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MEMO

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To: The Oregon Health Policy Board
From: Healthcare Workforce Committee
Subject: Report on Financial Incentive Programs in Oregon

The Healthcare Workforce Committee is pleased to submit this report on the range of financial incentive programs to the Health Policy Board. This memo fulfills the following deliverable request:

> *A report on the range of incentive programs designed to encourage providers to practice in underserved areas or with underserved populations in Oregon. The report should: a) recommend criteria for monitoring the programs and evaluating their outcomes and effectiveness; and b) suggest strategies for sustaining, expanding, and/or re-targeting the programs as necessary.*

The five recommendations contained in the report are prioritized, with the Committee's topmost priority appearing first. The Committee would like to highlight the recommendation that **[t]he Oregon Legislature, Oregon Health and Science University and Oregon Health Authority should support system-wide data collection and analysis, using common performance measures wherever possible, and use program performance information to inform decision-making.** As noted in the report there are several components to this recommendation—each of which should be considered seriously to advance decision-making on these types of programs.

The Committee notes that a legislative working group is trying to answer questions similar to those posed by the Board to the Committee, and has expressed interest in this set of recommendations as well.

The Committee appreciates the opportunity to review this important topic and add to the body of knowledge in Oregon regarding financial incentive programs, their value, and how Oregon compares with other states. We believe there may be an ongoing role for the Committee in helping convene and direct stakeholders on behalf of the Board, and are happy to play whatever role the Board should request in the future.

OREGON HEALTH POLICY BOARD
HEALTHCARE WORKFORCE COMMITTEE

Financial Incentive Programs in Oregon

A Report for the Oregon Health Policy Board

7/1/2014

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I. Introduction

Building a strong health care workforce for Oregon remains a critical task. For several years, the state has faced shortages of health care workers in many, traditionally underserved areas of the state. Now in 2014, some systems are struggling to find an adequate number of providers to serve the 400,000 plus Oregonians who are newly covered as a result of the Affordable Care Act.

Oregon, like many states, offers an array of various financial incentives to help address existing and anticipated shortages of health care providers. The Oregon Health Policy Board has directed the Health Care Workforce Committee (HCWC) to prepare a report "on the range of incentive programs designed to encourage providers to practice in underserved areas or with underserved populations in Oregon. The report should: a) recommend criteria for monitoring the programs and evaluating their outcomes and effectiveness; and b) suggest strategies for sustaining, expanding, and/or re-targeting the programs as necessary."

This report will: provide a summary of the evidence on effectiveness of different kinds of incentives; describe the array of financial incentive programs currently available in Oregon; and make recommendations for evaluating and prioritizing these programs in the future.

II. Background on Financial Incentive Programs

The World Health Organization defines incentives as "all the rewards and punishments that providers face as a consequence of the organizations in which they work, the institutions under which they operate and the specific interventions they provide." Incentives are the factors and/or conditions within health professionals' work environments that can be used to enable and encourage them to stay in their job location and in their professions. Incentives have been shown to be an important means of attracting and retaining healthcare workers to locations that may be less generally appealing to many professionals.

Incentives can be positive or negative (disincentives) and can be financial or non-financial. Although non-financial incentives (such as work autonomy, schedule flexibility, career development opportunities, and educational and career opportunities for children and spouses) can have a powerful effect, the focus of this report is financial incentives. Financial incentives involve monetary value, such as salaries, pensions, bonuses, allowances, loans, etc. Among the most common types of financial incentives for health care providers are:

- Loan Repayment – through which a provider is offered money to help pay for student loans that have already been incurred, in return for a period of work typically in an underserved location;
- Loan Forgiveness – in most cases, loan forgiveness programs subsidize a student's educational costs directly in return for future service;
- Tax Credits – through which a provider receives a credit directly against tax liability;
- Insurance Subsidies – through which a portion of a provider's malpractice insurance premium is covered by an outside source;
- Relocation Costs – through which employers contribute funds toward the cost of a newly hired provider relocating from a different area;
- Signing bonuses – which are one-time payments made by the employer to incentivize acceptance of an offer; and
- Employer financial support for continuing education or advanced training.

Financial incentives may be designed to recruit providers to a given area, to retain providers who are already working in an area, and/or to increase the supply of providers in a specific specialty or discipline regardless of where they work. The nature of programs that include a service obligation is that providers face a decision at the end of their required service: whether to remain practicing in the underserved area—at the practice site where they had received their incentive or another site—or to move to another area where pay and other conditions may be more favorable.

Financial incentives are usually directed specifically at the healthcare provider. Whether a provider chooses to stay in an area following the end of the incentive can be influenced by a number of factors, including a clinician's age, gender, location of the practice, their family situation, sense of belonging in the community, satisfaction with the practice's administration, and their total compensation package. (Campbell, 2012) Other significant factors can include the prevailing workforce availability, economic conditions, availability and quality of local services.

III. Summary Review of Available Evidence

Financial incentive programs to direct providers to underserved areas and populations are widely used (Pathman, 2013). At the federal level, the National Health Service Corps (NHSC) provides loan repayment awards to over 11,000 primary care, dental and medical health providers in underserved areas. Nearly every state in the country has health care providers who receive federal NHSC dollars. Most states also have one or more state loan repayment

programs (either the federal State Loan Repayment Program [SLRP] or state-funded loan repayment or both) which are also used to incentivize providers to practice in areas with a low supply of providers.

There are fewer studies of the impact of health care provider incentive programs than might be expected, but the published evidence suggests that they can be effective in attracting providers to and keeping them in underserved areas. (O'Toole, 2010) Physicians who participate in state loan repayment and similar incentive programs are more likely than their peers to practice in needy areas and to serve Medicaid and uninsured patients (48% vs. 28%). They also tend to remain longer in their positions (Pathman, 2004). Participants in loan repayment programs are also more likely than non-participants to continue to practice in underserved areas even after their service obligation expires, although it may not be the same area as their original placement (Barnighausen & Bloom, 2009; Colegrove, 2009). Rural participants in loan repayment programs tend to remain in their service areas after the obligation ended longer than their urban counterparts (Pathman, 2012).

Some programs have made concerted efforts to increase provider retention after an obligated service period and have seen clear results. For example, only 26 percent of NHSC providers stayed in their given area more than two months past their service commitment in the 1980s, while in 2012 that number had risen for 71 percent. The Obama Administration funded a nearly $20 million initiative in the early 2000s to learn how states and communities can expand their ability to retain providers in underserved areas after participation in a financial incentive program concludes. Oregon was one of the states that participated in this effort. Oregon completed its two-year grant with 84 percent of those who had completed their service remaining practicing in underserved areas. (Length of retention varied from 3 to 18 months at the time of measurement, so this statistic is not the most informative measure of long-term retention.) The average retention among all states participating in the project was 76%. Oregon's above average results in this effort are attributed in large part to outreach efforts to the health care providers serving in the identified cohort, and support and general interest provided for their program participation.

Retention after a service commitment often depends more on general job satisfaction than with compensation in principle. (Devine, 2013) An 11-state collaborative that surveyed more than 1,500 obligated health professionals in 2012 found that relationship with the practice administration, a sense of belonging in the community, and alignment with the mission and goals of the practice all predicted retention more strongly than financial remuneration (Pathman, 2012).

Tax credits are less expensive than loan repayment on an annual basis but there does not appear to be any published evidence regarding the relative effectiveness of tax credits and other incentives. According to a GAO report, states that offer an array of diverse provider incentive programs are more likely to attract providers to areas in need than states with just one or two incentive programs. (US GAO, 1995).

IV. Brief Description of Current Incentive Programs in Oregon

As context for the rest of the report, this section provides brief descriptions of the array of provider financial incentive programs currently available in Oregon.

Programs in Oregon using *state* funding include:

- Rural Medical Practitioners Insurance Subsidy Program
- Medicaid Primary Care Loan Repayment Program
- Scholars for a Healthy Oregon Program (Loan Forgiveness)
- Oregon State Loan Forgiveness Program
- Rural Practitioner Tax Credit
- EMT Tax Credit

Programs in Oregon using *federal* funding include:

- Oregon State Partnership Loan Repayment Program (SLRP)
- National Health Service Corps (NHSC) Loan Repayment
- National Health Service Corps (NHSC) Scholarship Program
- Nurse Corps (NELRP) Loan Repayment Program
- Federal Faculty Loan Repayment Program

Additionally, there are many employer-funded and –specific financial incentive programs designed to recruit and retain health care professionals working within their organizations. Because such programs contribute to employers' competitive advantage, it is difficult to obtain detailed information about their size and scope.

See Appendix A for a complete matrix of the above programs, including annual funding, number of participants in the program, financial benefit per participant, total annual cost, administrative costs, program performance measures, and other factors. Programs in Oregon include:

- **The Rural Medical Practitioners Insurance Subsidy Program** is authorized under ORS Chapters 676.550-676.556, and administered by the Oregon Health Authority (OHA). The program was first established in 2003. The program exists to provide subsidies to qualifying physicians and nurse practitioners in rural areas to offset the cost of medical malpractice insurance. In 2013 there were 655 providers whose insurance premiums were subsidized through the program.

- **The Medicaid Primary Care Provider Loan Repayment Program** was authorized under SB 440 (2013) and established in the Oregon Health Authority (OHA). The impetus for this program was Oregon's 2012 waiver with the Centers for Medicare and Medicaid services, in which Oregon agreed to provide loan repayment for providers serving Medicaid patients to support Oregon's health system transformation and its expansion of Medicaid. It is estimated that approximately 50 providers will receive awards from the funding provided by the legislature. Total funding for the program was $4 million for 2013-15.

- **The Scholars for a Healthy Oregon Program** was established by the 2013 legislature, to address the high cost of medical education and the mal-distribution of health care providers around the state. The program offers full tuition and fees to 21 OHSU medical, physician assistant, dental and advance practice nursing students who begin in the 2014-15 academic year. Students then have a service obligation for an equivalent number of years, plus one, for each year of support received. Service must be completed in an OHSU approved underserved site. Total funding for the program was $2.5million for 2013-15, allowing an anticipated 21 students to receive awards.

- **The Oregon State Loan Forgiveness Program** was established in 2010 to meet workforce needs in rural Oregon for the following professions: Primary Care Physician, Physician Assistant, Master of Nursing and Doctor of Nursing Practice, General Surgery and Psychiatry. Students who are enrolled full-time as second or third year students in an approved Oregon rural training track are eligible to apply for up to 3 years of funding. Typical awards are $35,000 per year. Legislative funding for the 2013-15 biennium is $700,000, including $200,000 from the 2014 Session.

- **The Oregon Rural Practitioner Tax Credit** was first established in 1989, to encourage medical providers to serve the health care needs of rural Oregonians. Eligible medical providers, optometrists, and dentists receive a $5,000 credit annually for maintaining a rural practice. Providers pay a $45 application fee to the Office of Rural Health to participate in the program. The Oregon Legislative Revenue Office estimates that approximately 1,800 providers use the credit each year, with a revenue impact to the State General Fund of between $16-17 million per biennium. The program is open to those practicing full-time and part-time, as well as to providers who are not full-time Oregon residents.

- **The Volunteer Rural EMT Tax Credit** was first enacted in 1989 to provide a $250 tax credit for emergency medical responders in areas 25 miles or more from a population center of 30,000, in recognition of their voluntary service to rural Oregonians. According to the Oregon Department of Revenue, $300,000 in tax credits were used in the 2011-13 biennium, and approximately 600 rural emergency responders took advantage of the credit.

- **The State Loan Repayment Program** allows primary care providers serving in Health Professional Shortage Areas (HPSAs)[1] to receive financial awards to help offset the cost of their health professional loans. As the program is configured in Oregon, 50 percent of the loan repayment comes from federal sources through the State Office of Rural Health; matching community funds (including clinic funding) provide the additional 50 percent of the funds to the provider. In 2013, there were a total of 15 providers receiving awards under the SLRP.

- **The National Health Service Corps (NHSC) Loan Repayment Program** allows primary care providers at an NHSC-approved site to receive up to $25,000 annually in loan repayment for at least two years of service. Sites must not deny service to anyone due to an inability to pay, and must offer a sliding fee schedule for those below 200 percent of the Federal Poverty Level. The number of Oregon providers receiving NHSC LRP increased from 124 in 2010 to 192 in 2013. More than $3.6 million was awarded to clinicians serving in underserved areas within Oregon in 2013.

- **The NHSC Scholarship Program** awards scholarships to students pursuing primary health care professions training in NHSC-eligible disciplines in return for a commitment to provide health care to communities in need, upon graduation and the completion of training. In return for each school year, or partial school year, of financial support received, students agree to provide primary health care services for one (1) year at an NHSC-approved site located in a high-need Health Professional Shortage Area (HPSA). There were 20 NHSC Scholarship participants from Oregon in 2013, and HRSA paid a total of $1.2 million to these providers that year.

- **The NURSE Corps Loan Repayment Program** eases the student debt burden of registered nurses who work in health centers, rural health clinics, hospitals and other types of facilities currently experiencing a critical shortage of nurses. The program repays 60 percent of the outstanding balance in exchange for 2 years of full-time service at an eligible facility. Participants may be eligible to receive an additional 25 percent of the original loan balance

[1] Health Professional Shortage Areas (HPSAs) are codified in federal statute as a way to determine the severity of need of an area or population for health professionals. States analyze provider data and apply for designation of a HPSA to the federal government. HPSA designations and the accompanying scores that show greater or lesser shortage are used to make awards for a variety of state and federal programs related to health care workforce.

for an additional year of full-time service in a critical shortage facility. A funding preference is given to RNs with the greatest financial need. Oregon had 101 nurses participating in the program in 2013, with a federal financial commitment of approximately $2 million.

- **The Faculty Loan Repayment Program** is a loan repayment program for health professions graduates from disadvantaged backgrounds who serve as faculty at an eligible health professions college or university. In exchange for at least 2 years of service, the Federal government pays up to $40,000 of the outstanding principal and interest on the individual's health professions education loans. The employing institution matches the loan repayment unless it is determined the matching requirement would impose an undue financial hardship on the institution. Two faculty members in Oregon received awards under this program in 2013, costing $44,000 in federal revenue.

See Appendix A for a complete matrix of the above programs, including annual funding, number of participants in the program, financial benefit per participant, total annual cost, administrative costs, program performance measures, and other factors.

V. Observations on Financial Incentive Programs in Oregon

Financial incentive programs are not currently designed to complement one another. Historically, provider financial incentive programs have been developed separately to respond to an identified need without always taking other similar programs into account. In Oregon, for example, the Rural Practitioner Tax Credit may be used alongside loan repayment programs as well as the Rural Provider Malpractice Insurance Subsidy. The impact is that a provider may be receiving $40,000 annually in loan assistance in addition to having a portion of their medical insurance premium paid and receiving a $5,000 tax credit. The broader observation is that because program rules and eligibility criteria are designed and applied independently, the resources of financial incentives may be spread unevenly or inefficiently.

There is a lack of systematized data collection to measure programs' effectiveness. Data on programs' operations and impact are not collected consistently from one program to another nor are they readily obtained, although some can be found upon research. Operational data elements like number of participants, average amount of award, and location of participating providers are more commonly reported than outcomes such as post-program retention or impact on local workforce capacity. The Oregon Healthcare Workforce Institute (OHWI) has conducted a four-year review of National Health Service Corps participants along with the participants in the J-1 Physician Waiver Program, a non-financial incentive program for foreign physicians completing residencies in the U.S., but this review is somewhat unique (see Appendix B). Even where data are available, programs typically do not set and report on their

progress against performance targets. There are no standards or consistency in the required data collection or reporting on performance, and no single agency that is authorized to collect and report on such data.

Differing definitions of "need" may make it hard to compare the benefits of programs. In Oregon, for instance, we have at least two definitions of "need": The legislature has authorized the State Office of Rural Health to develop an assessment of need for rural areas and to use these measurements in determining allocations of funds. However, the federal government uses a distinct system of Health Professional Shortage Areas, which it uses to allocate federal resources among applications for financial assistance that come from states.

There is no overarching review or governance of the array of provider financial incentive programs. State-funded program responsibilities are spread across various agencies, although the State Office of Rural Health has an administrative role in most. Federally funded programs are managed separately. At the operational level, Oregon has increased coordination over the last several years through an informal Healthcare Workforce Recruitment and Retention Partnership. However, executive review and oversight across programs has been limited to legislative renewal of state funded programs and Congressional allocations.

Oregon's range of provider financial incentive programs is more diverse than in many other states. Each state in the nation takes a unique approach to offering financial incentives to health care providers based on considerations specific to its situation. Factors states have used in making decisions concerning which programs to fund include state policy direction, budgetary constraints, supply of health care providers, and strength of institutions to implement such programs. Among the twenty states from which information was available, no state other than Oregon offered a tax credit, nor did any state offer insurance subsidies to providers in rural areas. Oregon's roughly $16 million combined investment in this area is well beyond some many states, and is far below others. This is somewhat less impressive when one considers that one large health system might make the same level of investment in recruitment and retention. Some representative samples of state-funded financial incentives, selected based on availability of information, are included in Appendix D.

It is important to keep in mind the total number of providers who benefit from financial incentive programs, not just the number of programs or the total investment made. It may look as though Oregon is ahead of many states that have only one or two different programs; the reality is that Oregon has fewer than 400 providers—an extremely small percent of the overall number of providers in the state—participating in any given year in either a state- or federally-funded loan repayment or scholarship program.

VI. Recommendations

1) *The Oregon Legislature, Oregon Health and Science University and Oregon Health Authority should support system-wide data collection and analysis, using common performance measures wherever possible, and use program performance information to inform decision-making.*

   While agencies currently track various elements of their programs' performance, the lack of consistency and comparability makes it difficult for policymakers and other to consider the suite of programs as a whole. The Oregon Healthcare Workforce Institute (OHWI) is a statewide organization with a track record of cross-program and cross-discipline analysis, and could likely perform this task in an objective manner. The Committee believes it is best suited to be the statewide clearinghouse for data and analysis for health care provider financial incentive programs. One potential solution to the challenge of funding data collection could be to earmark a small percentage (e.g., 2 percent) of each program's allocation for measuring performance and effectiveness over time.

   There are several components to this recommendation:

   a) *OWHI, and administering agencies, should identify key performance measures to be used across programs.* Such measures likely include:
      i. *Number of placements/slots filled*
      ii. *Number of patients seen by obligated service providers*
      iii. *Number of patient visits to obligated service providers*
      iv. *Retention of providers over time*
      v. *Reduction in need*
      vi. *Return on Investment (ROI) from the program to the greater community*

      Appendix A includes various data points for current provider incentive programs in Oregon and could be a starting place for identifying a consensus set of performance measures to be collected and analyzed. In order to enable OHWI to track and analyze performance across programs, it will be necessary for program information to be shared from relevant agencies (OHA Primary Care Office, OHSU-Office of Rural Health, OR Department of Revenue, etc.).

   b) *OHWI should develop performance targets with the involvement of stakeholders benefiting from the programs as well as those administering and/or accountable for*

the programs. Consequences for falling short of targets or incentives for exceeding them should also be carefully considered. Examples of targets could include:

i. *No more than X% of an incentive program's total funds may be spent on administration;*
ii. *Each obligated service provider is expected to see Y patients in a day/week, etc.*
iii. *Average clinician retention following completion of the program is Z years.*

Because Oregon typically does not have the authority to set standards or targets for federally funded programs, state officials should work closely with federal partners to maximize alignment of both measures and the agreed on targets for program performance against these measures.

c) *Timeliness of reviews by OHWI.* The Committee recommends that programs be evaluated on a two-year cycle. However, it is important to note some programs require a longer time period before some of the benefits are realized. For example, the *Scholars for A Healthy Oregon* Program offers tuition assistance to students as they begin their professional study in fields like nursing or medicine. Given the length of training, it will be 4-8 years before the awardees will begin their service obligations and even longer before data will be available on whether participants remain in underserved area after that obligation has been met.

2) *The Oregon Legislature should adopt a set of overarching principles for provider financial incentive programs.*

These principles should be applied in any decision-making process sustaining, expanding, and/or re-targeting programs. Potential principles include these:

For program design:

- Maximize the use of Federal and other non-state resources and attempt to limit state investment to areas where funding cannot be found elsewhere
- Use all available data to target programs to the greatest need, and to adjust the design as needs change
- Complement rather than duplicate other incentive programs, contributing to a diverse portfolio of resources to attract, recruit and retain health care providers in areas that need them
- Seek input from relevant stakeholders in the design phase to help ensure that the program will reach and motivate the target population
- Do not create "unfunded mandates"

For program operations:

- Ensure that program administration is transparent, fair and consistent
- Maintain reasonable per-capita costs and administrative overhead
- Ensure that organizations overseeing and administering programs have and the resources needed to be successful.

3) *The Health Policy Board and the Oregon Legislature should direct key entities involved in assessing unmet need (OHA-Primary Care Office, OHSU-Office of Rural Health, Oregon Healthcare Workforce Institute) to work together to align understandings of unmet need across the state.*

   Although it is unrealistic to expect a single definition of need to be used for all programs, there are common factors that can be used across programs. These include: travel time to available sources of care; population demographics that can predict utilization and access concerns; and provider-to-population ratios that incorporate all relevant provider types. Oregon agencies and policymakers should work with federal partners (HRSA) to resolve contradictions in definitions at the federal level as much as possible. These entities should also explore use of an overall score to assess need.

4) *The Health Policy Board should direct stakeholders who support and administer provider financial incentive programs to meet periodically to compare results and share information*.

   This report was created in part because policymakers had expressed the need for an overarching view of financial incentives programs. Many stakeholders have an interest in seeing how well the individual pieces are working and whether they are supporting or detracting from the effectiveness of the other components. An annual gathering and review could include both sharing of best practices on what is working as well as candid discussion of where efforts are not producing the intended result of an increased supply of workers in areas of need. This would benefit both policy makers and the organizations administering the programs. The Healthcare Workforce Committee or the Oregon Healthcare Workforce Institute could offer a forum for such collaboration.

5) *Policymakers and funders should re-allocate a portion of existing incentive program funds to a flexible pool that can be used to respond to current needs.*

To balance longer-term investment with shorter-term responsiveness, Oregon policymakers should create a flexible pool of health care provider incentive funds. These funds would allow for incentives targeted to the disciplines, geographic areas, and populations most needed at a given time, free from the constraint of rigid program requirements that cannot be changed for years. Current program stakeholders and communities should be consulted as to the appropriate level of flexible vs. fixed resources and a simple, transparent methodology for deciding how the flexible funds should be allocated and on what timeframe. A consortium of agencies could help direct funds; the State Office of Rural Health is a potential candidate to help organize such a consortium.

VII. Conclusion

Financial incentive programs can offer supports for recruitment and retention of health providers in areas where they are needed and regular market forces do not result in an adequate supply of health professionals. In comparison with other states, Oregon offers a reasonable number and diversity of financial incentive programs, although many other states make a much larger investment.

In terms of making the greatest use of limited funds, there is much more Oregon can do, particularly in the systematic collection of program data to determine ongoing effectiveness of financial incentive programs, the establishment of accepted, system-wide determination of need, and in the establishment of program and system performance targets to ensure that programs remain accountable and effective.

The Committee appreciates the attention of the Oregon Health Policy Board on this matter, and is happy to continue to work on behalf of the Board in this matter as directed.

VII. Bibliography

Barnighausen, T and Bloom DE. Financial incentives for return of service in underserved areas: a systematic review. BMC Health Serv Res. 2009 May 29; 9:86. doi: 10.1186/1472-6963-9-86.

Campbell N, McAllister L, Eley D. The influence of motivation in recruitment and retention of rural and remote allied health professionals: a literature review. *Rural and Remote Health* **12: 1900**. (Online) 2012. Available: http://www.rrh.org.au

Colegrove DJ, Whitacre BE. Interest in rural medicine among osteopathic residents and medical students. *Rural and Remote Health* **9: 1192**. (Online) 2009. Available: http://www.rrh.org.au

Daniels, Zina M. PT, MOMT, MA ; VanLeit , Betsy J. PhD, OTR/L ; Betty J. Skipper , PhD ; Margaret L. Sanders , PhD ; and Robert L. Rhyne , MD. *Factors in Recruiting and Retaining Health Professionals for Rural Practice***.** National Center for Rural Health. 2007

Oregon Healthcare Workforce Institute, Oregon's Obligated Service Health Providers 2008-2012. Fall 2013.

O'Toole K, Schoo AM. Retention policies for allied health professionals in rural areas: a survey of private practitioners. *Rural and Remote Health* **10: 1331**. (Online) 2010. Available: http://www.rrh.org.au

Pathman, Donald MD MPH, Konrad, Thomas R. PhD. Schwartz, Robert MBA Final Report--*Evaluating Retention in BCRS Programs.* University of North Carolina SHEPS Center. March 2012

Pathman, Donald MD MPH Fannell, Jackie, Konrad, Thomas R. PhD.. *Findings of the First Year Retention Survey of the Multi-State/NHSC Retention Collaborative.* University of North Carolina SHEPS Center. November 2012.

Pathman, Donald MD MPH Goldberg, Lynda MBA, MSPH, Konrad, Thomas R. PhD. *Flux in Loan Repayment Programs for Healthcare Professionals With States' Budget Cuts and National Health Service Corps Budget Increases.* University of North Carolina SHEPS Center. November 2013.

Pathman et al. (2004). Outcomes of States' scholarship, loan repayment, and related programs for physicians. Medical Care 42: 560-568.

US General Accounting Office. *National Health Service Corps: Opportunities to Stretch Scarce Dollars and Improve Provider Placement*, HEHS-96-28: Published: Nov 24, 1995. Publicly Released: Dec 4, 1995. http://www.gao.gov/products/GAO/HEHS-96-28

APPENDICES

A. Matrix of Oregon Financial Incentive Programs--Purposes, Participants, Performance Measures and Costs
B. Oregon Healthcare Workforce Institute, Oregon's Obligated Service Providers 2013
C. Links to program administrative rules and statutory references
D. Information on other state financial incentive programs

State and Federally Funded Primary Care Financial Assistance Programs Available to Clinicians in Oregon

7/1/2014

Program	Entities Responsible	Description	Purpose (Recruitment, Retention, or Attaction to Area/Discipline)	Maximum Length of Award	Eligible Disciplines	Other Eligibility Criteria	Award Information	Number of Participants (year)	Targeted Service Population	State Investment (year)	Federal Investment (year)	Average Annual Award per Participant	Timeframe for Beginning Service Commitment	Program Data Tracked	Program Monitoring	References
Rural Medical Practitioners Insurance Subsidy Program	* OHA/DMAP for Oversight and funding * ORH for administration	Physicians and Nurses working in rural areas of the state are eligible for a subsidy of their professional liability insurance premiums.	Recruitment and Retention of Rural Providers	Annual, Renewable	Physicians and Nurse Practictioners serving Medicare and Medicaid patients in rural Oregon in proportion to their community's percentages	Providers with insurance policies of at least $1 million per occurrence and $1 million aggregate.	80% of premiums for obstetric physicians or nurse practitioners; 60% of premiums for physicians in family or general practice certified for obstetric services; 40% of premiums for physicians in family practice, general practice, internal medicine, geriatric, pulmonary, pediatric, general surgery or anesthesiology; 15% for all other providers.	655 (2013)	Any	$2.5 million	$0	$3,820	Immediately	# of carriers participating; # of providers receiving awards; amount of money distributed	Legislative Review of Program; for providers, an annual renewal of participation	Oregon Revised Statutes 676.550-676.556; Oregon Administrative Rules 410-500-000 - OAR 410-500-060.
Rural Provider Tax Credit	* ORH for maintaining provider list * OR Department of Revenue also for administering credit	$5,000 tax credit for providers in rural areas	Recruitment and Retention of Rural Providers	Annual, Renewable	Physician (MD/DO), Podiatrist (DPM), Dentist (DMD/DDS), Nurse Practitioner (NP), Certified Registered Nurse Anesthetist (CRNA) and Physician Assistant (PA), Optometrists	Providers at Type A, Type B, certain Type C Hospitals and certain providers whose practice is at least 60% rural patients.	Providers claim tax credit on annual State Income Tax return. Non- and part-year residents receive a portion of the credit.	1,800 (for any given tax year)	Any	$8.5 million (historic annual average)	$0	$4700[b]	Service Commitment began prior to financial benefit received	# of people receiving credit amount of money distributed	Legislative Review of Tax Credit; for provider, annual report on Income Tax filing	Oregon Revised Statutes 315.613, 315.616, & 315.619; Oregon Administrative Rules 572-090-030.
Volunteer Rural EMT Tax Credit	* ORH for maintaining provider list * OR Department of Revenue also for administering credit	Tax credit for Emergency Medical Services Providers who volunteer their services to elgible Oregon communities.	Encourage volunteerisim of EMS.	Annual, Renewable	Emergency Medical Responder, EMT Basic, Advanced EMT, EMT-Intermediate and Paramedic	Amount of reimbursement for EMS cannot exceed $3m000 per calendar year or 25% of gross annual income	Providers claim tax credit on annual State Income Tax return. Non- and part-year residents receive a portion of the credit.	approximately 600 (2012 tax year)	Communities more than 25 miles from a population center of 30,000 or more	$150,000 (for any given tax year)	$0	<$250	Service Commitment began prior to financial benefit received	# of providers receiving credit, number of eligible communities, total amount awarded	Legislative Review of Tax Credit; for provider, annual report on Income Tax filing	Oregon Revised Statute 315.622.
National Health Service Corp (NHSC) LRP	* HRSA for funding and federal administration; * OHA/PCO for recommendation of approval of sites and outreach within state	Primary care providers working at an NHSC approved site with a HPSA score of 14 or above can receive loan repayment towards qualified education loans. **Minimum HPSA score may vary depending on application cycle.*	Recruitment of providers to underserved areas	2 years, with the option to apply for a continuation (up to 7 years). Participants can be full-time; minimum 40 hrs/week, no fewer than 4 days/week or half time; minimum 20 hrs/week, no fewer than 2 days/week.	Physician (MD/DO), Dentist (DMD/DDS), Nurse Practitioner (NP), Certified Nurse Midwife (CNM), Physician Assistant (PA), Registered Dental Hygienist (RDH), Health Service Psychologist (HSP), Licensed Clinical Social Worker (LCSW), Psychiatric Nurse Specialist (PNS), Marriage and Family Therapist (MFT) and Licensed Professional Counselor (LPC).	US citizen or national, practicing in a qualified discipline, licensed to practice in the state, qualifying education loans and must work in a NHSC approved facility.	**Sites with a HPSA score of 14 or above**: Full-time participants can receive up to $50,000 for a 2 year commitment; half-time participants can receive up to $50,000 for a 4 year commitment.	192 (2013)	Underserved populations (general population, or specific populations [homeless, low-income, migrant and seasonal farmworker, Medicaid Patients])	$0	$4.6 million	$25,000	Within 60 days of award at latest, otherwise immediately	# of LRP participants overall and by state, # of full-time awardees and part-time awardees; # of continuation applications submitted; cost per site visit for interviews; % of applications received acted on within 12 days.	HRSA Program Compliance, which includes occasional participant interviews, GSA, oversight; 12-day review requirement from HRSA to determine site eligibility;	Section 338B of the Public Health Service Act (42 USC 254I-1)
National Health Service Corp (NHSC) SP	* HRSA for funding and federal administration; * OHA/PCO for recommendation of approval of sites and outreach within state	Scholarships are awarded to students pursuing primary health care professions training in eligible disciplines in return for a commitment to provide health care to communities in need, upon graduation and completion of training.	Recruitment of providers to severely underserved areas	For each school year, or partial school year of financial support received, students agree to provide primary health services for one year at an approved NHSC site located in a HPSA.	Physician (MD/DO), Dentist (DMD/DDS), Nurse Practitioner (NP), Certified Nurse Midwife (CNM) and Physician Assistant (PA)	US citizen or national enrolled or accepted in the eligible primary care disciplines' degree program at a US accredited school.	Tax free payment is made (up to 4 years) for tuition, required fees and other reasonable educational costs. Scholarship recipients also receive a taxable monthly living stipend.	20 (2013)	Underserved populations (general population, or specific populations [homeless, low-income, migrant and seasonal farmworker, Medicaid Patients])	$0	$1.1 million (2013)	$55,000	1-2 years	# of applicants; # of scholars placed; amount of funding	Scholar Placement process, occasional interviews by Program. For provider, submission of financial reports.	Title III, Section 338A of the Public Health Service Act (42 USC 254l)
Nursing Education Loan Repayment Program (NELRP)	* HRSA for funding and federal administration; * OHA/PCO for recommendation of approval of sites and outreach within state	NELRP helps to alleviate the critical shortage of nurses by offering loan repayment assistance to RNs and ANPs, in exchange for a commitment to work at a critical shortage facility. Nurse faculty can also receive loan repayment if they work full-time at an accredited school of nursing.	Recruitment of nurses in underserved areas	A minimum of 2 years of service is required, with the option of a third year of service available.	Registered Nurse (RN) and Advanced Nurse Practitioner (ANP)	Must be a licensed RN or ANP, employed full-time (minimum of 32 hrs/week) at a public or private non-profit critical shortage facility. Faculty must be employed as a full-time nurse faculty member at a public or private non-profit school of nursing.	**For RNs and ANPs:** Funding preference will be given to nurses based on the greatest financial need, the type of facility, and the HPSA designation of the facility. **For faculty:** Funding preference is given to faculty with the greatest financial need and to faculty working at nursing schools with at least 50% of students from a disadvantaged background. *NELRP participants will receive 60% of their total outstanding qualifying educational loan balance for a 2 year commitment. Participants may receive an additional 25% of their original loan balance for a third year of service.	101 (2013)	Underserved populations (general population, or specific populations [homeless, low-income, migrant and seasonal farmworker, Medicaid Patients])	$0	$1.2 million (2013)	$1,880	Within 60 days of award at latest, otherwise immediately	# of applicants; # of awardees; amount of money distributed	HRSA Program Compliance, which includes occasional participant interviews, GSA, oversight	Section 846 of the Public Health Service Act (42 United States Code (U.S.C.) section 297n), and 42 Code of Federal Regulations (C.F.R.) section 57.312.

Program	Entities Responsible	Description	Purpose (Recruitment, Retention, or Attaction to Area/Discipline)	Maximum Length of Award	Eligible Disciplines	Other Eligibility Criteria	Award Information	Number of Participants (year)	Targeted Service Population	State Investment (year)	Federal Investment (year)	Average Annual Award per Participant	Timeframe for Beginning Service Commitment	Program Data Tracked	Program Monitoring	References
Oregon Partnership State Loan Repayment Program (SLRP)	* HRSA for funding to state * OR Office of Rural Health for administration of program	This program is a loan repayment opportunity for health professionals who commit to working in a HPSA for a minimum of 2 years.	Recruitment of providers to underserved areas--primarily rural	Minimum 2 year service commitment, with the option to apply for a 1 year extension- up to 5 years.	Physician (MD/DO), Nurse Practitioner (NP), Physician Assistant (PA), Dentist (DMD/DDS), Registered Dental Hygienist (RDH), Licensed Clinical Social Worker (LCSW), Licensed Professional Counselor (LPC) and Psychologist (PSY)	US citizen, must work full-time (minimum 40 hrs/week) at an approved site in a HPSA.	Participants can receive a maximum award of $35,000 per year, or 25% of total loan debt, whichever is a smaller amount.	15 (2013-14)	Underserved populations (general population, or specific populations [homeless, low-income, migrant and seasonal farmworker, Medicaid Patients])	$0	$300,000 (2013)	$35,000 total (half of a 2-year award of $70,000) (Note--federal award is e matched with community dollars to equal a total award to provider. Contribution from Federal SLRP funds is 17,500 annually)	Within 60 days of award at latest, otherwise immediately	# of awardees; amount of money distributed; 0% default rate since program began+$	Financial reports to HRSA, including annual progress report	Public Health Service Act, Title III, Section 3381, 42 U.S.C. 254 q-1(h). Section 10503 of the Affordable Care Act (P.L. 111-148)
Federal Faculty Loan Repayment Program	* HRSA for funding and federal administration; * OHA/PCO for recommendation of approval of sites and outreach within state	Faculty members from disadvantaged backgrounds with a professional health care degree or certificate may receive loan repayment assistance in exchange for teaching at educational institutions that provide training for health care professionals.	Support for nursing faculty with disadvantaged backgrounds	Minimum 2 year contract; participants can apply for sequential contracts.	Physician (MD/DO), Registered Nurse and Nurse Practitioner (RN/NP), Dentist (DMD/DDS), Registered Dental Hygienist (RDH), Physician Assistant (PA), Mental Health professions (Clinical Psychology, Clinical Social Work, Marriage and Family Therapy, Professional Counseling), Audiology, Optometry, Occupational and Physical Therapy (OT/PT), Pharmacy, Podiatry, Speech Language Pathologist (SLP), Medical Laboratory Technology, Radiologic Technology, Dietician, and Veterinary disciplines.	US citizen or national, school produced certification to demonstrate disadvantaged background, full-time or part-time faculty position for a minimum of 2 years.	Participants can receive up to $40,000 towards repayment of student loans for a 2 year service commitment.	2 (2013)	Nurses from Disadvantaged Backgrounds; underserved populations with limited access to health care	$0	$44,000 (2013)	$22,000	Within 60 days of award at latest, otherwise immediately	# of awardees; amount of money distributed; characteristics of participants	HRSA Program Compliance, which includes occasional participant interviews, GSA, oversight	Section 738(a) of the Public Health Service Act (42 USC 293b(a)
Oregon State Loan Forgiveness Program	OR Office of Rural Health	This loan forgiveness program provides loans to students studying to be physicians, nurse practitioners or physician assistants who are committed to working in a rural area. This program focuses on the idea that rural communities may be able to "grow" their own by identifying star students who want to become medical professionals.	Recruitment of providers to rural areas	For each year that loans are received, participants agree to practice in a rural setting in Oregon, at a pre-approved site.	Physicians (MD/DO), Physician Assistant (PA), and Nurse Practitioner (NP)	US Citizen or national, must have completed the first year of education in a qualified discipline, and must complete a service agreement that outlines their commitment to practicing in a rural service following their training and residency.	Participants will receive up to $35,000 annually for expenses related to their medical education.	5 (2013)	Medical students committing to serve rural patients; rural communities and patients	$1 million (2013-14)	100% State Funding ($1 million in 2013-15 biennium)	30,000/year for 2 years (2013)	1-2 years	# of participants; distribution of placement; amount of funds distributed	Legislative Oversight, review of application materials and verification of rural track program; financial forms submitted by participant	ORS 442.573
Primary Care Services Loan Repayment Program (currently unfunded)	OR Office of Rural Health	Program designed to help provide supports for clinicians to serve in underserved areas, particularly rural.	Recruitment of providers to underserved areas	For NP and PA participants, there was a 2 year commitment, with an option of completing up to 4 years. For all other disciplines, there was a minimum of 3 years, with an option of continuing up to 5 years.	Physician (MD/DO), Physician Assistant (PA), Nurse Practitioner (NP), Dentist (DMD/DDS), Pharmacist (PharmD), and Naturopath (ND)	US citizen or national, practicing in a qualified discipline, licensed to practice in the state, qualifying education loans and must work in health professional shortage area.	Participants could receive partial loan repayment (1/3 of the outstanding loan balance, or $25,000), if they participated in a minimum 3 year service commitment.	N/A	Underserved rural populations	$0 (unfunded)	$0 (unfunded)	N/A	N/A	N/A	Legislative Oversight when program funded	ORS 442.550 - 442.565 & SB 404
Scholars for a Health Oregon Initiative	*OHSU	Program established to address the high cost of tuition for students and the maldistribution of providers throughout the state.	Support for OHSU students with high loan debt	Students receiving awards must agree to practice in a rural setting for one year longer than the student received funding.	Students in one of the following clinical degree programs: Physician (MD), Dentist (DMD), Masters of Physician Assistant Studies, Masters of Nursing (MN) in Nurse Anesthesia, Family Nurse Practitioner, Nurse Midwifery, Psychiatric Mental Health Nurse Practitioner.	All students in qualifying programs may apply; priority given to those considered of Oregon heritage under OHSU's admission guidelines; other priorities also apply, including diversity of background, first-generation college student, and rural heritage	Participants eligible to receive funding to cover full tuition and fees for 2014-15 student academic year. Stipends are not covered.	Estimates: 6 medical students, 8 nursing students, 4 PA students, 4 dental students (total, 22 slots)	Any	$1.25 million (2013-14)	$0	Awards likely will range from $37,000-$85,000 depnding on the discipline	2 - 4 years	Total dollars award; characteristics of participants; number of awards *	Oversight and monitoring from OHSU/Oregon AHEC office	Senate Bill 2 (2013 Session), Chapter 511, Oregon Laws 2013)

Program	Entities Responsible	Description	Purpose (Recruitment, Retention, or Attaction to Area/Discipline)	Maximum Length of Award	Eligible Disciplines	Other Eligibility Criteria	Award Information	Number of Participants (year)	Targeted Service Population	State Investment (year)	Federal Investment (year)	Average Annual Award per Participant	Timeframe for Beginning Service Commitment	Program Data Tracked	Program Monitoring	References
Medicaid Primary Care Provider Loan Repayment Program (MPCLRP)	* OHA as accountable state agency * OR Office of Rural Health for daily administration of program	Program designed to meet the goals of Oregon's health care transformation, to provide financial incentives to new providers to serve Medicaid patients	Recruitment of providers to areas most in need of provider capacity to serve Medicaid patients	3 years, with the option to apply for up to an additional two years. Participants can be full-time; minimum 40 hrs/week, no fewer than 4 days/week or half-time; minimum 20 hrs/week, no fewer than 2 days/week.	Physician (MD/DO), Dentist (DMD/DDS), Nurse Practitioner (NP), Physician Assistant (PA), Expanded Practice Dental Hygienist, Psychiatrist, Clinical Social Worker, Marriage and Family Therapist (MFT).	Provider practicing in a qualified discipline, licensed to practice in the state, qualifying education loans, written commitment to serving Medicaid patients.	Participants eligible to receive 20% annually of unpaid health professional loans, up to $35,000 per year for three years, with ability to request up to two additional years of service; priority may be given for working in a HPSA with a score of 10 or higher, in a recognized Patient Centered Primary Care Home, and for percentage of Medicaid eligible patients in area and clinic.	dentists	Medicaid Population (particularly Medicaid Expansion)	$2 million (2013-14)	$0	$32,000	Immediately, upon award of contract	# of awardees; distribution of awardees throughout state; amount of money distributed; average HPSA score for awardees; average difference in Medicaid served from county population.	* Number of awards given	ORS 442.550 - 442.565 OAR 409-037

Oregon's Obligated Service Health Providers: 2008 through 2012

Oregon Healthcare Workforce Institute
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Oregon's Obligated Service Health Providers: 2008 through 2012

Since the 1960s, the issue of an adequate supply of health professionals to meet the needs of underserved areas and populations has been a part of the national discussion around health care.[1] The establishment of the National Health Services Corps (NHSC) in 1972 was a watershed event, in which the federal government created a concentrated approach to address health care access in underserved areas. To varying degrees, states have followed the lead of the federal government, with many states sponsoring their own loan repayment and loan forgiveness programs to supplement federal resources to recruit health professionals to practice in underserved areas or with underserved populations.

The U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA) has agreements in place with 54 states and territories to coordinate the NHSC and other recruitment and retention programs. In Oregon, the Oregon Primary Care Office (PCO) within the Oregon Health Authority works in partnership with HRSA in administering many federal health care workforce programs to increase the supply of health providers in Oregon's rural and underserved areas.[2] These HRSA programs include student loan repayment and scholarships, as well as the J-1 physician visa waiver program, for qualified health providers who commit to practicing for a defined service period in communities located in Health Professional Shortage Areas (HPSA).[3]

The term "obligated service providers" is used in this report to define those health professionals fulfilling a service contract with HRSA in exchange for loan repayment assistance or scholarship, as well as those individuals fulfilling a service contract under a J-1 Visa Waiver for a foreign physician. This report presents information on these obligated service programs and health professions, employing facilities, and retention rates of obligated service providers in Oregon's health care workforce from 2008 through 2012.[i]

Obligated Service Programs

Oregon's PCO coordinates four obligated service programs for the state: the National Health Service Corps, NURSE Corps, Faculty Loan Repayment Program, and J-1 Visa Waiver Program.

National Health Service Corps (NHSC) providers serve in federally designated HPSAs in primary care, dentistry, and mental and behavioral health. There are two NHSC programs:

> *The National Health Service Corps Loan Repayment Program (LRP)* offers providers working full-time in HPSAs up to $60,000 in student loan repayment. The program requires a two-year service commitment with an opportunity to extend service contracts for additional support. Recipients must work in approved worksites in rural, urban and frontier communities.

[i] There exists other state and private programs administered in Oregon that provide similar financial assistance for health care providers; however, information on these programs and providers are not included in this report.

The National Health Service Corps Scholarship Program (SP) offers students pursuing primary health care careers funding for tuition and other educational expenses as well as monthly stipends. In exchange, recipients commit to practicing in a HPSA for a minimum of two and maximum of four years after graduation and licensure.

The NURSE Corps includes licensed registered nurses, advanced practice nurses and nurse faculty who serve at Critical Shortage Facilities (CSF). CSFs are facilities within HPSAs that include non-profit hospitals, inpatient or outpatient nursing facilities, Federally Qualified Health Centers, rural health or public health clinics, and accredited public or private not-for-profit nursing schools. There are two NURSE Corps programs:

The NURSE Corps Loan Repayment Program (NELRP) offers registered nurses and advanced practice registered nurses working in critical nurse-shortage areas loan repayment for up to 60% of eligible school loans. The program requires a two-year service commitment and offers additional 25% repayment for a third-year of service. Recipients must work in approved facilities in rural, urban and frontier communities.

The NURSE Corps Scholarship Program (NSP) offers nursing students funding for tuition and other educational expenses as well as stipends. Recipients commit to working in HPSA facilities with a critical shortage of nurses for a minimum of two and maximum of four years after graduation and licensure.

The Faculty Loan Repayment Program (FLRP) is for health profession program graduates from disadvantaged backgrounds who serve for two years as faculty in qualified health profession education programs at an accredited college or university. Recipients can receive a maximum of $40,000 in loan repayment to be matched by the employing institution.

J-1 Physician Visa Waiver Program (J-1 Visa Waiver)
To address the U.S. physician shortage, the federal J-1 Physician Visa Waiver Program, also known as the Conrad Program, authorizes Oregon's PCO to sponsor up to 30 international medical graduates per year in full-time employment in federally-designated HPSAs, Medically Underserved Areas, or Medically Underserved Population worksites.[45]

Foreign physicians who obtained their exchange visitor visa to pursue graduate medical education or post-graduate training in the United States are eligible for this program. The J-1 Visa Waiver waives the requirement that foreign physicians return to their home country for two years before applying for permanent residency in the United States. In exchange, the physician agrees to practice full-time for three years in underserved areas or with underserved populations. Once the obligations of the J-1 Visa Waiver have been fulfilled, the physician is eligible to apply for permanent residence or other visa status.

Data and Methods

Data for this report comes from the following sources:

- PCO's 2010 - 2013 National Health Service Corps Field Strength Reports, which includes the loan repayment and scholarship programs, identifies the providers' health profession, employment status, obligated service program type, worksite location, and length of obligation.

- PCO's 2013 J-1 Physician Visa Waiver Database identifies the physicians' practice specialty, gender, country of origin, worksite location, start date, and waiver year. When data elements from the J-1 Physician Visa Database match with data elements in the loan repayment and scholarship database (e.g., worksite location), the data is presented together, otherwise the data is presented separately.

- Oregon Medical Board (OMB) licensing applicant/licensee services website identifies the current license status and worksite location for physicians and physician assistants. [6]

- Oregon State Board of Nursing (OSBN) license verification services website identifies the current license status and worksite location for nurses. [7]

- Oregon Board of Dentistry online licensee directory identifies the current license status and worksite location of dentists and dental hygienists. [8]

- Oregon Board of Licensed Professional Counselors and Therapists online licensee directory identifies the current license status and worksite location for licensed professional counselors and marriage and family therapists. [9]

- Oregon Board of Licensed Clinical Social Workers online license verification and disciplinary records check system identifies the current license status and worksite location for licensed social workers. [10]

- Nurse practitioner workforce data from the 2012 OSBN licensing database as submitted to the Oregon Health Care Workforce Licensing Database in February 2012 and cleaned by the Oregon Center for Nursing.[11]

- Physician and physician assistant workforce data from the 2012 OMB licensing database as submitted to the Oregon Health Care Workforce Licensing Database in January 2012 and cleaned by the Oregon Healthcare Workforce Institute.[12]

The number of obligated service providers in Oregon for 2008, 2009, 2010, 2011, and 2012 was determined by counting obligated service health professionals reported as active in the National

Health Service Corps Field Strength Reports and the J-1 Physician Visa Database for any duration during the specified year.

The primary practice address for obligated service health professionals working in multiple counties was identified as the first reported address. The obligated service providers' rural/non-rural practice status was determined using the Oregon Office of Rural Health's rural/urban zip code designation list.[13]

Retention rates of health providers who have fulfilled their contract obligations were determined using 2013 practice location data from the licensing boards' online directories.

The percentages of obligated service physicians, nurse practitioners, and physician assistants and their non-obligated counterparts working in primary medical care were determined at the county-level using data from the 2012 Oregon Health Care Workforce Licensing Database. For purposes of this report primary medical care providers are defined as physicians, nurse practitioners and physician assistants who reported practicing in the specialties of family medicine, general practice, geriatrics, pediatrics, adolescent medicine, internal medicine, obstetrics and gynecology, or women's health.[ii]

Section I: Obligated Service Providers in Oregon from 2008 through 2012

Oregon's Obligated Service Providers

There are 14 types of health providers eligible for the obligated service programs identified in this report: [14]

Physicians (MD and DO)
Physician Assistants (PA)
Dentists (DD)
Registered Dental Hygienists (RDH)
Advanced Practice Nurses (Nursing NELRP)
Certified Nurse Midwives (CNM)
Nurse Practitioners (NP)
Registered Nurses (NUR and Nursing NELRP)
Nurse Faculty (Nursing NELRP)
Psychiatric Nurse Specialists (PNS)
Health Service Psychologists (HSP)
Licensed Clinical Social Workers (LCSW)
Licensed Professional Counselors (LPC)
Marriage and Family Therapists (MFT)

[ii] HRSA includes OB/GYN physicians among the definition of primary medical care providers eligible to participate in obligated service programs. Other Oregon Health Authority workforce reports, such as the *Oregon Health Professions: Occupational and County Profiles* report, exclude OB/GYN physicians within the definition of primary care providers. For more information on differing definitions of primary care see, for example, the Institute of Medicine, the American Academy of Family Physicians, and the Morehouse School of Medicine's National Center for Primary Care.

The number of obligated service providers in Oregon has increased from 33 in 2008 to 338 in 2012 (see Table 1).

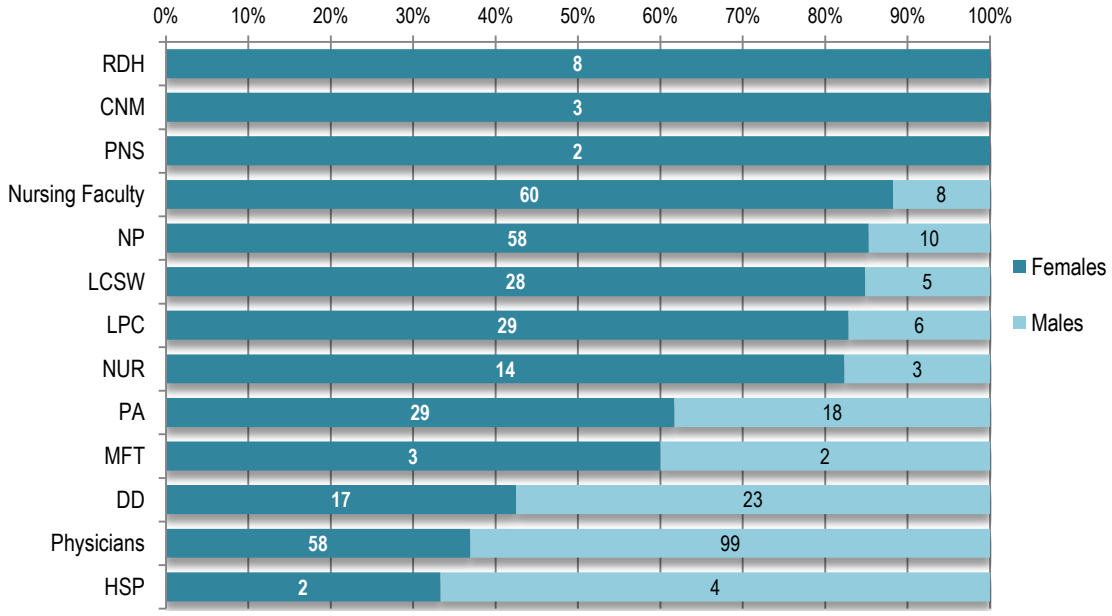
Table 1: Count of Oregon's Obligated Service Health Providers by Year: 2008 - 2012

Profession	2008	2009	2010	2011	2012
Nursing Faculty	0	0	0	0	67
Physicians (MD/DO)	26	36	42	91	78
Nurse Practitioners	1	11	28	49	53
Physician Assistants	1	12	21	38	39
Licensed Clinical Social Workers	0	3	9	21	28
Licensed Professional Counselors	0	5	9	20	29
Dentists	5	14	21	31	30
Registered Nurses	0	0	0	0	17
Health Service Psychologists	0	0	1	4	6
Registered Dental Hygienists	0	0	5	7	5
Marriage and Family Therapists	0	1	2	4	3
Certified Nurse Midwives	0	3	3	3	1
Psychiatric Nurse Specialists	0	1	1	1	1
Total	**33**	**86**	**142**	**243**	**338**

Gender of Obligated Service Providers

The number of females (311) in obligated service programs exceeds the number of males (178) (see Figure 1); however, three disciplines have a majority of males: physicians, dentists (DD), and psychologists (HSP).

Figure 1: Gender of Oregon's Obligated Service Providers by Discipline: 2008 - 2012



Oregon's Obligated Service Providers by County

From 2008 through 2012, Oregon's PCO facilitated the placement of 489 obligated service providers in Oregon's rural and underserved areas. Table 2 presents the number of obligated service providers by county of placement over this five-year time period.[iii]

From 2008 through 2012, the counties with the highest number of obligated service providers are Multnomah (86), Jackson (56), Marion (31), and Washington (28). No obligated service provider identified a practice address in Curry, Sherman, Wallowa, or Wheeler counties during this time period.

[iii] From 2008 to 2012, eight obligated service providers worked in two or more counties. Two dentists, one physician assistant, and one social worker practiced in both Hood River and Wasco counties. One physician worked in Benton and Linn counties. One dental hygienist worked in Jackson and Josephine counties and one dental hygienist worked in Washington and Yamhill counties. One nurse practitioner worked in three counties: Crook, Deschutes, and Jefferson. For the purpose of this report, only the county associated with the primary practice address of each of these professionals was used to construct Table 2.

Table 2: Distribution of Oregon's Obligated Service Providers by County: 2008 - 2012

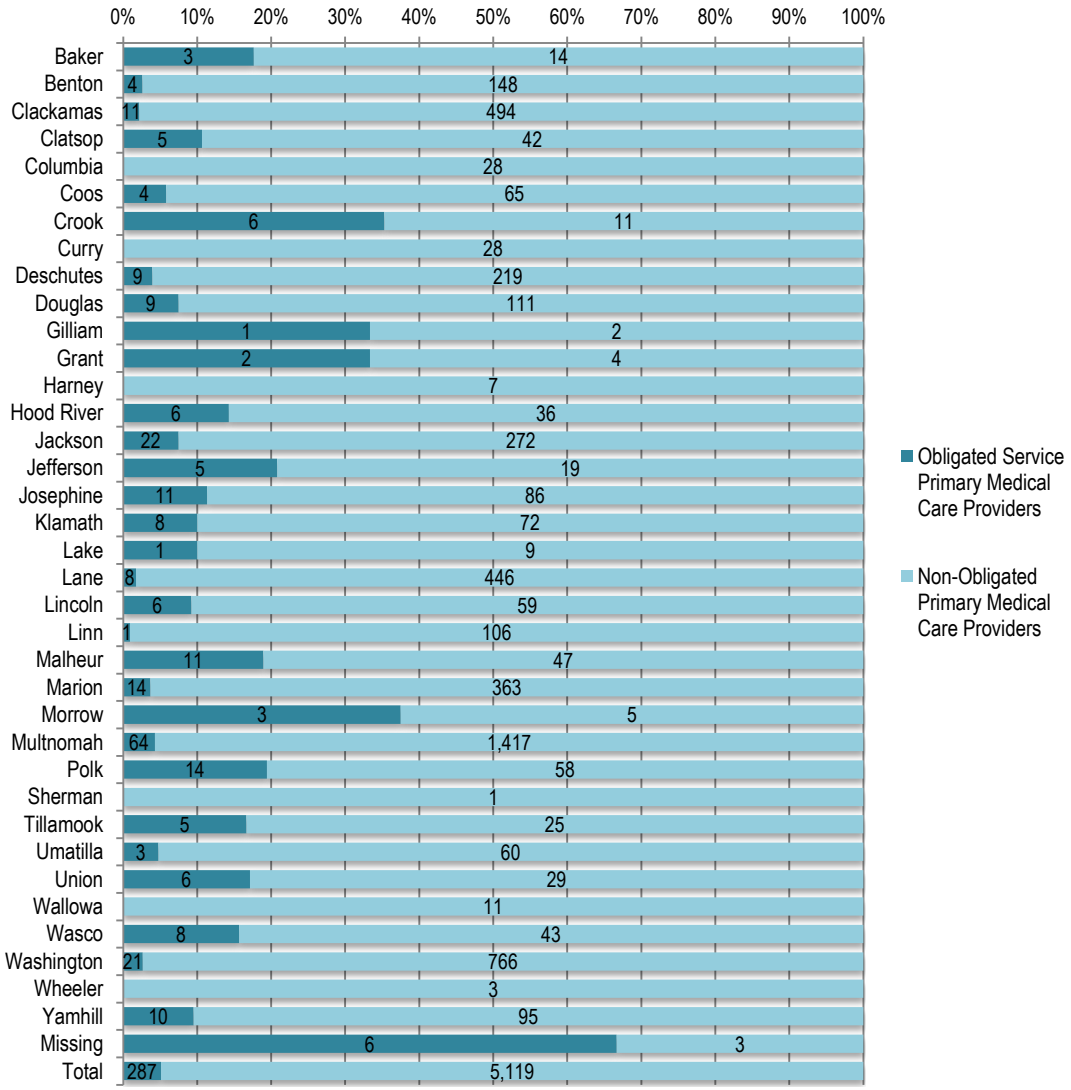
County	Certified Nurse Midwife	Dentist	Health Service Psychologist	Licensed Clinical Social Worker	Licensed Professional Counselor	Marriage and Family Therapists	Nurse (NELRP Program)	Nurse Practitioner	Registered Nurse	Physician (MD/DO)	Physician Assistant	Psychiatric Nurse Specialist	Dental Hygienist	Total
Baker	0	0	0	1	1	0	1	0	0	0	1	0	0	**4**
Benton	0	0	0	0	0	0	0	0	1	1	0	0	0	**2**
Clackamas	0	1	0	2	2	0	2	4	0	2	1	0	0	**14**
Clatsop	0	0	0	0	0	0	0	8	0	4	0	0	0	**12**
Columbia	0	0	0	0	0	0	0	0	0	1	0	0	0	**1**
Coos	0	0	0	1	3	0	0	4	0	7	0	0	0	**15**
Crook	0	0	1	0	0	0	0	1	0	2	3	0	0	**7**
Curry	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Deschutes	0	0	0	0	0	0	1	1	0	6	7	0	0	**15**
Douglas	0	0	0	2	3	1	0	7	0	9	0	0	0	**22**
Gilliam	0	0	0	0	0	0	0	0	0	0	1	0	0	**1**
Grant	0	0	0	0	1	0	0	1	0	2	0	0	0	**4**
Harney	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**
Hood River	0	3	0	1	0	0	0	0	0	2	1	0	0	**7**
Jackson	2	10	0	2	5	0	3	8	2	20	1	0	3	**56**
Jefferson	0	0	0	1	1	0	1	2	0	2	0	0	0	**7**
Josephine	0	3	1	3	3	0	1	3	0	7	0	1	1	**23**
Klamath	0	1	0	1	2	1	1	2	0	9	0	0	1	**18**
Lake	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**
Lane	0	1	0	0	0	0	2	3	0	18	0	0	0	**24**
Lincoln	0	3	0	1	2	1	1	0	0	0	0	0	0	**8**
Linn	0	0	0	0	0	0	0	0	0	2	0	0	0	**2**
Malheur	0	6	0	1	0	0	0	0	2	6	1	0	0	**16**
Marion	0	1	1	0	0	0	4	1	4	15	4	0	1	**31**
Morrow	0	0	0	1	1	0	0	0	0	0	2	0	0	**4**
Multnomah	0	2	0	3	2	0	40	12	5	14	6	1	1	**86**
Polk	0	2	0	3	6	0	0	3	0	1	5	0	0	**20**
Sherman	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Tillamook	0	0	0	1	1	0	0	1	0	1	3	0	0	**7**
Umatilla	0	0	0	2	0	0	0	2	0	9	0	0	0	**13**
Union	0	0	0	2	1	0	2	0	0	5	1	0	0	**11**
Wallowa	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Wasco	0	0	0	2	1	0	1	3	0	3	2	0	0	**12**
Washington	1	3	2	3	0	0	8	1	3	2	4	0	1	**28**
Wheeler	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Yamhill	0	4	1	0	0	0	0	1	0	7	4	0	0	**17**
Total	**3**	**40**	**6**	**33**	**35**	**5**	**68**	**68**	**17**	**157**	**47**	**2**	**8**	**489**

County Distribution of Obligated Service Primary Medical Care Providers

In Figure 2, a comparison is made between the number of obligated service physicians, nurse practitioners, and physician assistants who are primary medical care providers and their non-obligated counterparts by county of practice in 2012. Primary medical care providers are defined as physicians, nurse practitioners, and physician assistants who reported practicing in the specialties of family medicine, general practice, geriatrics, pediatrics, adolescent medicine, or internal medicine, obstetrics and gynecology, or women's health.

Statewide in 2012, obligated service physicians, nurse practitioners, and physician assistants made up 5% of the statewide primary medical care workforce. There were four counties where more than 25% of the primary medical care workforce consisted of obligated service physicians, nurse practitioners, and physician assistants: Morrow (38%), Crook (35%), Gilliam (33%) and Grant (33%).

Figure 2: Count of Obligated Service Primary Medical Care Providers as Compared to Non-Obligated Primary Medical Care Providers by County (2012)



J-1 Visa Waiver Program

From 2008 through 2012, 105 foreign physicians began their obligated service contracts in Oregon under the J-1 Visa Waiver program. These physicians represent 33 different countries (see Table 3). The most frequently reported home country was India (28) followed by the Philippines (22), Canada (8), and Pakistan (5).

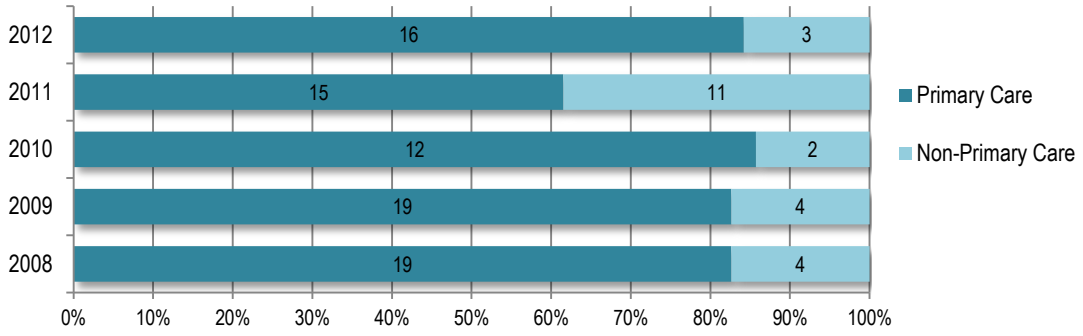
Table 3: Home Country of Oregon's J-1 Visa Waiver Program Physicians by Year Entered: 2008 - 2012

Home Country	2008	2009	2010	2011	2012	Total 2008 - 2012
Argentina	0	0	1	1	0	2
Bangladesh	0	0	1	0	0	1
Barbados	0	0	1	0	0	1
Botswana	0	0	0	0	1	1
Canada	4	1	0	1	2	8
Dominican Republic	2	2	0	0	0	4
Egypt	0	0	0	0	1	1
El Salvador	0	0	0	0	1	1
Germany	0	0	1	0	0	1
Great Britain	0	0	1	0	0	1
India	2	8	5	8	5	28
Kenya	0	0	0	1	0	1
Lebanon	1	0	0	0	1	2
Malaysia	1	0	0	2	0	3
Maldives	0	0	1	0	0	1
Mexico	1	1	0	1	0	3
Moldova	1	0	0	0	0	1
Nepal	0	1	0	1	0	2
New Zealand	0	1	0	0	0	1
Pakistan	2	1	0	1	1	5
Peru	0	0	0	0	1	1
Philippines	6	3	2	8	3	22
Romania	0	0	0	0	1	1
South Korea	0	1	0	0	0	1
Serbia and Montenegro	1	0	0	0	0	1
Slovak Republic	1	0	0	0	0	1
Saint Vincent and the Grenadines	1	0	0	0	0	1
Sudan	0	0	0	0	1	1
Syria	0	1	1	0	0	2
Thailand	0	1	0	0	0	1
Trinidad and Tobago	0	0	0	0	1	1
Turkey	0	1	0	1	0	2
Venezuela	0	0	0	1	0	1
Missing	0	1	0	0	0	1
Total	**23**	**23**	**14**	**26**	**19**	**105**

Primary Care Physicians in the J-1 Visa Waiver Program

From 2008 through 2012, 77% of the 105 J-1 Visa Waiver physicians beginning their 3-year service obligation in Oregon reported practicing in primary care specialties (see Figure 3). These included family medicine, internal medicine, geriatrics, obstetrics and gynecology, and pediatrics

Figure 3: Percentage and Count of Oregon's J-1 Visa Waiver Physicians by Specialty Category by Year Entering: 2008 - 2012



Practice Specialties of Oregon's J-1 Visa Waiver Physicians

There are 20 reported practice specialties of physicians in the J-1 Visa Waiver Program (see Table 4). Internal medicine (56) and family medicine (20) were the most frequently identified specialties reported by those physicians entering the J-1 Visa Waiver program in Oregon from 2008 through 2012.

Table 4: Practice Specialty of Oregon's J-1 Visa Waiver Physicians by Year of Entry: 2008 - 2012

Specialty Type	2008	2009	2010	2011	2012	Total
Bariatric Surgery	0	2	0	0	0	**2**
Cardiology	1	0	0	1	0	**2**
Dermatology	1	0	0	1	0	**2**
Endocrinology	0	0	1	1	0	**2**
Family Medicine	4	2	3	6	5	**20**
General Psychiatry	0	0	0	1	0	**1**
General Surgery	0	0	0	1	1	**2**
Geriatrics	1	0	0	0	0	**1**
Hematology	0	0	0	1	0	**1**
Infectious Diseases	0	0	0	1	0	**1**
Internal Medicine	14	15	9	8	10	**56**
Laparoscopic Surgery	0	0	0	1	0	**1**
Nephrology	1	1	0	0	0	**2**
Neurological Surgery	0	0	0	0	1	**1**
Neurology	1	0	0	0	0	**1**
Obstetrics/Gynecology	0	1	0	1	0	**2**
Otolaryngologist	0	0	1	0	0	**1**
Pediatrics	0	1	0	0	1	**2**
Pulmonology	0	0	0	2	0	**2**
Rheumatology	0	1	0	0	1	**2**
Vascular Surgery	0	0	0	1	0	**1**
Total	**23**	**23**	**14**	**26**	**19**	**105**

Section II: Obligated Service Programs in Oregon from 2008 through 2012

In 2008, only ten obligated service providers in the NHSC loan repayment and scholarship programs were serving in Oregon (see Table 5). In 2012, that number grew to 319 providers in five HRSA loan repayment and scholarship programs.

Table 5: Number of HRSA Obligated Service Providers by Program by Year in Oregon: 2008 - 2012

Program	Count of Obligated Service Providers 2008	Count of Obligated Service Providers 2009	Count of Obligated Service Providers 2010	Count of Obligated Service Providers 2011	Count of Obligated Service Providers 2012
FLRP	0	0	0	0	2
NELRP	0	0	0	0	67
NHSC LRP	9	62	124	208	221
NHSC SP	1	3	4	9	13
NSP	0	0	0	0	13
Total	**10**	**65**	**128**	**217**	**319**

The number of J-1 Visa Waiver physicians beginning their terms of service for each year from 2008 through 2012 is seen in Table 6.

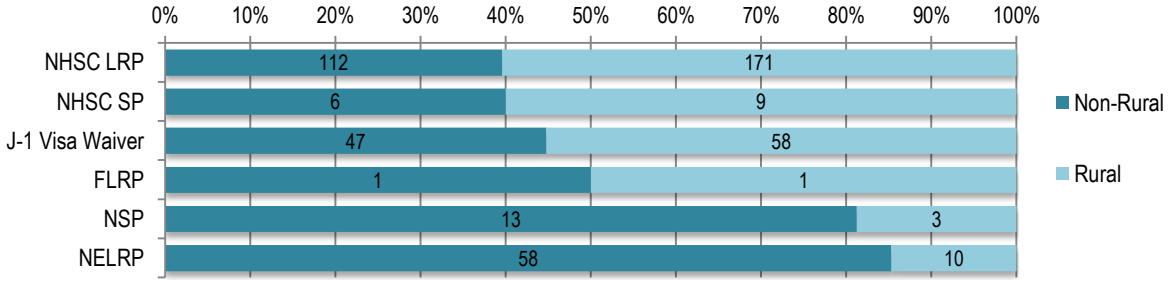
Table 6: Number of J-1 Visa Waiver Physicians in Oregon by Year of Service Entry: 2008 - 2012

Program	2008	2009	2010	2011	2012	Total Entering 2008 - 2012
J-1 Visa Waiver Physicians	23	23	14	26	19	105

Rural/Non-Rural Practice Locations of Obligated Service Providers by Program

From 2008 through 2012, more than 50% of obligated service providers were practicing in Oregon's rural communities (see Figure 4). Sixty percent (or 171) of NHSC loan repayment obligated service providers were serving in rural communities. Of Oregon's J-1 Visa Waiver program physicians, 55% (or 58) were practicing in rural communities. The majority of NSP (13) and NELRP (58) obligated service nurses worked in non-rural communities.

Figure 4: Rural/Non-Rural Location of Providers in Obligated Service Programs: 2008 - 2012



Obligated Service Program by County

From 2008 through 2012, health care providers participating in obligated service programs were present in 31 of Oregon's 36 counties.

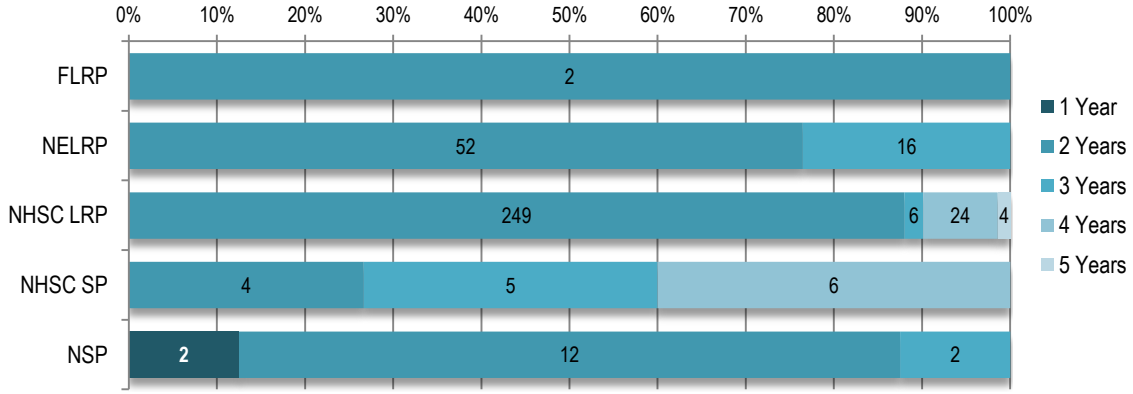
Table 7: Obligated Service Programs by County and Number of Providers: 2008 - 2012

County	FLRP	J-1 Visa	NELRP	NHSC LRP	NHSC SP	NSP	Total
Baker	0	0	1	3	0	0	**4**
Benton	0	0	0	1	0	1	**2**
Clackamas	0	1	2	11	0	0	**13**
Clatsop	0	2	0	10	0	0	**10**
Columbia	0	1	0	0	0	0	**0**
Coos	0	7	0	8	0	0	**8**
Crook	0	0	0	5	2	0	**7**
Curry	0	0	0	0	0	0	**0**
Deschutes	0	0	1	11	3	0	**15**
Douglas	0	8	0	14	0	0	**14**
Gilliam	0	0	0	1	0	0	**1**
Grant	0	0	0	4	0	0	**4**
Harney	0	0	0	1	0	0	**1**
Hood River	0	0	0	6	1	0	**7**
Jackson	0	18	3	29	4	2	**38**
Jefferson	0	0	1	3	3	0	**7**
Josephine	0	7	1	15	0	0	**16**
Klamath	0	4	1	12	1	0	**14**
Lake	0	0	0	1	0	0	**1**
Lane	0	17	2	5	0	0	**7**
Lincoln	0	0	1	7	0	0	**8**
Linn	0	0	0	2	0	0	**2**
Malheur	0	3	0	11	0	2	**13**
Marion	0	12	4	11	0	4	**19**
Morrow	0	0	0	4	0	0	**4**
Multnomah	1	5	40	36	0	4	**81**
Polk	0	0	0	20	0	0	**20**
Sherman	0	0	0	0	0	0	**0**
Tillamook	1	0	0	6	0	0	**7**
Umatilla	0	8	0	5	0	0	**5**
Union	0	5	2	4	0	0	**6**
Wallowa	0	0	0	0	0	0	**0**
Wasco	0	1	1	9	1	0	**11**
Washington	0	0	8	17	0	3	**28**
Wheeler	0	0	0	0	0	0	**0**
Yamhill	0	6	0	11	0	0	**11**
Total	**2**	**105**	**68**	**283**	**15**	**16**	**489**

Length of Service Obligation

From 2008 through 2012, most of Oregon's obligated service providers committed to a two-year length of service (see Figure 5). The NHSC loan repayment program has the largest number of obligated service providers serving beyond two years. Twenty-eight providers in the NHSC loan repayment program have served for four or more years. J-1 Visa Waiver physicians have a three year service obligation.

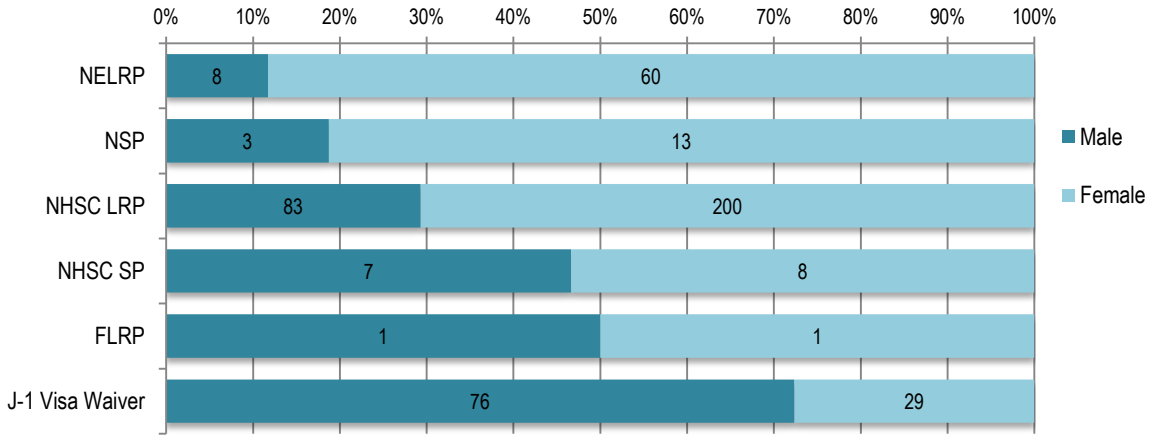
Figure 5: Count and Percentage of Providers by Length of Service Commitment in Obligated Service Program: 2008 -2012



Obligated Service Program Gender Profile

From 2008 through 2012, the majority of Oregon's obligated service providers were female (see Figure 6). The only program with a majority of males is the J-1 physician visa waiver program with 76 male physicians and 29 female physicians beginning service during this timeframe.

Figure 6: Provider Gender by Obligated Service Program: 2008 - 2012



Section III: Oregon's Health Care Facilities Employing Obligated Service Providers

Overview of Facilities Employing Obligated Service Providers

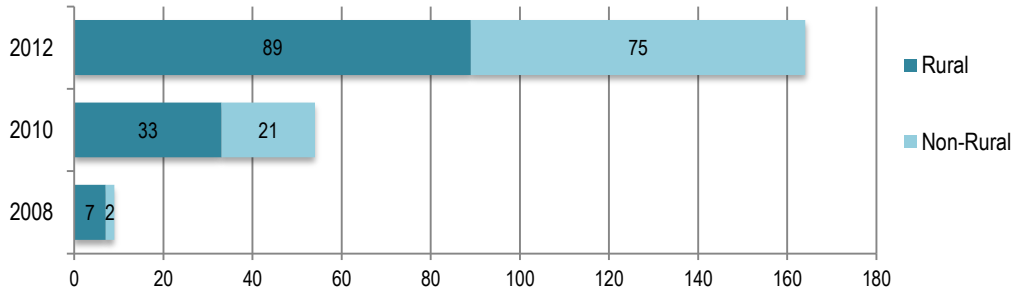
Obligated service providers are employed in federally designated facilities, such as community rural, tribal, or migrant health centers or Federally Qualified Health Clinics, or as faculty in accredited health profession education programs (see Table 8). The most common facility types employing obligated service providers in 2012 were Community and Migrant Health Centers (40) and Federally Qualified Health Centers (26).

Table 8: Type and Count of Facilities Employing Obligated Service Providers (2012)

HRSA Designated Facility Type	Count of Facilities: 2012
Community/Migrant Health Center	40
Federally Qualified Health Center	26
Rural Health Center	6
Hospital Affiliated Primary Care Practice	5
Mental Health/Substance Abuse	2
Prison	2
Certified Rural Health Clinic	1
Compacted Indian Tribe	1
Dental Clinic	1
Group Practices	1
Homeless Shelter	1
Indian Health Service, Tribal Clinic, and Urban Indian Health Clinic	1
Other	21
Missing	56
Total	**164**

The majority of facilities that employ obligated service providers are located in Oregon's rural communities, where the number of facilities increased from 7 in 2008 to 89 in 2012 (see Figure 7). The number of facilities that employ obligated service providers in Oregon's non-rural communities increased from two in 2008 to 75 in 2012.

Figure 7: Rural/Non-Rural Location of Facilities Employing Obligated Service Providers: 2008 - 2012



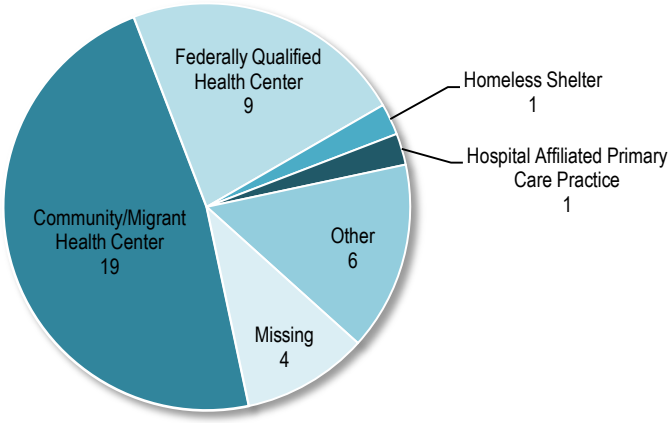
In 2008, there were nine facilities in seven counties employing obligated service providers (see Table 9). By 2012, the number of facilities employing obligated service providers increased to 164 and spread throughout 30 counties in Oregon. The counties experiencing the largest increases in the number of facilities employing obligated service providers from 2008 through 2012 were Multnomah (25), Jackson (13), and Washington (12).

Table 9: Count and County of HRSA Designated Facilities Employing Obligated Service Providers by Year

County	Count of Facilities: 2008	Count of Facilities: 2010	Count of Facilities: 2012
Baker	0	1	3
Benton	0	0	3
Clackamas	0	2	8
Clatsop	0	1	3
Columbia	0	0	0
Coos	0	1	1
Crook	0	2	3
Curry	0	0	0
Deschutes	1	1	3
Douglas	0	2	8
Gilliam	0	0	1
Grant	0	2	1
Harney	0	1	0
Hood River	0	2	2
Jackson	0	6	13
Jefferson	0	1	6
Josephine	1	1	6
Klamath	2	3	5
Lake	0	0	1
Lane	0	3	5
Lincoln	0	0	7
Linn	0	0	1
Malheur	2	4	8
Marion	0	1	9
Morrow	0	1	3
Multnomah	1	7	25
Polk	0	2	6
Sherman	0	0	0
Tillamook	0	1	3
Umatilla	0	1	3
Union	0	1	4
Wallowa	0	0	0
Wasco	0	2	7
Washington	1	3	13
Wheeler	0	0	0
Yamhill	1	2	3
Total	**9**	**54**	**164**

In 2012, most of the 319 obligated service health professionals worked in a single facility. Twenty-three, however, worked in at least two and up to four facilities during their service obligation. These obligated service providers working at multiple facilities included nine nurse practitioners, three licensed clinical social workers, three dentists, three physicians, two physician assistants, two dental hygienists, and a marriage and family therapist. The 23 obligated service health professionals worked in 40 of the 164 active HRSA designated facilities in 2012 (see Figure 8).

Figure 8: Type and Count of Facilities Employing Those Obligated Service Professionals Who Worked in Multiple Locations (2012)



Section IV: Retention of Obligated Service Providers

Retention of Oregon's Obligated Service Providers

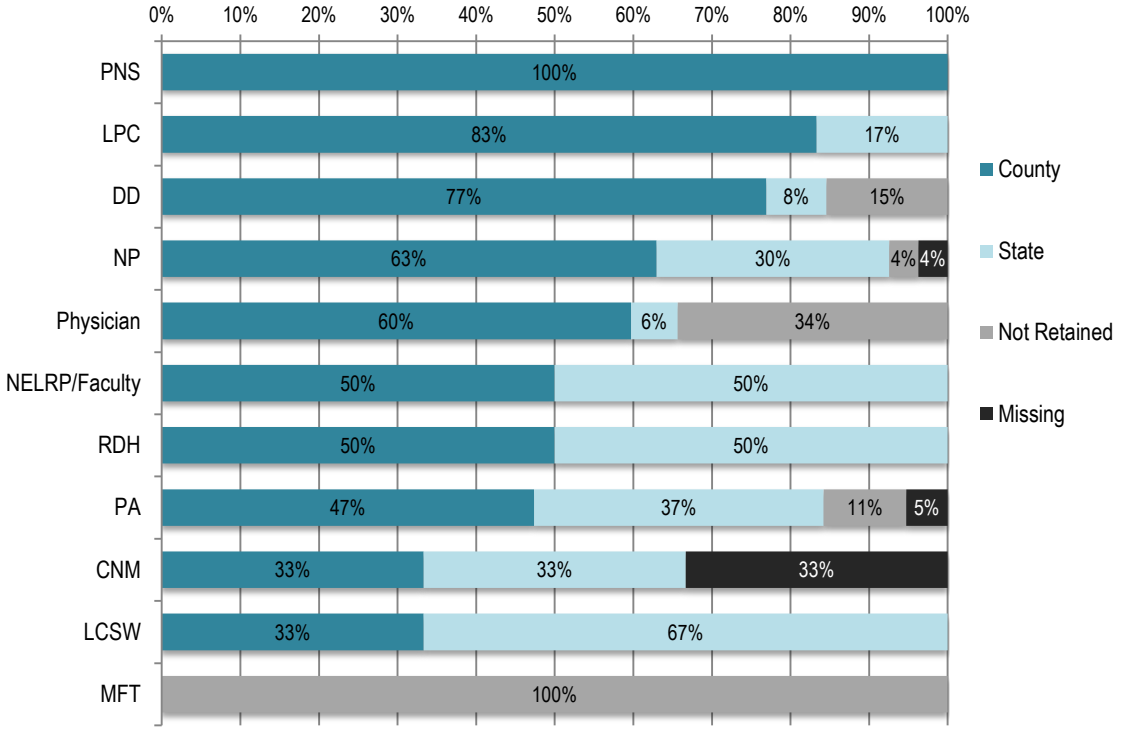
From 2008 through 2013, 142 obligated service providers fulfilled their service contracts in Oregon, including 65 physicians, 27 nurse practitioners, 19 physician assistants, 13 dentists, six licensed professional counselors, three certified nurse midwives, three licensed clinical social workers, two nurse faculty, two dental hygienists, one psychiatric nurse specialist, and one marriage and family therapist. Overall, 78% of these obligated providers completing their service agreement from 2008 through 2013 have remained in Oregon, of which 60% continue to practice in the same county where they served (see Table 10).

Table 10: Percent Retention of Obligated Service Providers (based on service dates): 2008 - 2013

In-County Retention Rate	In-State Retention Rate	Not Retained in Oregon	Missing Data
60%	78%	20%	2%

The provider types with the highest percentage rates of in-county retention include the one psychiatric nurse specialist (100%), licensed professional counselors (83%), dentists (77%), nurse practitioners (63%), and physicians (60%) (see Figure 10).

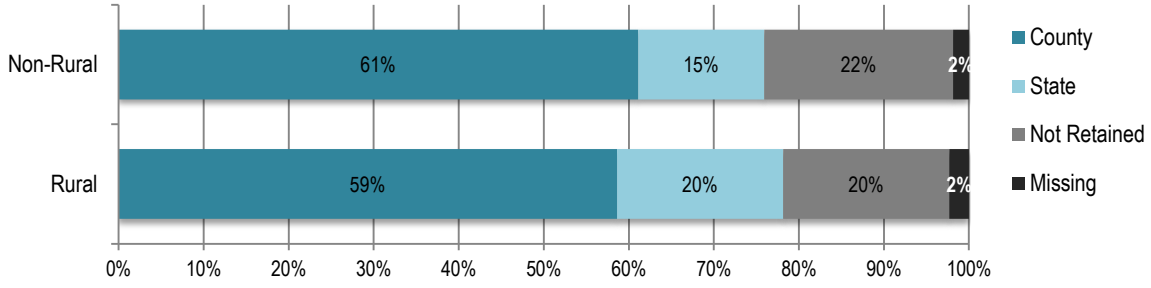
Figure 10: Retention Rates of Oregon's Obligated Service Providers: 2008 - 2013



Retention of Oregon's Obligated Service Providers in Rural and Non-Rural Areas

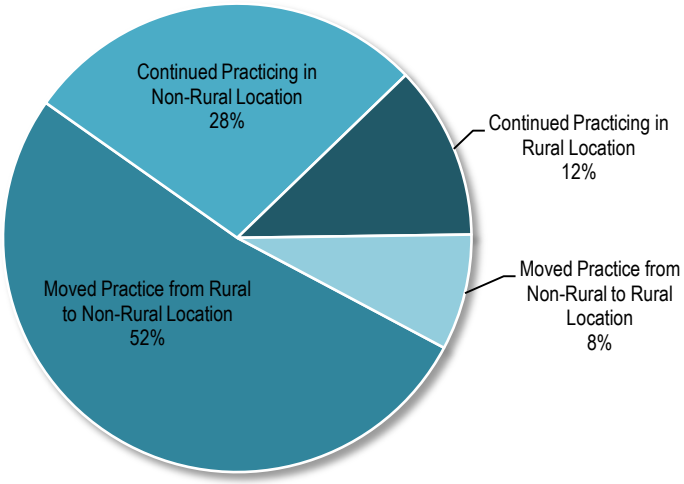
From 2008 through 2013, 61% of non-rural and 59% of rural obligated service providers continued to practice within the same county after completion of their contracts (see Figure 11). Twenty percent of rural and 15% of non-rural providers who completed their service obligations during this time period moved their practice to another county, but remained in Oregon. Twenty-two percent of non-rural and 20% of rural obligated service providers left the state after finishing their service obligations.

Figure 11: Percent Retention of Oregon's Obligated Service Providers by Rural/Non-Rural Practice Location: 2008 - 2013



For obligated service providers who completed their service contracts and remained in Oregon, 80% now practice in non-rural communities (see Figure 12). Of those now practicing in a non-rural setting, 52% percent relocated from a rural Oregon community. Only 8% of obligated service providers moved their practice from a non-rural setting to a rural community.

Figure 12: Post-Service Practice Location of Oregon's Obligated Service Providers Remaining in Oregon: 2008 - 2012



Conclusion

At a time when health insurance coverage for historically underserved groups is expanding at a rate faster than that of the supply of health care providers, and with state and federal health care reforms fully underway, the need for health professionals is greater than ever. Since 2008, the Oregon Primary Care Office has assisted in the promotion of access to care by facilitating the placement of 489 obligated service providers in rural and underserved areas. In 2008, nine facilities in seven of Oregon's counties employed the total of the state's 33 obligated service providers. In 2012, 164 facilities in 30 of Oregon's counties employed the total of the state's 338 obligated service providers.

One crucial measurement of the continued success of these programs is the fulfillment of contracts and subsequent retention of providers. Since 2008, 142 obligated service providers fulfilled their contracts. Seventy-eight percent of these providers have remained in Oregon, of which 60% continue to practice in the same county where they served.

The increases in the numbers of obligated service providers, facilities that employ them and retention rates after contract conclusion show the success of efforts to utilize these programs to their maximum effectiveness. Moreover, the geographic distribution of these providers throughout Oregon's counties and in rural and underserved urban areas has improved. In the face of health reform implementation, provider shortages, and Oregon's growing and aging population, these successes come at a crucial time to meet the workforce demands of a dynamic health care system.

Endnotes

[1] Reynolds, P. (2008). A legislative history of federal assistance for health professions training in primary care medicine and dentistry in the United States: 1963-2008. *Academic Medicine, 83*: 1004-1014.

[2] http://www.hrsa.gov/index.html

[3] http://www.hrsa.gov/shortage/

[4] U.S. Department of Health and Human Services, Health Resources and Services Administration. *Bureau of Clinician Recruitment and Services*. Available at http://www.hrsa.gov/about/organization/bureaus/bcrs/.

[5] U.S. Department of Homeland Security. *Conrad 30 Waiver Program*. Available at http://www.uscis.gov/working-united-states/students-and-exchange-visitors/conrad-30-waiver-program

[6] https://techmedweb.omb.state.or.us/Clients/ORMB/Public/VerificationRequest.aspx.

[7] http://osbn.oregon.gov/OSBNVerification/Default.aspx.

[8] http://obd.oregonlookups.com/

[9] https://hrlb.oregon.gov/oblpct/licenseelookup/index.asp

[10] https://hrlb.oregon.gov/BLSW/LicenseeLookup/index.asp

[11] Oregon Office for Health Policy and Research (2013). *Oregon Health Professions: Occupational and County Profiles (February 2013).* Available at http://oregonhwi.org/documents/2012ProfilesReportFINAL1.pdf

[12] Oregon Office for Health Policy and Research (2013). *Oregon Health Professions: Occupational and County Profiles (February 2013).* Available at http://oregonhwi.org/documents/2012ProfilesReportFINAL1.pdf

[13] Oregon Office of Rural Health. *Rural/Urban Designation*. Available at http://www.ohsu.edu/xd/outreach/oregon-rural-health/data/rural-definitions/index.cfm

[14] U.S. Department of Health and Human Services. (February 2013). National Health Service Corps Loan Repayment Program. Rockville, MD.

Appendix C. Links to State-Funded Financial Incentive Program

Administrative Rules and Statutory Links

Oregon Medicare Primary Care Provider Loan Repayment Program (MCPLRP):

http://www.oregon.gov/oha/OHPR/rulemaking/notices/409-037_Web_Perm.pdf

Oregon Partnership Care Loan Repayment Program (SLRP)

http://www.ohsu.edu/xd/outreach/oregon-rural-health/providers/loan-repayment/slrp.cfm

Provider Tax Credits

http://www.ohsu.edu/xd/outreach/oregon-rural-health/providers/provider-tax-credits/index.cfm

Oregon Rural Medical Practitioners Insurance Subsidy Program

http://www.dhs.state.or.us/policy/healthplan/rules/temps/500-all(T)013112.pdf

APPENDIX D

Information on Other State Financial Incentive Programs

1. Selected State Summaries

Arizona currently operates a State Loan Repayment Program (SLRP) of approximately $350,000, funded through the Office of Rural Health and Primary Care, which funds about 15 providers annually. Funding for the non-federal portion of the program comes from their State General Fund. Additionally, the office administers a very small Rural Practice Provider Loan Repayment Program ($150,000 in funding), with about 5 awardees at any one time. Both programs require sites to adhere to the National Health Service Corps (NHSC) standards. A Loan Forgiveness program did exist until 2012, but was defunded due to state budget shortfalls. Payments from this program by providers in default are credited back to the office and are being used to help fund the state share of the SLRP in future years. Behavioral Health providers are not eligible for any of Arizona's programs.

Illinois offers no financial incentive programs for health professionals, outside of the federally funded programs administered by the Bureau of Clinician Recruitment and Service. The state has applied for SLRP funds, which will begin in 2014.

Kansas administers a small state-funded loan repayment program of $250,000 per year through their State Office of Rural Health and Primary Care. Providers qualify for annual awards of $25,000 per year for a physician and $20,000 per year for other disciplines. In the last program year, the state awarded a total of 5 new awards and 3 continued awards to providers who had completed their initial two years of service. Although Kansas has a "clawback" provision requiring heavy penalties from defaulting providers, no provider has defaulted to date, and it has not been used. Additionally, the University of Kansas Medical Center, Rural Health Education and Services (RHES), administers the Kansas Bridging Plan (KBP), a loan forgiveness program (up to $26,000) offered to physicians in Kansas residency programs of Family Practice, Internal Medicine, Pediatrics and Medicine/Pediatrics in most counties in exchange for 3 years of continued service upon completion of their residency program, a Student Loan Program that allows 30 entering students per year the opportunity to receive tuition, room and board and a stipend in exchange for an equal number of years of service in an underserved area of the state. Finally, the university offers what is known as a "retroactive" loan repayment program, funded from the unspent Student Loan Program dollars whenever students default.

Montana offers two programs for primary care providers: The Montana Rural Physician Incentive Program (MRPIP) administered by the Higher Education Commissioner's Office which offers medical education loan repayment assistance to approved physicians who practice in rural or medically underserved areas of the state or who serve underserved populations. The

maximum amount of education debt repayment a full-time physician may receive is $100,000 spread over a 5-year period of service. Proportionately reduced repayment amounts are also available for physicians who practice less than full-time. Also, for providers who do not receive an award under MRPIP and who apply unsuccessfully for NHSC, a small State Loan Repayment Program, administered by the Primary Care Office within the State Department of Health, makes available awards to 10 new providers per year. Funding from the State Legislature of $75,000 per year is matched with $75,000 in federal funds. Currently, the state has 22 providers participating in the program.

Nebraska offers both a scholarship program and a loan repayment program funded with state dollars. The Nebraska Student Loan Program provides forgivable student loans to Nebraska medical, dental, physician assistant, and graduate-level mental health students who agree to practice an approved specialty in a state-designated shortage area. The Nebraska Loan Repayment Program assists rural communities in recruiting and retaining primary care health professionals by offering state matching funds for repayment of health professionals' government or commercial educational debt. Awardees receive up to $40,000 in combined state and matching local funds. As of September 2013 a total of 96 awardees were participating in the two programs combined.

Oklahoma does not administer a SLRP, but does offer a Dental Loan Repayment Program through the State Office for Health, for up to 25 dentists who are eligible to receive $25,000 per year. Total funding from the legislature is $750,000.

South Dakota does not offer any loan forgiveness or loan repayment programs or other financial incentives to providers through state government. The University of South Dakota does offer programs that offer direct financial incentives to health care providers practicing in remote areas. One program provides qualifying physicians, dentists, physician assistants, nurse practitioners or nurse midwifes an incentive payment in return for three continuous years of practice in an eligible rural community. Physicians and dentists receive $154,796 for the three year period. The amount of the incentive payment for a qualifying physician assistant, nurse practitioner or nurse midwife is $35,956. Another program allows other professions (including dietitians and EMT professionals) to receive a one-time $10,000 payment upon completion of a three year commitment.

Pennsylvania offers a robust state-funded loan repayment program through their State Department of Health using a legislative appropriation of $600,000. Their program makes available loan repayment of $64,000 for physicians and dentists over the four-year contract, or $40,000 for Physician Assistants, Nurse Practitioners, and Certified Nurse Midwives. The state is in the process of re-designing their program and is anticipating a significant state budget increase in the next fiscal biennium to $2.8 million for the 2014-15 biennium. They will move to

a 2 year contract and increase the award for that contract to: $100,000 for Physicians/Dentists over the 2 years; $70,000 for PA's, NP's, CNM's and add the following in this category - Dental Hygienist, Licensed Professional Counselors, and Psychologists.

Vermont, a state often compared with Oregon due to its innovative health care system has not had a SLRP, although it applied for one for the first time this year through HRSA. It will be administered by the State Office of Rural Health and Primary Care. Like Oregon, they are taking an approach of asking the local sites to provide the match to the federal SLRP dollars. Where this is not possible the State will match the balance, from its State Education Trust Fund. Vermont also has an annual $100,000 legislative appropriation, which they subgrant to the Vermont Student Assistance Corp., which goes to dentists, dental hygienists, and nurses. There are currently 12 participants in the program. Finally, the Office receives a legislative appropriation of $870,000 which is subgranted to the AHEC program office at the University of Vermont to administer the Educational Loan Repayment Program. Approximately 20 awards are made annually, with award amounts varying.

Washington, Oregon's neighbor to the north and sometimes competitor for health professionals has a small State Loan Repayment Program, administered by the Primary Care Office, (around 20 participants annually) and a much larger Health Professional Loan Repayment Program, which is open to licensed physicians, nurse practitioners, physician assistants, nurse midwives, pharmacists, dentists, dental hygienists and registered nurses. In 2012, awards were made to 120 providers. Total funding for these awards, all from state general funds, was $4.2 million. The Health Professional Loan Repayment Program is administered by the Washington Student Achievement Council.

Wyoming has a fully-state funded loan repayment program called the Wyoming Healthcare Professional Loan Repayment Program. It provides up to $90,000 ($30,000/year for 3 years) for physicians and dentists and up to $30,000 ($10,000/year for 3 years) for all other licensed/ certified health professions. Total annual funding for the program is $500,000. Approximately 10 awards across all professions are funded each year. Wyoming is also applying for federal SLRP funds for the first time, and anticipates a total of $160,000 in federal and state general funds to provide awards for 4 providers for four years each. Physician awards will be $60,000 in exchange for two years of service, and mid-level awards will be $20,000 in exchange for two years of service. Additionally, Wyoming has the Wyoming Physician Recruitment Grant Program, also administered by the State Office of Rural Health. This program, the only one of its kind in the nation, provides grants of up to $80,000 to a hiring entity to reimburse the costs of recruiting an approved physician from outside of Wyoming. The program has been funded at $400,000 per biennium.

2. Distribution of State Financial Incentive Programs

State	Tax Credit	SLRP	Other State-Funded LRP	Loan Forgiveness/ Scholarship	University- or Foundation Funded
Alabama			YES	YES	
Alaska			YES		
Arizona		YES	YES		
Arkansas			YES		
California		YES			YES
Colorado		YES	YES		
Connecticut					
Delaware		YES			
D.C		YES			
Florida					YES
Georgia			YES		
Hawaii		YES			YES
Idaho					
Illinois		YES			YES
Indiana			YES	YES	
Iowa		YES	YES		
Kansas		YES		YES	YES
Kentucky		YES			YES
Louisiana		YES	YES		
Maine			YES	YES	

Maryland	YES	YES		YES	
Massachusetts		YES			
Michigan		YES	YES		
Minnesota		YES		YES	
Missouri		YES		YES	
Mississippi				YES	
Montana		YES	YES		
Nebraska			YES		
Nevada		YES			
New Hampshire		YES			
New Jersey		YES			
New Mexico		YES	YES		YES
New York		YES	YES	YES	YES
North Carolina			YES	YES	YES
North Dakota		YES		YES	
Ohio		YES			
Oklahoma			YES		
Oregon	YES	YES	YES	YES	YES
Pennsylvania			YES		
Rhode Island		YES			
South Carolina				YES	
South Dakota					
Tennessee		YES			YES
Texas			YES		YES

Utah					
Vermont			YES		
Virginia		YES			
Washington		YES	YES		
West Virginia			YES	YES	YES
Wisconsin			YES	YES	
Wyoming			YES		

3. Listing of Health Professional Financial Incentive Programs in Various States and Nationally

Allied Health Loan-for-Service Program	New Mexico	State	Loan Program
Arizona Loan Repayment Program	Arizona		Repayment
Arizona Rural Private Primary Care Provider Loan Repayment Program	Arizona	State	Repayment
Board of Medical Scholarship Awards	Alabama		Scholarship
Community Match Rural Physician Recruitment Program	Arkansas	State	Repayment
Community Practitioner Program	North Carolina	State	Scholarship
Delaware State Loan Repayment Program	Delaware	Federal/State	Repayment
Doctors Across New York	New York	State	Repayment
Doctors for Maine's Future Scholarship	Maine		Scholarship
Dr. James L. Hutchinson & Evelyn Ribbs Hutchinson Medical School Scholarship	California	State	Scholarship
Family Practice Resident Rural Scholarship Program	Oklahoma	State	Scholarship
Georgia Physician Loan Repayment Program	Georgia	State	Repayment
Health Professional Loan Repayment	Missouri	Federal/State	Repayment
Health Professional Loan Repayment Program (HPLRP)	New Mexico	Federal/State	Repayment
Health Professional Recruitment Program (HPRP)	Iowa	State	Forgiveness
Illinois/National Health Service Corps Loan Repayment Program	Illinois	Federal/State	Repayment
Indian Health Service Loan Repayment Program	Maryland		Repayment
Indian Health Service Scholarship Program	Maryland		Scholarship
Indiana Primary Care Scholarship Program (IPCSP)	Indiana	State	Scholarship
Iowa PRIMECARRE Loan Repayment Program	Iowa	Federal/State	Repayment
Kansas Bridging Plan	Kansas	State	Forgiveness
Kansas State Loan Repayment Program	Kansas	State	Repayment
Kentucky State Loan Repayment Program	Kentucky	Federal/State	Repayment
Louisiana State Loan Repayment Program	Louisiana	Federal/State	Repayment
Maine Health Professions Loan Program	Maine	State	Forgiveness
Massachusetts State Loan Repayment Program	Massachusetts	Federal/State	Repayment
Medical Loan-for-Service Program	New Mexico	State	Loan Program
Medical Student Loan Program	West Virginia	State	Forgiveness
Michigan State Loan Repayment Program	Michigan	Federal/State	Repayment
Minnesota Dentist Loan Forgiveness Program	Minnesota	State	Forgiveness
Minnesota Nurse Loan Forgiveness Program	Minnesota	State	Forgiveness
Minnesota Rural Mid-level Practitioner Loan Forgiveness Program	Minnesota	State	Forgiveness
Minnesota Rural Physician Loan Forgiveness Program	Minnesota	State	Forgiveness

Minnesota State Loan Repayment Program	Minnesota	Federal/State	Repayment
Minnesota Urban Physician Loan Forgiveness Program	Minnesota	State	Forgiveness
Montana Rural Physician Incentive Program (MRPIP)	Montana	State	Repayment
NC Student Loan Program for Health, Science and Mathematics	North Carolina	State	Scholarship-Loan
NHSC Loan Repayment Program	National Health Service Corps	Federal	Repayment
NHSC Scholarship Program	National Health Service Corps	Federal	Scholarship
NHSC/CA State Loan Repayment Program	California	Federal	Repayment
NIH Loan Repayment Programs (LRP)	National Institutes of Health	Federal	Repayment
NIH Undergraduate Scholarship Program (for Individuals from Disadvantaged Backgrounds)	National Institutes of Health	Federal	Scholarship
Nebraska Loan Repayment Program	Nebraska	State	Repayment
Nevada Health Service Corps	Nevada	State	Repayment
New Hampshire State Loan Repayment Program	New Hampshire	Federal/State	Repayment
Nursing Loan for Service Program	New Mexico	State	Loan Program
Oregon Partnership Student Loan Repayment Program (SLRP) rather than (RHS)	Oregon	State	Repayment
Pennsylvania Primary Health Care Loan Repayment Program	Pennsylvania	Federal/State	Repayment
Physician State/Community Matching Loan Repayment Program	North Dakota	State	Repayment
Physician/Community Match Loan Program	Oklahoma	State	Loan Program
Primary Care Loan Redemption Program of New Jersey	New Jersey	Federal/State	Repayment
Primary Care Resource Initiative for Missouri (PRIMO)	Missouri	State	Forgiveness
Professional and Practical Nurse Student Loan	Missouri	State	Loan Program
Rhode Island Primary Care Loan Forgiveness Program	Rhode Island	State	Forgiveness
Rural Kentucky Medical Scholarship Fund (RKMSF) Grant Program	Kentucky		Scholarship/Grant
Rural Medical Education Scholarship Loan Program	Oklahoma	State	Scholarship
Rural Practice Scholarship Program	Arkansas		Scholarship
South Dakota Recruitment Assistance Program	South Dakota		Tuition Reimbursement
State Health Care Professional Loan Repayment Program	Colorado	Federal/State	Repayment
State Loan Repayment Program (SLRP) in Maryland	Maryland	State	Repayment
State Medical Education Loan/Scholarship Program	Mississippi	State	Scholarship-Loan
The Health Professions Loan Repayment Program	California	State	Repayment

Appendix D: Information on Other State Financial Incentive Programs

The Pisacano Scholars Leadership Program	American Board of Family Practice		Scholarship
The Steven M. Thompson Physician Corps Loan Repayment Program	California	State	Repayment
U.S. Air Force Health Professions Scholarship Program (HPSP)	US Air Force	Federal	Scholarship
U.S. Army Health Professions Scholarship Program	US Army	Federal	Scholarship
U.S. Navy Health Professions Scholarship Program	US Navy	Federal	Scholarship
U.S. Navy Health Professions Loan Repayment Program (HPLRP)	US Navy	Federal	Repayment
Vermont State Educational Loan Repayment Program for Primary Care Practitioners	Vermont	State	Loan Repayment & Loan Forgiveness
Virginia State Loan Repayment Program (Va-SLRP)	Virginia	Federal/State	Repayment
WA State Loan Repayment Program	Washington	Federal/State	Repayment
WICHE (Montana and Wyoming) Professional Student Exchange Program	Montana	State	Professional Student Exchange
Wisconsin Health Professions Loan Assistance Program	Wisconsin	Federal/State	Repayment
Wyoming WWAMI Medical Education Program	Wyoming	State	Medical Education Program

Source: Association of American Medical Colleges

Appendix D: Information on Other State Financial Incentive Programs