



# Data Needed to Understand Health Workforce Supply

June 6, 2012

Washington Health Personnel Shortage Task Force

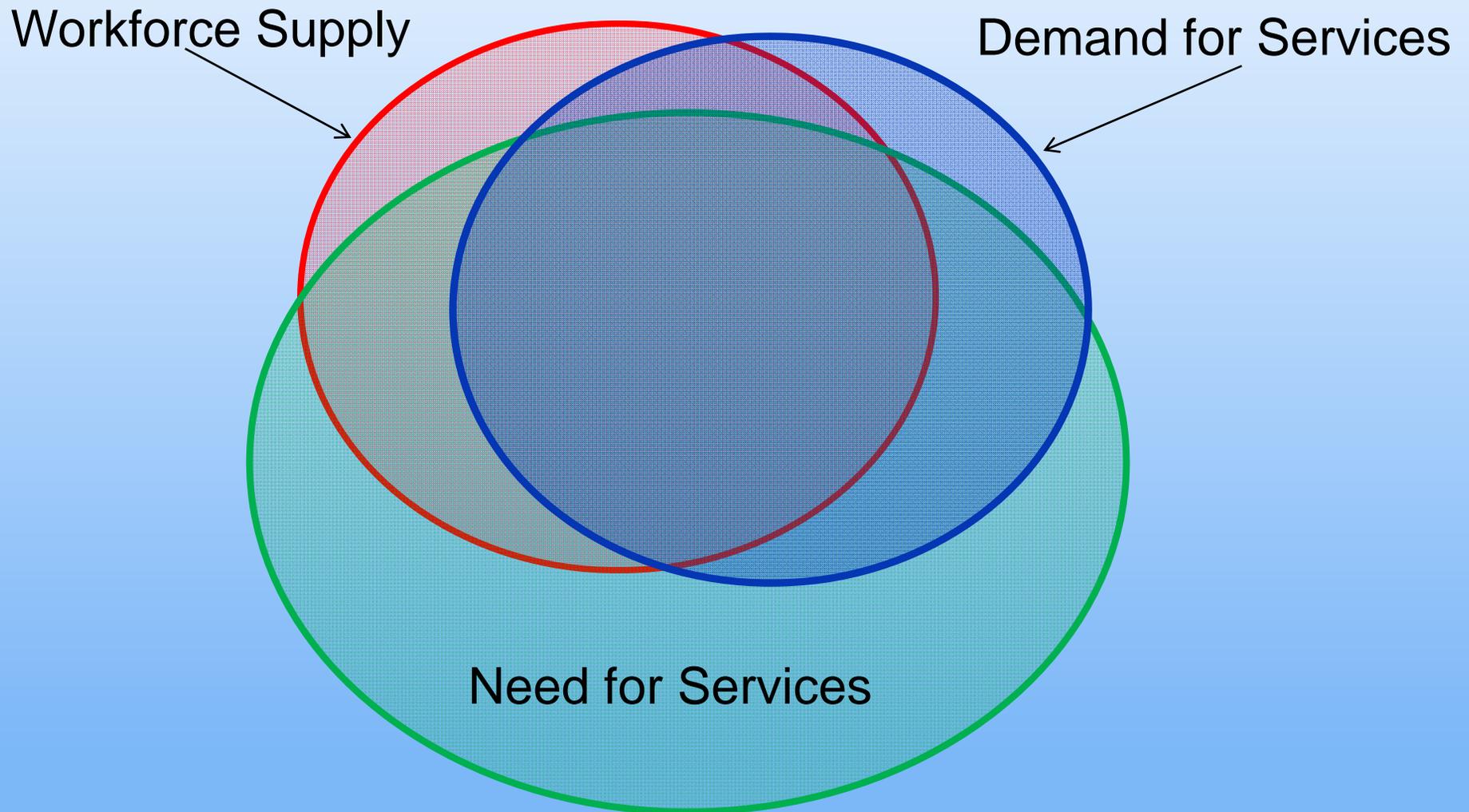
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Center for Health Workforce Research, and  
Area Health Education Center

# Health Workforce Planning

- ▣ Need to know:
  - ▣ The population's need for health care services (**NEED/REQUIREMENTS**)
  - ▣ The extent to which the population accesses health care services (**DEMAND**)
  - ▣ The supply of services available (**SUPPLY**)
  - ▣ **Changes** in above over time

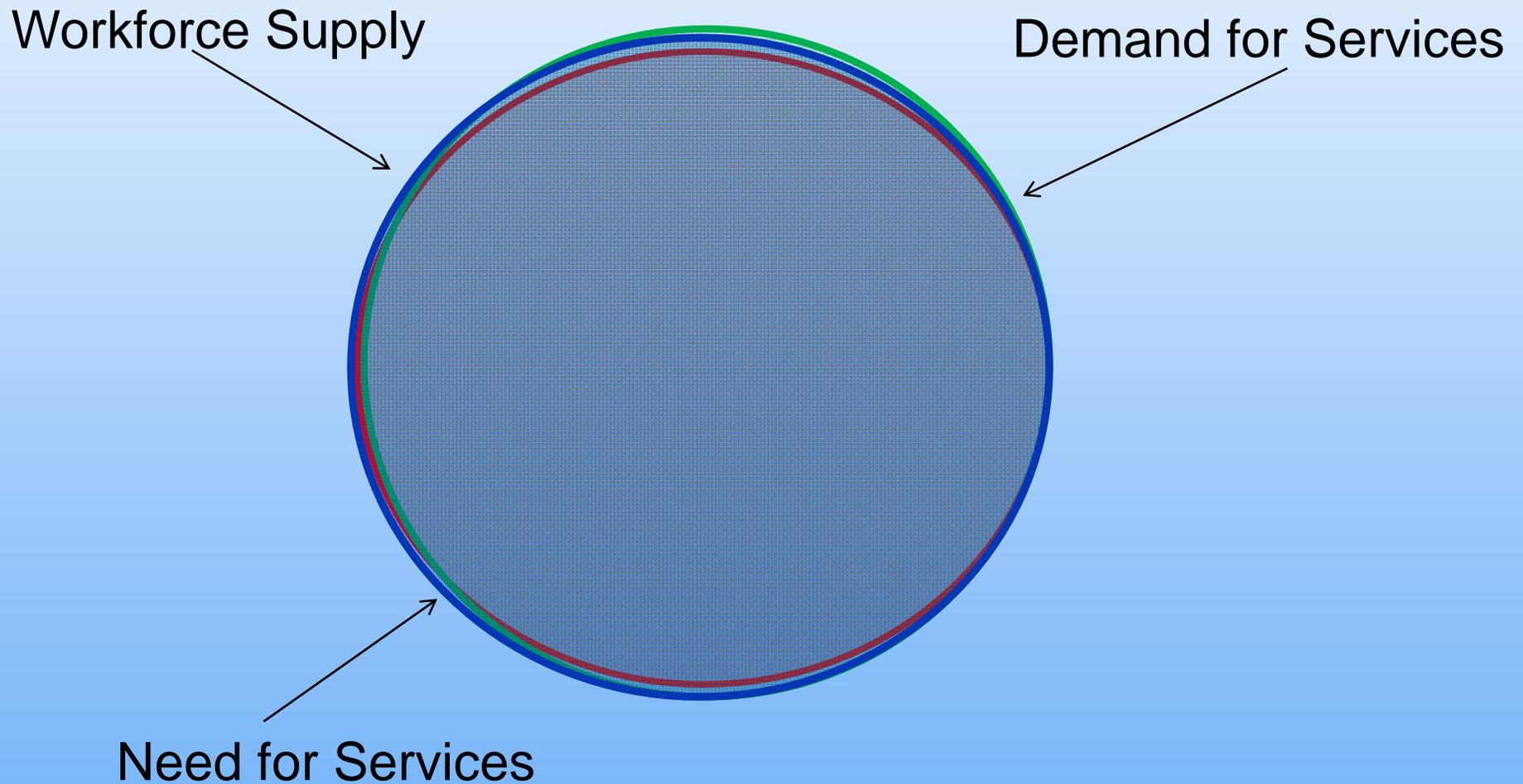
# Health Workforce

## Supply/Demand/Need: Inefficient status

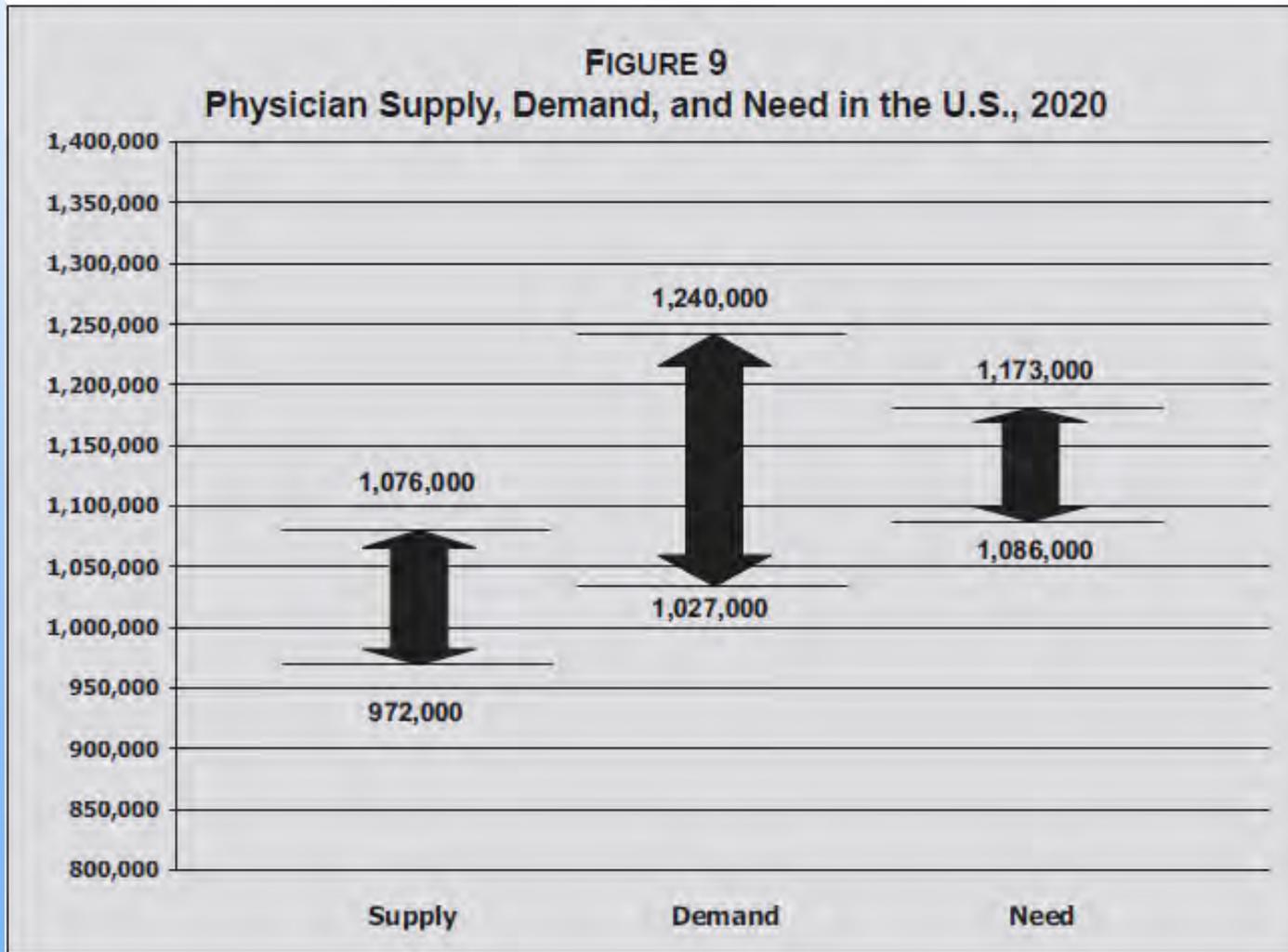


# Health Workforce

## Supply/Demand/Need: Desired Status



# U.S. Physicians: COGME 2005



From: *Sixteenth Report: Physician Workforce Policy Guidelines for the U.S., 2000-2020* (January 2005), Council on Graduate Medical Education

# Key Workforce Supply Questions

## *Information needed to plan health care in Washington State*

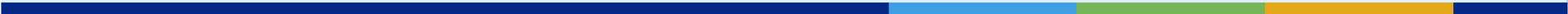
- ▣ Who is providing care?
- ▣ What are practitioners doing?
- ▣ Where are they doing it?
- ▣ Will they be there in the future?

# Sources of Data on State Health Workforce Supply

- ▣ **Health professionals state licensing and renewal data**
- ▣ **Surveys (with licensing, or independent)**
- ▣ *Education institution enrollments/completions*
- ▣ *National Provider Identifier (CMS)*
- ▣ *AMA Physician Masterfile*
- ▣ *National Sample Surveys (e.g., RNs, NPs)*
- ▣ *Bureau of Labor Statistics*
- ▣ *U.S. Census (PUMA, American Comm. Survey, etc.)*

# Currently Available from WA Health Professionals' Licenses

- ▣ Name
- ▣ Mailing address
- ▣ Gender
- ▣ Birthdate



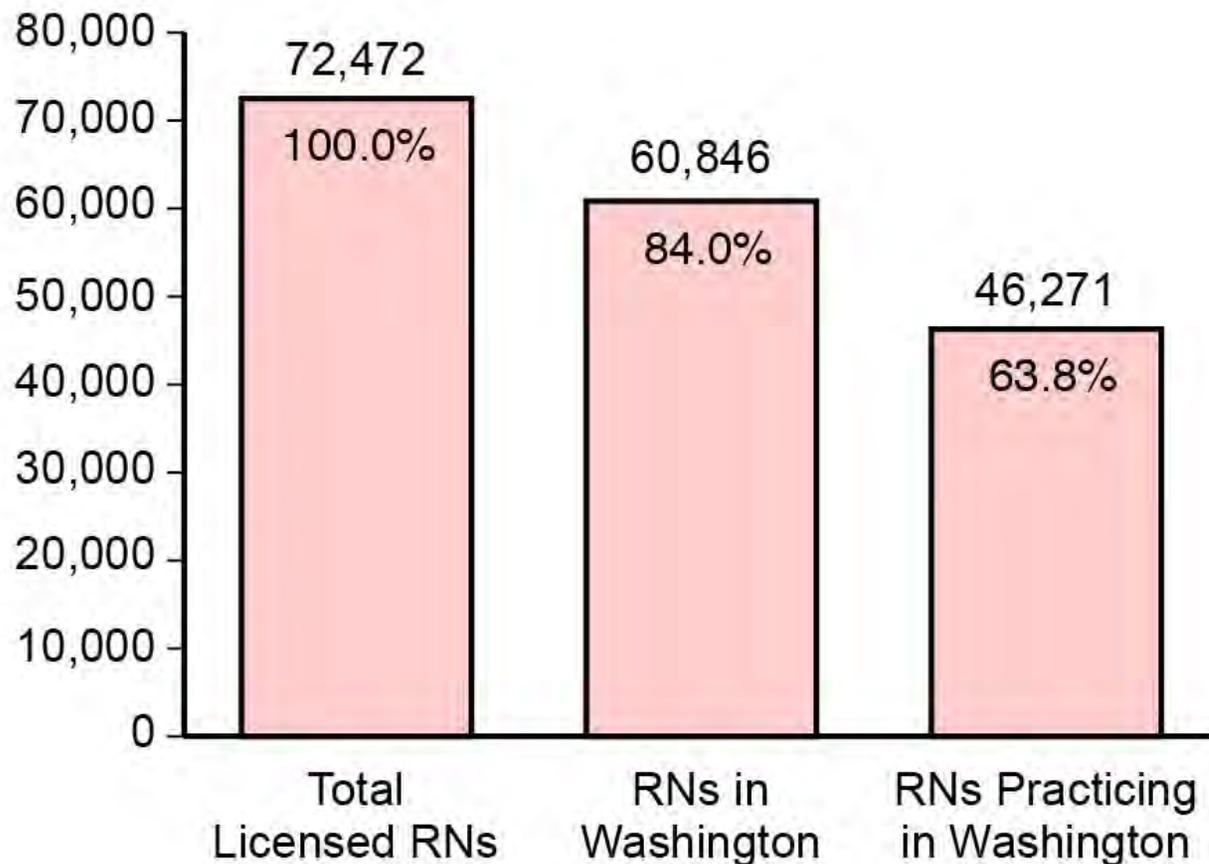
**Who is providing care?**

# Who Provides Oral Health Services in Washington (2009)? (\*based on license data)

	<b>Education</b>	<b>Credential</b>	<b>Supply size</b>
<b>Dentists</b>	4+ years post-college	License	<b>5,819 *</b>
<b>Dental hygienists</b>	2-year college, or bachelor's degree	License	<b>5,014*</b>
<b>EFDAs</b> ( <i>expanded function dental auxiliaries</i> )	EFDA certification after dental asst.	License	0 licensed, 34 pending
<b>Dental assistants</b>	Range: OTJ to bachelor's degree	Registration	9,327
<b>Denturists</b>	1-2 years (associate degree or technical program)	License	<b>138*</b>
<b>Primary care medical providers</b>	Special training needed for Medicaid reimbursement	Medical license	>1,000 physicians, PAs, APNs (<1/3 of total eligible)
<b>Supporting caregivers</b>	Short-term training or CE component	None	2,500

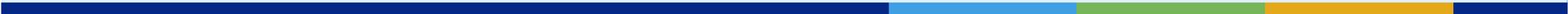
Source: Skillman SM, Andrilla CHA, Alves-Dunkerson JA, Comenduley M, Yi J, Doescher MP. *Washington State's oral health workforce*. Final Report #130. Seattle, WA: WWAMI Center for Health Workforce Studies, University of Washington; Nov 2009.

# Washington's RNs 2007: Licenses → Practicing Supply



Based on  
data from  
2007 RN survey

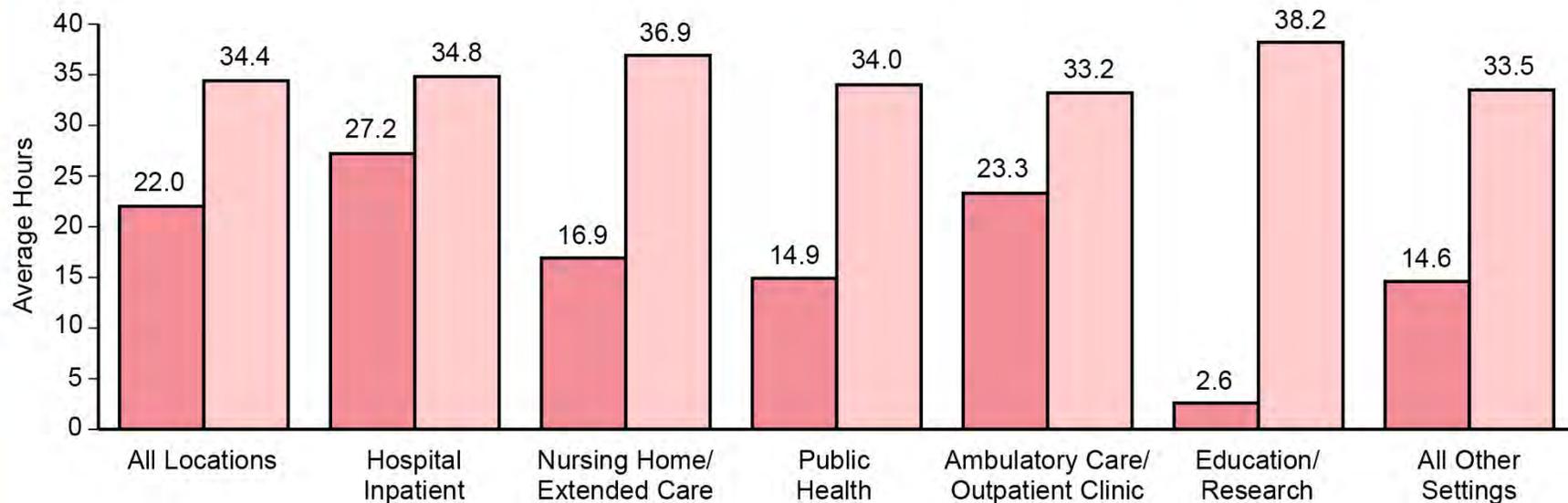
Source: Skillman SM, Andrilla CHA, Tieman L, Doescher MP. Demographic, education, and practice characteristics of registered nurses in Washington State: results of a 2007 survey. Final Report #120. Seattle, WA: WWAMI Center for Health Workforce Studies, University of Washington; Jun 2008.



**What are practitioners doing?**

# Washington RNs 2007

**Average Weekly Hours in Professional Activities of RNs Practicing in Washington, by Work Setting**



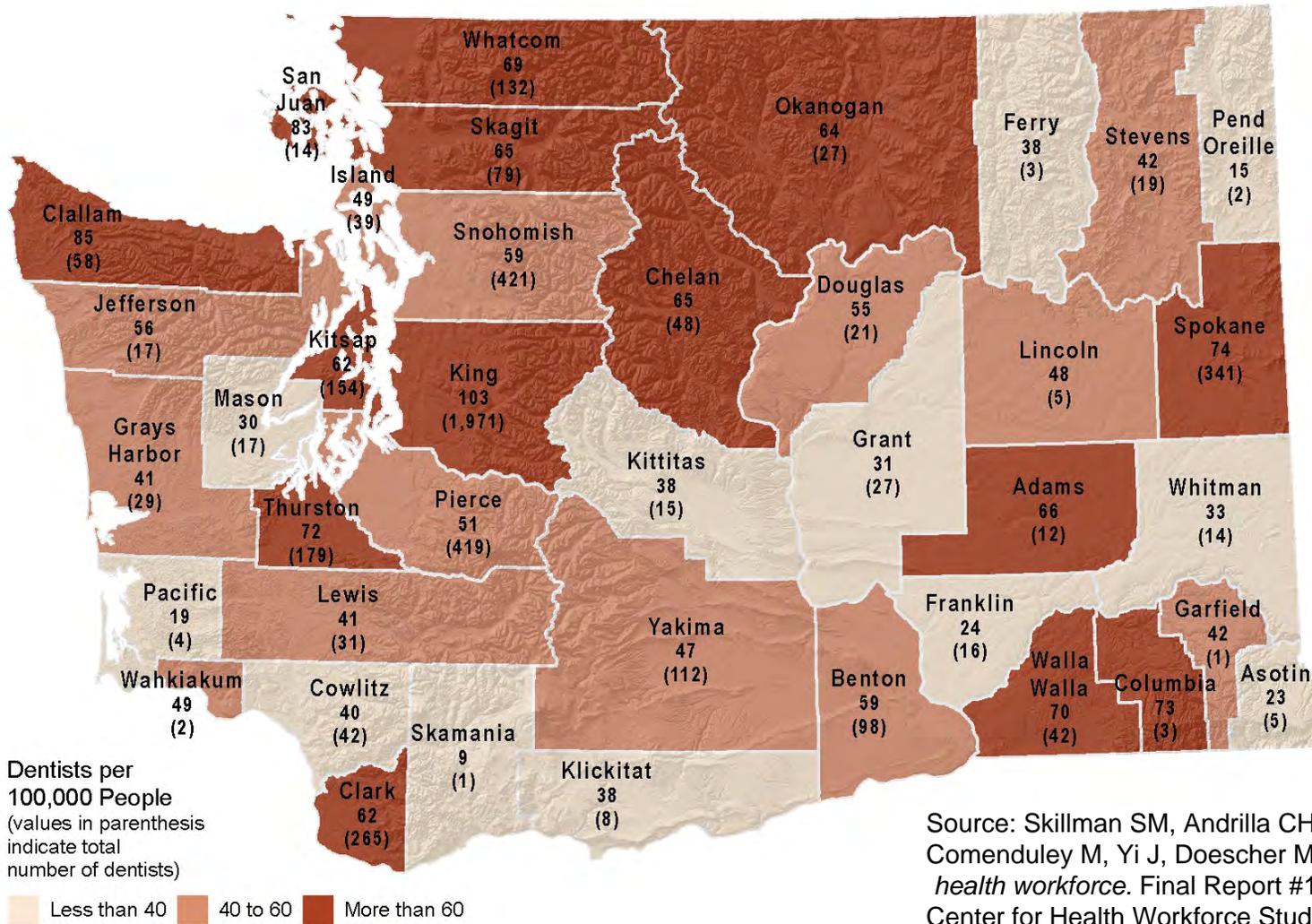
**Based on 2007 survey data**

Legend:  Direct patient care hours  Total weekly hours

Source: Skillman SM, Andrilla CHA, Tieman L, Doescher MP. Demographic, education, and practice characteristics of registered nurses in Washington State: results of a 2007 survey. Final Report #120. Seattle, WA: WWAMI Center for Health Workforce Studies, University of Washington; Jun 2008.

**Where are they doing it?**

# Distribution: Dentists per 100,000 Population and Number Licensed, 2009

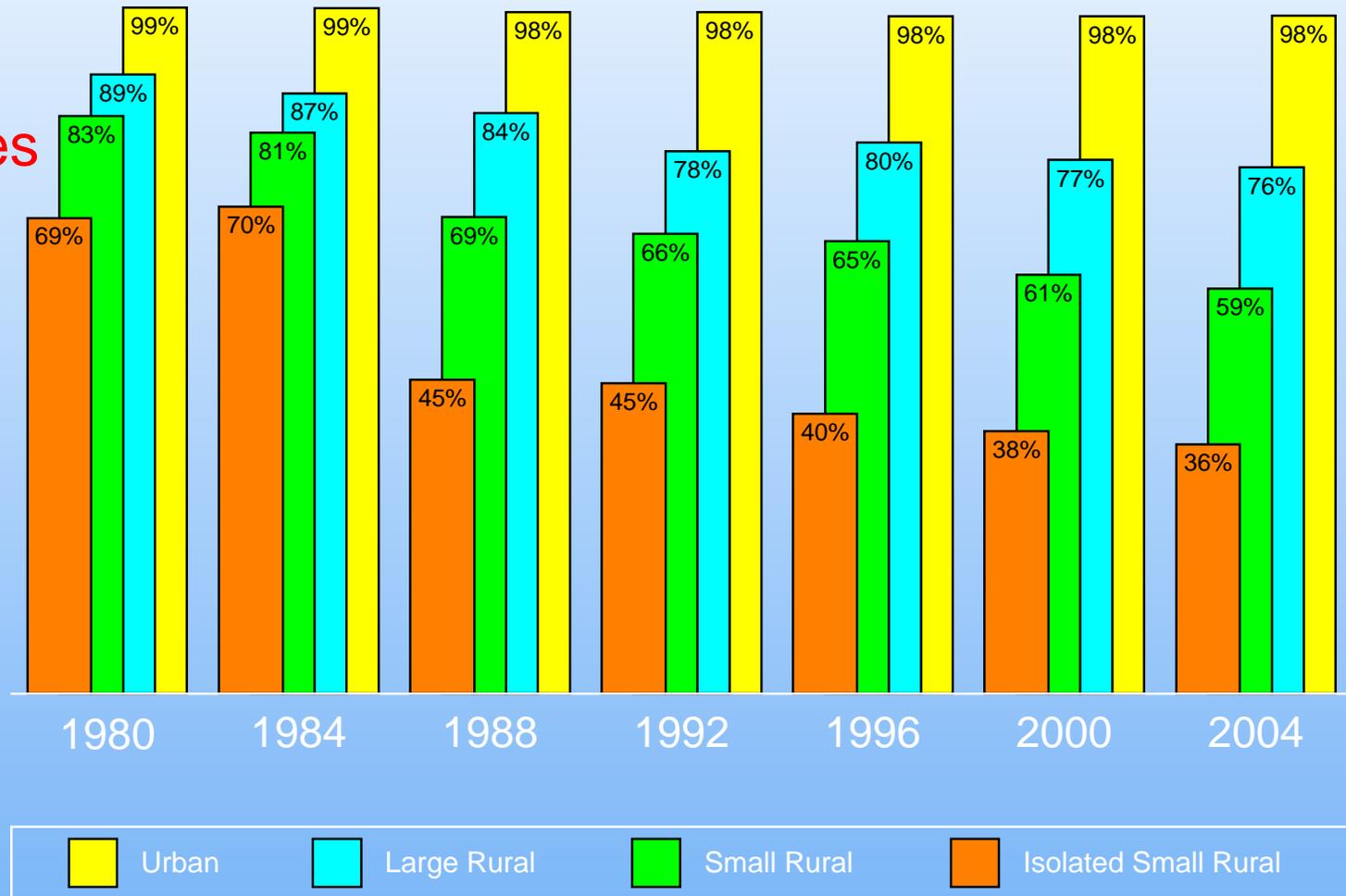


Based on license data. Is this where they are practicing?

Source: Skillman SM, Andrilla CHA, Alves-Dunkerson JA, Comenduley M, Yi J, Doescher MP. *Washington State's oral health workforce*. Final Report #130. Seattle, WA: WWAMI Center for Health Workforce Studies, University of Washington; Nov 2009.

# US RN Workforce 1980 – 2004: Working RNs Who Live and Work in the Same Area Type (NSSRN Data)

Commuting  
long distances  
to work is  
becoming  
more  
common

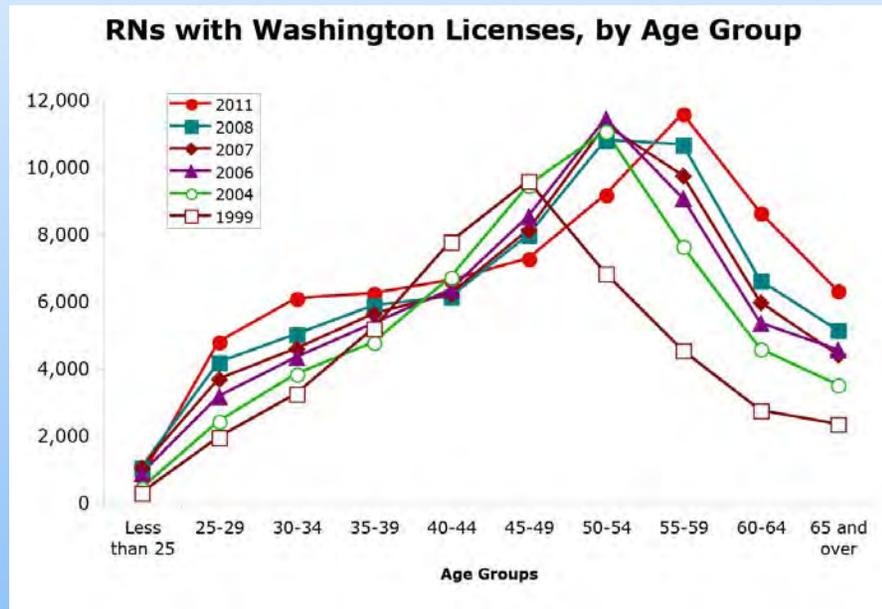


**Source:** Skillman SM, Palazzo L, Hart LG, Butterfield P. Changes in the rural registered nurse workforce from 1980 to 2004. Final Report #115. Seattle, WA: WWAMI Rural Health Research Center, University of Washington; Oct 2007

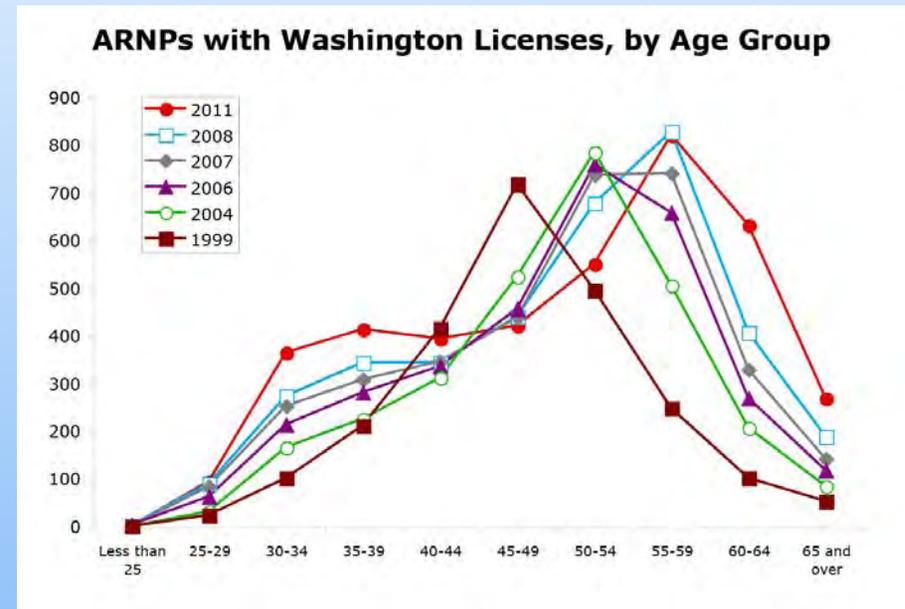
**Will they be there in the  
future?**

# Washington's Nurse Supply: Increasing Average Age – More Retirement Impact

## Registered Nurses



## Advanced Practice RNs



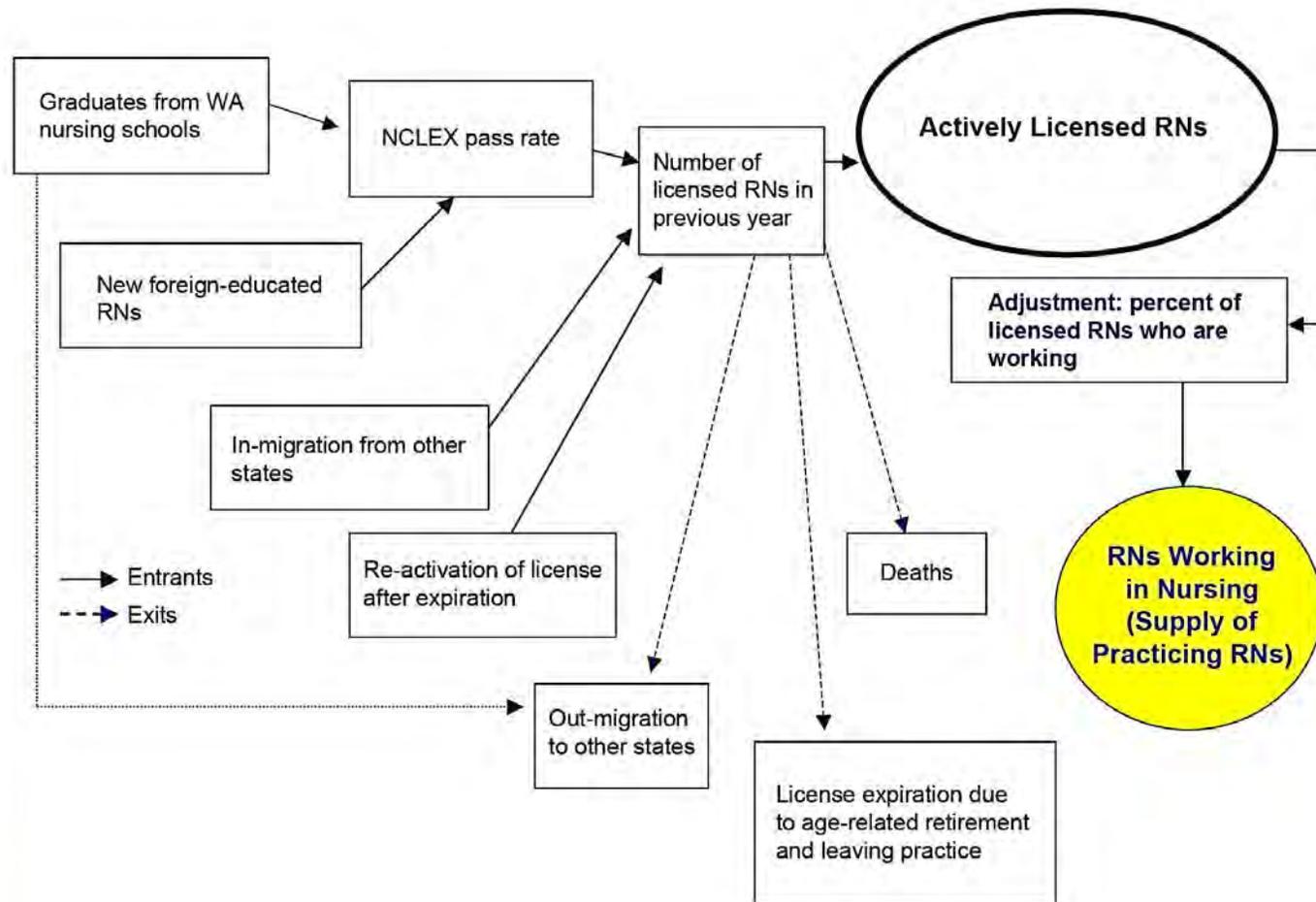
Source: Skillman SM, Andrilla CHA. Washington State data snapshot: registered nurses (RNs). Seattle, WA: WWAMI Center for Health Workforce Studies, University of Washington; Mar 2011.

Source: Skillman SM, Andrilla CHA. Washington State data snapshot: advanced registered nurse practitioners (ARNPs). Seattle, WA: WWAMI Center for Health Workforce Studies, University of Washington; Mar 2011.

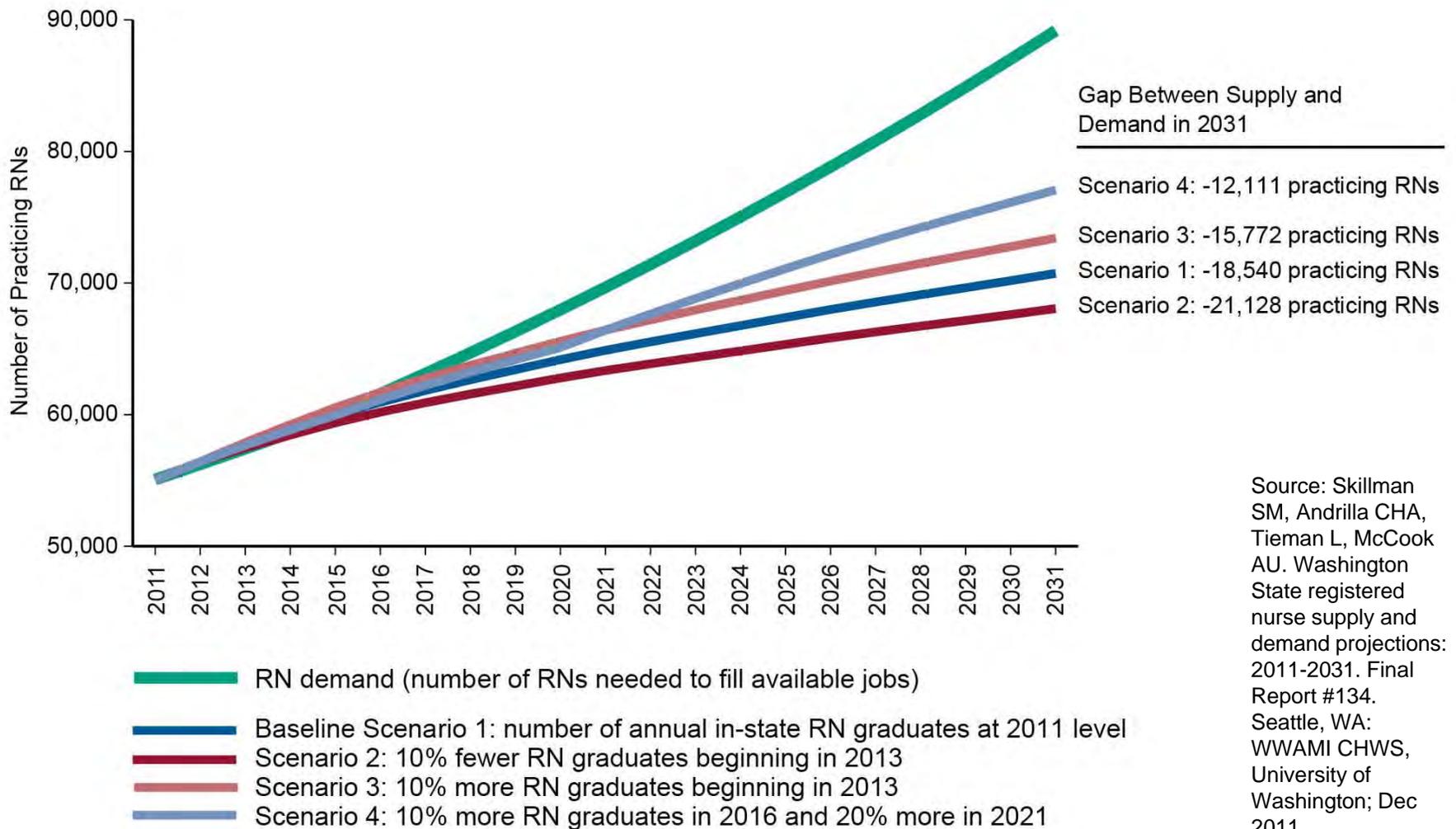
Source: Skillman SM, Andrilla CHA, Tieman L, McCook AU. Washington State registered nurse supply and demand projections: 2011-2031. Final Report #134. Seattle, WA: WWAMI CHWS, University of Washington; Dec 2011.

# Factors Affecting Supply

Conceptual Model of Factors Affecting State RN Supply in One Year



# Washington RN Supply/Demand Projections: 2011-2031



Source: Skillman SM, Andrilla CHA, Tieman L, McCook AU. Washington State registered nurse supply and demand projections: 2011-2031. Final Report #134. Seattle, WA: WWAMI CHWS, University of Washington; Dec 2011.

# Understand Workforce Supply: Data Needed to Answer Basic Questions

	Who is practicing?	What are they doing?	Where?	In the future?
Demographics:				
Name*	X			
Birthdate*				X
Gender*	X			
Address* (if location of practice)			X?	
Race/Ethnicity	X			
Language(s) spoken	X			
Education (incl. residencies, fellowships) and Certifications	X	X		
Practice data:				
Current practice (Y/N, locations)		X	X	
Specialties		X		
Hours/visits per week		X		

\*data currently collected with licensing and renewal



## Health Professions Minimum Data Set (MDS)

- Guidelines for fundamental questions
- Basic, *minimum*, consistent
- Focus on supply and distribution
- Comparable data across health professions, locations and time
- Can be asked of health professions, states, professional organizations



## MDS Professions

Physicians (allopathic,  
osteopathic)

Nurses (including  
advanced practice)

Physician assistants

Physical therapists

Pharmacists

Dentists

Dental hygienists

Psychiatrists

Psychologists

Social workers

Licensed professional  
counselors

Marriage and family  
therapists

Substance abuse  
counselors

Behavioral Health Occupations

# Much stakeholder work done....



## MDS Progress at National Level

- MDs: April FSMB vote to recommend MDS
- RNs: Collaborating with NCSBN
- PAs: MDS questions in Professional Profile
- Pharmacy: Summer 2012 refinement and implementation of MDS
- PTs, DDS, DH: Determining interest and current status at state level



## MDS Progress at State Level

- DC: Development of Physician Profile
- MA: MDS for seven professions
- NV: MDS Development Project
- PA: MDS for nursing, with more to come
- VA: 14 surveys being developed or standardized

# Conclusions

- Having useful state and sub-state data on the health workforce is needed to address key health care planning questions
- The federal Minimum Data Set (MDS) initiative should be assessed for possible adoption in Washington
  - State-Federal partnership increases ability to compare WA with other states and the nation
  - Benefits from stakeholder input nationally and from other states

# For More Information

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- <http://depts.washington.edu/uwchws/>

- <http://depts.washington.edu/uwrhrc/>

- Christina Hosenfield and Ed Salsberg (info about MDS)

HRSA National Center for Health Workforce Analysis

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301-443-9257

- <http://bhpr.hrsa.gov/healthworkforce/index.html>