwin, Laura-Mae; Hart, L. Gary. Emergency Department Use by the Rural Elderly. November 1998.
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