

Provider Need and Shortage Analysis

Lake County

Community Health Improvement Partnership

August, 2013



Introduction



- Access and Provider Productivity
 - How many hours per week
 - How many patients per year
 - How long does it take to get an appointment
 - Payer Mix

- Surplus or Shortage
 - Population based supply model
 - How many providers are currently practicing, how many appointments are they/should they be supplying
 - How many providers are needed to meet population's demand

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Provider Hours and Visits

Lakeview Service Area - Primary Care

- Average Hours per Week 32
- Average Annual Office Visits 3552

North Lake Service Area - Primary Care

- Average Hours per Week 40 / two weeks
- Average Annual Office Visits 2700

Oregon Average – Primary Care¹

- Average Hours per Week 33.73
- Average Annual Office Visits 3,585

National Average – Primary Care

- Average Hours per Week² 35.5
- Average Annual Office Visits³ 3,521

¹ Oregon Medical Association Preliminary Report of The 2003 Physician Workforce Assessment, *Oregon Medical Association House of Delegates Executive Committee Report F*, April, 2003
² Wassenarr, PhD, John D; Thran, Sara L.; ed. (2003) "Table 14: Office Visits per Week, 2001" Physician Socioeconomic Statistics, 2003 Edition. American Medical Association, 49.
³ Hing E, Schappert SM. Generalist and specialty physicians: Supply and access, 2009-2010. NCHS data brief, no 105. Hyattsville, MD: National Center for Health Statistics. 2012.

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Wait in Days to get an Appointment

Lakeview Service Area:

- Existing Patients..... 19 Days
 - Range – 5 to 60 days
- New Patients..... 26 Days
 - Range – 14 to 60 days
- Emergency..... Same Day
 - Range – 0 to 1 days

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Wait in Days to get an Appointment



North Lake Service Area:

- Existing Patients..... 4 Days
 - Range – 1 to 7 days
- New Patients..... 7 Days
 - Range – 7 to 7 days
- Emergency..... Same Day
 - Range – 0 to 1 days

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Time for Provider Appointments in Days: State of Oregon

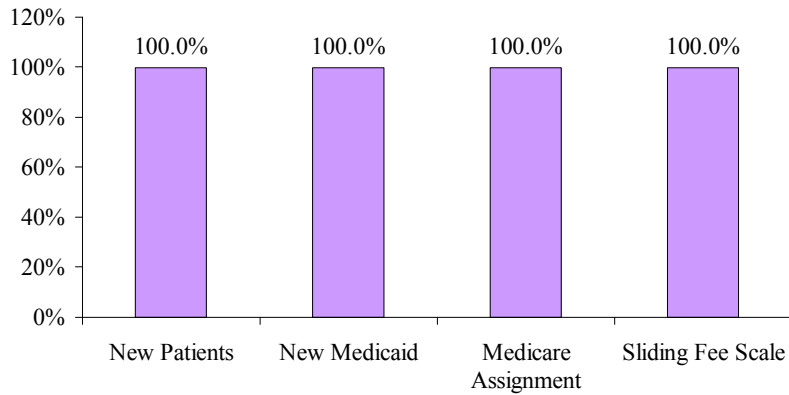


- Existing Patients.....11.17 Days
 - Range >30 days to 1 day
- New Patients.....19.58 Days
 - Range >30 days to 1 day

Oregon Medical Association Preliminary Report of The 2003 Physician Workforce Assessment, Oregon Medical Association House of Delegates Executive Committee Report F, April, 2003

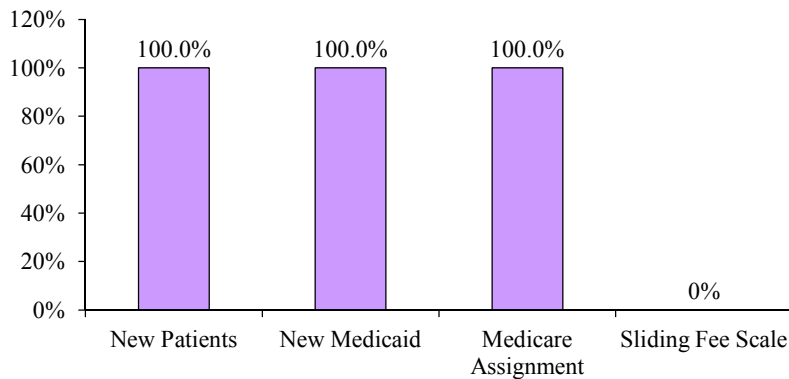
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Percentage of Lakeview Providers Accepting the Following Payment Methods



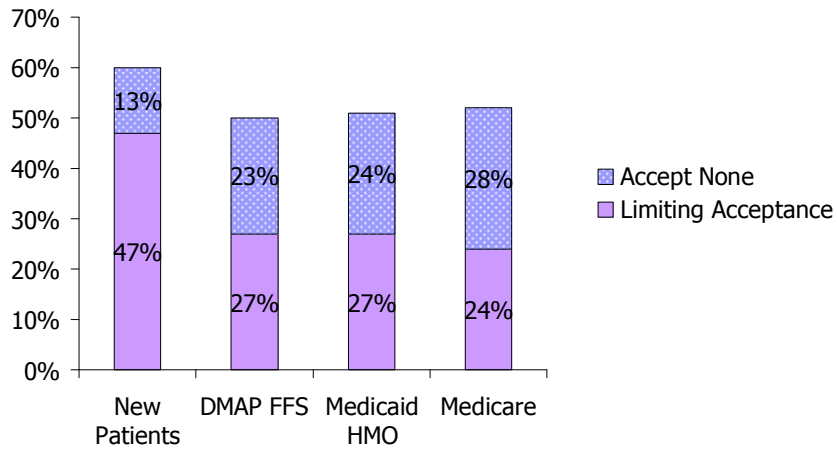
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Percentage of North Lake Providers Accepting the Following Payment Methods



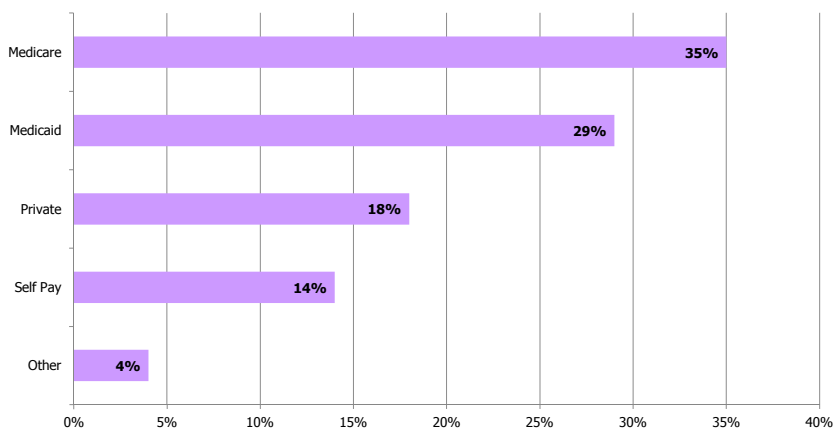
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Oregon Primary Care Providers Accepting the Following:



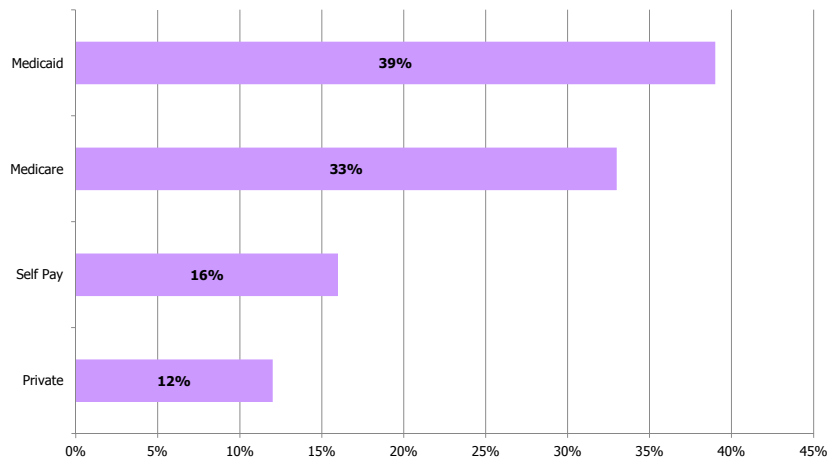
Oregon Medical Association Preliminary Report of The 2003 Physician Workforce Assessment, Oregon Medical Association House of Delegates Executive Committee Report F, April, 2003
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Payers by Percentage for Lakeview Service Area Primary Care Providers



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Payers by Percentage for North Lake Service Area Primary Care Providers



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Payers Compared to National Data



<u>Lakeview</u>		<u>North Lake</u>		<u>National Data</u>	
■ Private	18%	■ Private	12%	■ Private	61%
■ Medicare	35%	■ Medicare	33%	■ Medicare	17%
■ Medicaid	29%	■ Medicaid	39%	■ Medicaid	13%
■ Self Pay	14%	■ Self Pay	12%	■ Self Pay	4%
■ Others	4%			■ Others	5%

Hing E, Uddin S. Visits to primary care delivery sites: United States, 2008. NCHS data brief, no 47. Hyattsville, MD: National Center for Health Statistics. 2010.

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Provider Need and Shortage Analysis

- Population Based Method – How Many Providers are Needed for the Current Population
 - Use current population
 - Need Ratios based on providers per 1000 people
 - Estimates of providers needed based on the service area population multiplied by the need ratios
 - Shortage(Surplus) calculated as needed supply estimates minus current physician supply
 - Need Ratios broken out by specialty
 - Only looks at number of providers, does not consider how many visits are being supplied or demand for visits based on population age

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Lake County Area Population

- Lakeview Service Area: 5,848
- North Lake Service Area: 2,071

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Sources of Physician per 1,000 Population Need Ratios



- Sources of Physician Need Ratios come from Medicus Partners as of June 1, 2002. This information is based upon 10 different sources.
 - GMENAC (Graduate Medical Education National Advisory Committee)
 - Health Manpower Report (Amended Figures)
 - Medical Economics
 - Inforum
 - Current National Ratio
 - AMA
 - Mulhausen Staff Model HMO
 - Journal of American Medicine
 - Hicks & Glenn
 - Average (discard high & low number and average remainder)
- Numbers assume local use, there may/will be out-migration for services
- Ratios are Useful to Get Estimate of Provider Need

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Lakeview Service Area	Population: 5,848	Current Average	Local FTE	Difference Compared to Current Average
<i>Primary Care</i>	Family Practice	1.42	4.00	2.58
	Internal Medicine	1.20		-1.20
	Pediatrics	0.63		-0.63
	OB/GYN	0.60		-0.60
	TOTAL Primary Care	3.85	4.00	0.15
<i>Medical Specialties</i>	Allergy	0.06		-0.06
	Cardiology	0.18		-0.18
	Dermatology	0.12		-0.12
	Nephrology	0.06		-0.06
	Neurology	0.13		-0.13
	Oncology	0.17		-0.17
	Physical Medicine	0.08		-0.08
	Psychiatry	0.58		-0.58
	Pulmonary Medicine	0.08		-0.08
TOTAL Medical	1.46	0.00	-1.46	
<i>Surgical Specialties</i>	Gastroenterology	0.12		-0.12
	General Surgery	0.49	1.00	0.51
	Neurosurgery	0.07		-0.07
	Ophthalmology	0.27		-0.27
	Orthopedic Surgery	0.37		-0.37
	Otolaryngology	0.15		-0.15
	Plastic Surgery	0.06		-0.06
	Thoracic Surgery	0.05		-0.05
	Urology	0.16		-0.16
TOTAL Surgical	1.73	1.00	-0.73	
<i>Hospital Based Specialties</i>	Anesthesiology	0.38		-0.38
	Emergency Medicine	0.23		-0.23
	Pathology	0.29		-0.29
	Radiology	0.33		-0.33
TOTAL Hospital-Based	1.23	0.00	-1.23	

North Lake Service Area		Population: 2,071	Current Average	Local FTE	Difference Compared to Current Average
Primary Care	Family Practice		0.50		-0.50
	Internal Medicine		0.42		-0.42
	Pediatrics		0.22		-0.22
	OB/GYN		0.21		-0.21
	TOTAL Primary Care		1.36	0.00	-1.36
Medical Specialties	Allergy		0.02		-0.02
	Cardiology		0.06		-0.06
	Dermatology		0.04		-0.04
	Nephrology		0.02		-0.02
	Neurology		0.05		-0.05
	Oncology		0.06		-0.06
	Physical Medicine		0.03		-0.03
	Psychiatry		0.21		-0.21
	Pulmonary Medicine		0.03		-0.03
TOTAL Medical		0.52	0.00	-0.52	
Surgical Specialties	Gastroenterology		0.04		-0.04
	General Surgery		0.17		-0.17
	Neurosurgery		0.02		-0.02
	Ophthalmology		0.10		-0.10
	Orthopedic Surgery		0.13		-0.13
	Otolaryngology		0.05		-0.05
	Plastic Surgery		0.02		-0.02
	Thoracic Surgery		0.02		-0.02
	Urology		0.06		-0.06
TOTAL Surgical		0.61	0.00	-0.61	
Hospital Based Specialties	Anesthesiology		0.13		-0.13
	Emergency Medicine		0.08		-0.08
	Pathology		0.10		-0.10
	Radiology		0.12		-0.12
TOTAL Hospital-Based		0.43	0.00	-0.43	

Primary Care Shortage in Grant County Service Area by Population Ratio Method



	Current Supply / Local FTE	Current Need	Surplus or (Shortage)
Lakeview	4	3.85	.15
North Lake	0.0	1.36	(1.36)

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Office Visit Methodology

- Number of provider office visits is the key factor for this method (supply)
- Also use national production averages to estimate total potential office visits (supply)
- Use age-adjusted population numbers to estimate how many visits are needed (demand)
- Compare both actual and potential office visit supply to population based demand to determine shortage or surplus

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COMMUNITY HEALTH IMPROVEMENT PARTNERSHIP
Estimates of Physician Visits Needed by Population and by Physician Specialty
 Lakeview Service Area

Age	Population		# of Visits per Person	Total Visits		Primary Care Adjuster	Primary Care Visits	Distribution by Specialty		
MALES										
<15	455	x	2.9	1320	x	60%	792	Family Practice	5,460	22.9%
15-24	344	x	1.4	482	x	60%	289	Internal Medicine	3,457	14.5%
25-44	546	x	1.6	874	x	60%	524	Pediatrics	3,147	13.2%
45-64	859	x	3.2	2749	x	60%	1649	OB/GYN	1,788	7.5%
65-74	315	x	6.6	2079	x	60%	1247	Ophthalmology	1,407	5.9%
>75	344	x	8.0	2752	x	60%	1651	Orthopedics	1,240	5.2%
								Cardiology	1,073	4.5%
								Dermatology	787	3.3%
FEMALES										
<15	411	x	2.7	1110	x	60%	666	Psychiatry	787	3.3%
15-24	276	x	2.5	690	x	60%	414	Urology	477	2.0%
25-44	529	x	3.3	1746	x	60%	1047	Otolaryngology	477	2.0%
45-64	914	x	4.3	3930	x	60%	2358	Oncology	453	1.9%
65-74	356	x	6.8	2421	x	60%	1452	General Surg	429	1.8%
>75	499	x	7.4	3693	x	60%	2216	Neurology	381	1.6%
								All Others	2,527	10.6%
TOTALS	5,848			23,844			14,306			100.2%

National Ambulatory Medical Care Survey: 2007 Summary, National Health Statistics Reports No. 27, Nov 3, 2010

COMMUNITY HEALTH IMPROVEMENT PARTNERSHIP
Estimates of Physician Visits Needed by Population and by Physician Specialty

Lakeview Service Area

Age	Population		# of Visits per Person	Total Visits	Primary Care Adjuster	Primary Care Visits	Distribution by Specialty			
MALES										
<15	455	x	2.9	1320	x	80%	1056	Family Practice	5,460	22.9%
15-24	344	x	1.4	482	x	80%	385	Internal Medicine	3,457	14.5%
25-44	546	x	1.6	874	x	80%	699	Pediatrics	3,147	13.2%
45-64	859	x	3.2	2749	x	80%	2199	OB/GYN	1,788	7.5%
65-74	315	x	6.6	2079	x	80%	1663	Ophthalmology	1,407	5.9%
>75	344	x	8.0	2752	x	80%	2202	Orthopedics	1,240	5.2%
								Cardiology	1,073	4.5%
								Dermatology	787	3.3%
								Psychiatry	787	3.3%
								Urology	477	2.0%
								Otolaryngology	477	2.0%
								Oncology	453	1.9%
								General Surg	429	1.8%
								Neurology	381	1.6%
								All Others	2,527	10.6%
TOTALS	5,848			23,844			19,075			100.2%

National Ambulatory Medical Care Survey: 2007 Summary, National Health Statistics Reports No. 27, Nov 3, 2010

COMMUNITY HEALTH IMPROVEMENT PARTNERSHIP
Estimates of Physician Visits Needed by Population and by Physician Specialty

North Lake Service Area

Age	Population		# of Visits per Person	Total Visits	Primary Care Adjuster	Primary Care Visits	Distribution by Specialty			
MALES										
<15	191	x	2.9	554	x	60%	332	Family Practice	1,769	22.9%
15-24	122	x	1.4	171	x	60%	102	Internal Medicine	1,120	14.5%
25-44	202	x	1.6	323	x	60%	194	Pediatrics	1,020	13.2%
45-64	345	x	3.2	1104	x	60%	662	OB/GYN	579	7.5%
65-74	126	x	6.6	832	x	60%	499	Ophthalmology	456	5.9%
>75	76	x	8.0	608	x	60%	365	Orthopedics	402	5.2%
								Cardiology	348	4.5%
								Dermatology	255	3.3%
								Psychiatry	255	3.3%
								Urology	155	2.0%
								Otolaryngology	155	2.0%
								Oncology	147	1.9%
								General Surg	139	1.8%
								Neurology	124	1.6%
								All Others	819	10.6%
TOTALS	2,071			7,726			4,635			100.2%

National Ambulatory Medical Care Survey: 2007 Summary, National Health Statistics Reports No. 27, Nov 3, 2010

COMMUNITY HEALTH IMPROVEMENT PARTNERSHIP
Estimates of Physician Visits Needed by Population and by Physician Specialty
 North Lake Service Area

Age	Population		# of Visits per Person	Total Visits		Primary Care Adjuster	Primary Care Visits	Distribution by Specialty		
MALES										
<15	191	x	2.9	554	x	80%	443	Family Practice	1,769	22.9%
15-24	122	x	1.4	171	x	80%	137	Internal Medicine	1,120	14.5%
25-44	202	x	1.6	323	x	80%	259	Pediatrics	1,020	13.2%
45-64	345	x	3.2	1104	x	80%	883	OB/GYN	579	7.5%
65-74	126	x	6.6	832	x	80%	665	Ophthalmology	456	5.9%
>75	76	x	8.0	608	x	80%	486	Orthopedics	402	5.2%
								Cardiology	348	4.5%
								Dermatology	255	3.3%
FEMALES										
<15	196	x	2.7	529	x	80%	423	Psychiatry	255	3.3%
15-24	104	x	2.5	260	x	80%	208	Urology	155	2.0%
25-44	205	x	3.3	677	x	80%	541	Otolaryngology	155	2.0%
45-64	321	x	4.3	1380	x	80%	1104	Oncology	147	1.9%
65-74	110	x	6.8	748	x	80%	598	General Surg	139	1.8%
>75	73	x	7.4	540	x	80%	432	Neurology	124	1.6%
								All Others	819	10.6%
TOTALS	2,071			7,726			6,181			100.2%

National Ambulatory Medical Care Survey: 2007 Summary, National Health Statistics Reports No. 27, Nov 3, 2010

Service Area Demand



■ Primary Care

- Lakeview Service Area Demand 19,075
- North Lake Service Area Demand 4,635

■ All Provider Types

- Lakeview Service Area Demand 23,844
- North Lake Service Area Demand 7,726

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Total Number of Reported Office Visits
Supplied Annually:



Lakeview Service Area:

■ Primary Care 17,760

North Lake Service Area:

■ Primary Care 5,400

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Reported Annual Supply vs. Demand
Primary Care



	Reported Supply	Population Demand	Surplus or (Shortage)
Lakeview Service Area	17,760	19,075	(1,315)
North Lake Service Area	5,400	6,181	(781)

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Lakeview Primary Care Provider Supply



Office Visits Accommodated by Local Primary Care Practitioners

Lakeview Service Area

Type of Provider	Number of this Type of Provider in Your Service Area	Multiply By	Patient Visits per Year ^{1,2}	TOTAL Potential Office Visits
Family Physician	4	X	3,254	13,016
Internal Medicine	0	X	2,663	-
Pediatrician	0	X	3,460	-
OB / GYN	0	X	2,723	-
Physician Assistant/ Nurse Practitioner	1	X	2,550	2,550
Total Primary Care Capacity				15,566

¹Hing E, Burt CW. Characteristics of office-based physicians and their practices: United States, 2003-04. Series 13, No. 164. Hyattsville, MD: National Center for Health Statistics. 2007.

²The average of the the figures derived by CMS (Centers for Medicare and Medicaid Services [formerly HCFA]): Form HCFA-222-92, "Visits and Overhead Cost for RHC/FQHC," Worksheet B--and a study done by the Idaho Rural Health Education Center: Pryzbilla, J. (1996). A Step-by-Step Training Guide to Primary Care Provider Recruitment and Retention, 22-23.

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North Lake Primary Care Provider Supply



Office Visits Accommodated by Local Primary Care Practitioners

North Lake Service Area

Type of Provider	Number of this Type of Provider in Your Service Area	Multiply By	Patient Visits per Year ^{1,2}	TOTAL Potential Office Visits
Family Physician	0	X	3,254	0
Internal Medicine	0	X	2,663	-
Pediatrician	0	X	3,460	-
OB / GYN	0	X	2,723	-
Physician Assistant/ Nurse Practitioner	1	X	2,550	2,550
Total Primary Care Capacity				2,550

¹Hing E, Burt CW. Characteristics of office-based physicians and their practices: United States, 2003-04. Series 13, No. 164. Hyattsville, MD: National Center for Health Statistics. 2007.

²The average of the the figures derived by CMS (Centers for Medicare and Medicaid Services [formerly HCFA]): Form HCFA-222-92, "Visits and Overhead Cost for RHC/FQHC," Worksheet B--and a study done by the Idaho Rural Health Education Center: Pryzbilla, J. (1996). A Step-by-Step Training Guide to Primary Care Provider Recruitment and Retention, 22-23.

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National Productivity Standard Supply vs. Demand for Primary Care



	Supply	Demand	Surplus or (Shortage)
Lakeview	15,566	19,075	(3,509)
North Lake	2,550	6,181	(3,631)

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Additional Survey information



- 100% of primary care respondents reported they are as busy as they would like.

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Lake County Medical Clinic



- Monday – Friday: 8:00am – 7:30pm

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Warner Mountain Medical Clinic



- Tuesday – Friday: 8:00am-5:00pm

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North Lake Clinic



- Monday – Friday: 8:00am-5:00pm

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