

Report to the 73rd Legislative Assembly: Electronic Health Records & Data Connectivity

March 2005

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The Electronic Health Records & Data Connectivity Subcommittee

Reviewed and endorsed by:

The Oregon Health Policy Commission

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Department of Administrative Services Office for Oregon Health Policy and Research http://egov.oregon.gov/DAS/OHPPR/

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HISTORY

The 2003 Oregon Legislative Assembly passed House Bill 3653, creating the Oregon Health Policy Commission (OHPC) to develop and oversee health policy and planning for the state. The OHPC identifies and analyzes significant health care issues affecting the state and makes policy recommendations to the Governor, the Oregon State Legislature and the state Office for Oregon Health Policy and Research. Additionally, the OHPC partners with health care experts and stakeholders around the state to develop projects focused on improving Oregonians' health status and access to effective and efficient health care services.

The OHPC Subcommittee on Electronic Health Records (EHR) and Data Connectivity was formed to develop recommendations for 1) fostering the adoption of EHR and 2) developing the infrastructure for the secure exchange of electronic health data in Oregon. The following report outlines the Subcommittee's recommendations on the appropriate role for government, in conjunction with the private sector, to further these efforts. It is the intent of the OHPC and the Subcommittee that these recommendations be used to further discussion with state legislatures, providers, and other stakeholders to move the state's health information technology forward.

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The Subcommittee gratefully acknowledges the thoughtful input of many stakeholders on the content of this report.

EXECUTIVE SUMMARY

Although the United States has one of the most technologically advanced health care systems in the world, it relies predominantly on a 19th century record keeping system. This antiquated paper-based record keeping system and the barriers it imposes on appropriate data sharing is a source of harm and excess costs to Oregonians. The State of Oregon can assist substantially in transformation of the system by adopting electronic health records (EHRs) and health information exchange.

Electronic health records and health information exchange are part of the solution to improve quality and safety, and reduce the cost of care. Fully functioning electronic health records make health data manageable, offer support for provider decisions at the point of care, such as reminders or drug-drug alerts, allow for input of orders by providers, and facilitate population-wide reporting and assessments. The electronic health record can reduce redundant, unnecessary medical tests as much as 15-20% within a hospital or outpatient setting. In all, electronic health records with the necessary functionality are estimated to save up to \$44 billion for the United States as a whole, a number confirmed in some early studies. 17-19

Adoption of electronic health records is not enough. Even when computer systems are used, most of the information is stored in silos and is not easily available to other providers. Creating a system with widespread health information exchange and interoperability is necessary to transfer information in urgent situations quickly and easily and to further improve efficiency and reduce waste in health care. This does not mean a centralized database containing all data, but the ability to confidentially, privately, and securely share data between healthcare entities when appropriate.

Most of the investment in EHR/Connectivity infrastructure will come from redirecting dollars already in the system but wasted on inefficient processes. Even the smallest of investment now by the State of Oregon to support collaboration and coordination will assure maximum benefit from the private sector investments currently underway.

Goals

- Oregonians' health record information is available to them and their healthcare provider anytime and anywhere that it is needed.
- Oregonians' health records are confidential and secure at all times.

These goals are best achieved through widespread adoption of robust, secure, interoperable electronic health records that support the delivery of high-quality efficient health care.

Recommendations

Standards: Endorse and encourage the use of national and federal standards for EHRs and adopt specific standards as they emerge.

Coordinated Regions: Embrace a partnership model with communities to foster a coordinated regional framework for sharing electronic health information.

Financing: Embrace a partnership model with business leaders in the health and information industries to better understand the costs and benefits of adopting EHRs that efficiently exchange information

Regulations & Laws: With the assistance of pertinent stakeholders and professional liability experts, determine whether any Oregon laws or regulations create barriers to implementation of interoperable EHRs or are inadequate to protect privacy and remedy them.

Healthcare Purchaser: Coordinate with private sector healthcare purchasers to leverage resources that encourage investment in information technology, with particular attention to the Public Employees Benefit Board (PEBB) and the State of Oregon's Office of Medical Assistance Programs (OMAP)

Monitoring & Assurance: Commission a study, alone or with partners such as the Oregon Medical Peer Review Organization (OMPRO) and business leaders, that assesses the current state of adoption of interoperable EHR functionality in medical practices throughout Oregon. The State should be particularly attentive to rural communities and the safety net providers.

Engaging the Public and Public Expectations: Coordinate with the private sector to conduct communication campaigns that increase the public's understanding of the value of electronic health data that can be shared.

Public Health, Research, and Outcomes Reporting: Collaborate with the private sector to assure that interoperable EHRs are used to support good policy development, decision-making and planning through its public health infrastructure. Participate in research that evaluates successes and failures of interoperable EHRs.

Education and Training: Coordinate with health professions training institutions and health professions leadership groups to increase the workforce's understanding and skills in managing electronic health information and systems.

Pilot Projects: Participate in collaborative demonstration and pilot projects that accelerate the adoption of interoperable EHRs in Oregon and assure broad application to leverage public and private resources.

Leadership & Governance: The State of Oregon needs a high-level, visible, respected Health Information Technology Coordinator, a Health Information Technology Advisory Board of experts and appropriate staff dedicated to carrying out these recommendations, who are accountable to the Director of the Oregon of Health Policy & Research (OHPR) and the Oregon Health Policy Commission.

Although the State does NOT have a role in the governance of and actual operations of the regional networks that exchange information, the State should have a catalyst role in creating an environment in which such organizations can thrive.

REPORT ON ELECTRONIC HEALTH RECORDS AND DATA CONNECTIVITY

Introduction

Although the United States has one of the most technologically advanced health care systems in the world, it relies predominantly on a 19th century record keeping system.¹ This antiquated paper-based record keeping system and the barriers it imposes on appropriate data sharing is a source of harm and excess costs to Oregonians. The State of Oregon can assist substantially in transformation of the system by adopting electronic health records and health information exchange. This report explores the benefits and barriers to adoption of these information technologies.

Background

While the knowledge and technology in the United States health care system is unparalleled, there are serious questions about the quality and equity of care delivered. For instance, a patient with an illness where there is known treatment, such as life-saving medications after heart attack, only receives appropriate care 54.9% of the time. Medical errors occur in at least 7% of hospital admissions, and lead to serious injury in about 3.7% of total hospitalizations. These quality and safety problems result in about 57,000 deaths, 41 million sick days, and \$11 billion in lost productivity annually. Rising costs have pushed the expenditures for health in the US to \$1.7 trillion, or 15% of GDP, in 2003; Oregonians spend approximately 1% (\$17 billion) of this amount. Inefficiencies in the system itself may lead to over \$100 billion worth of redundant, unnecessary, or inappropriate care, or \$1 billion in Oregon. A large portion of this – estimated at \$77.8 billion nationwide and approximately \$800 million in Oregon - comes from the fragmentation and gaps in the system.

Although there are many factors underlying these problems, many (though not all) of them center around inadequate access to information, which in turn results in waste, fragmentation of care, poor quality, and errors. A recent study, for example, showed that missing information compromises as many as 13% of all clinical encounters, and while half of the time the needed information is available somewhere, the 5-10 minute penalty to obtain it is too burdensome for the busy physician. Thus, while computers and the Internet are virtually ubiquitous in our society, and most modern industries have used them to improve their processes and the quality of their products, the health care system remains mired in a world of paper-based transactions. There is considerable evidence this reliance on paper leads to waste and compromised quality of care.

Consider the typical Oregonian almost anywhere in the world. He or she may easily access bank records, obtain appropriate credit, and receive necessary documents electronically. That same person back home, who is acutely ill and sent to a emergency room in a different part of Portland, does not have a similar mechanism to get her medical records, leading to delays, confusion, and potentially deadly outcomes if given a normally appropriate drug cross-reactive to one of her listed allergies.

For these reasons, the Institute of Medicine, the Department of Health and Human Services and multiple others have called for a more connected, structured system of care to address these problems. Electronic health records and health information exchange are part of the solution to improve quality and safety, and reduce the cost of care. However, the barriers to their adoption are

significant. Furthermore, public perception that electronic health records pose a threat to privacy remains strong, while financial models show misaligned incentives. Careful action by state government and other interested parties is required to catalyze these changes and lower the barriers.

What is an electronic health record and why promote it?

An electronic health record is not a computer or separate database about patients; rather, an electronic health record is a longitudinal collection of electronic health information for and about persons and the way to create, use, store and retrieve that information. A fully functioning electronic health record provides the ability to make health data manageable, offer support for provider decisions at the point of care, such as reminders or drug-drug alerts, allow for input of orders by providers, and facilitate population-wide reporting and assessments, amongst other things. It must also provide security to ensure privacy and confidentiality of patients while enabling easy communication between the health care team.

These important functions have been shown to improve safety and reduce cost and the waste of health care dollars. Electronic health records make patient information immediately available to all who have access, reducing costs of transcription and time searching for charts. This is a major issue in the United States, which ranks the worst of several countries in redundant testing and availability of the medical record in a recent comparison. The electronic health record can reduce redundant, unnecessary medical tests as much as 15-20% within a hospital or outpatient setting. Financially, systems can help reduce billing errors and prevent fraud through improved documentation and administrative checklists.

Most significant, however, is the effect of decision support and computerized provider order entry (CPOE) on patient safety. Decision support through alerts about patient allergies and drug interactions has been shown to reduce adverse events, or preventable injuries to patients. Reminders about best practice, such as electronic guidelines or protocols, can help improve the delivery of appropriate care and reduce inappropriate care. ¹⁵ CPOE – having physicians and other providers enter patient orders in a structured, electronic format – has been shown to have many benefits over written orders. ¹⁶ Improved legibility and accountability due to CPOE can reduce some significant errors such as misreading the placement of a decimal point or confusing names of drugs (Lamisil® for fungal infections and Lamictal® for brain disorders, for instance). Improved adherence to guidelines for critical issues such as screening, corollary orders to ensure safety, and appropriate selection of antibiotics has clearly been proven to improve the quality and safety of care delivered. Safety also can be increased by preventing potentially injurious medication orders through drug-drug interaction and allergy checking at the time of ordering, benefits beyond those engendered by decision support alone. Such efforts reduce costs for the health system as a whole. In all, electronic health records with the necessary functionality are estimated to save up to \$44 billion for the United States as a whole, a number confirmed in some early studies. 17-19

Barriers to electronic health records

Despite these potential benefits, no more than 15% of physicians nationwide use fully functional electronic health records. In a recent poll, 47% percent of the public was concerned that privacy and confidentiality risks outweighed benefits in electronic health records. Although many assessments indicate electronic data – with appropriate security – can protect privacy well, the

perception of risk remains a significant barrier to adoption. Increased availability of data does carry with it increased responsibility for each participant in the health system. Audit trails and penalties for misuse can be used to enforce responsible data access and use; in fact, electronic record-keeping will allow patients to continually monitor who is accessing their health records, a thing which is impossible with a paper system.

In addition to the privacy and confidentiality concerns, other barriers exist to easy adoption. First and foremost is the financial barrier. Per provider, the initial costs are between \$10,000 and \$20,000 in the first year with substantial maintenance costs in the subsequent years; a medium-sized hospital's initial costs have been estimated at \$2.7 million. The cost problem is further exacerbated by misaligned financial incentives—research shows only 11% of the benefits go back to the provider, yet the vast majority of costs for effective systems are borne by providers or health systems. Implementation of electronic health records in clinical settings can also be challenging, requiring practices to assess readiness and be prepared for temporary changes in productivity; failure to consider these issues have led to significant system disappointments. The complex legal and regulatory environment also poses a significant barrier, and these will need clarification prior to more widespread adoption.

Appropriate availability of health information: Health information exchange

Adoption of electronic health records is not enough. Even when computer systems are used, most of the information is stored in silos and is not easily available to other providers, leading to the problems outlined above. Creating a system with widespread health information exchange and interoperability is necessary to transfer information in urgent situations quickly and easily and to further improve efficiency and reduce waste in health care. Unlike many other industries, however, most communities and organizations do not possess the ability to transmit the important data easily even when needed urgently. Current systems rely on patient data faxed by humans, an unacceptably slow and error prone method. Digital information exchange, besides requiring electronic health records, requires interoperability, or the ability of disparate information systems to operate in conjunction with each other through shared or translated protocols and standards. Like other industries, however, this does not mean a centralized database containing all data, but the ability to confidentially, privately, and securely share data between healthcare entities when appropriate.

Those with experience in health information exchange have shown substantial benefits from its use. Consumers who switch physicians, insurers or simply seek emergent care will no longer suffer from delayed or lost medical records. Another benefit is the reduction of redundant laboratory tests for patients who seek care in different settings; between 8.6% and 20% of tests could be avoided if the information were available, saving up to \$31.8 billion per year in medical costs nationally. Reduction in redundant radiology studies through digital transmission of reports and, eventually, the films themselves may save up to \$3.2 billion per year. Connections to pharmacies could help generate better medication lists, reduce adverse effects from drug interactions, and speed prescription filling. Referral processes could be improved, communication between providers would be more robust, and transitions of care (such as between clinic and hospital) would be safer for patients, saving up to \$31.2 billion. Connection to the public health system could provide more timely information about disease and bioterrorism outbreaks, allowing for more rapid response and the potential to save many lives. The focus on bioterrorism makes the ability to react quickly and

appropriately – using good information – to threats to safety and security is very important. Health information exchange can assist in that process, save lives, and reduce costs. In all, \$77.8 billion might be saved if the highest level of information exchange is adopted in the United States.⁸

Barriers to health information exchange

Barriers to health information exchange exist. Costs are substantial and especially in smaller communities, may outweigh the benefits accruing directly to them in the short term, despite the significant societal benefits. Creation of connections to share data requires expensive, specialized technical interfaces. The variability of the system plays a role here – few common standards or frameworks are in place to allow the sharing of data. This has two implications beyond cost – one, gaining interoperability of systems will require time and effort in the development of standards or frameworks, and two, standards cannot be created externally (for example, by states) without seriously impairing the efforts of purchasers of electronic health records and those striving for health information exchange. Rather, frameworks that allow interoperability must be created through the collaboration of stakeholders. Concerns for privacy, security, confidentiality, and appropriate use are paramount in health information exchange as a whole, since the information will be more easily accessed; these risks currently require careful legal assessment and the formation of robust agreements between sharing entities. Infrastructure issues such as the accessibility of reliable, fast electronic connections plague many rural areas. Like electronic health records, the long-term benefits of health information exchange extend primarily to the payers (such as private insurers) and purchasers as a whole. Thus, those asked to make a substantial initial investment in the system – the providers – would *not* be the primary recipients of the benefits in the long run. In the short term, the system must be created – at significant cost – prior to any benefits being realized; the barrier of obtaining start-up funding must be addressed at every level of the health care system.

Current efforts

In light of the proven benefits of electronic health records and health information exchange, a myriad of federal, state and private efforts have been launched. These efforts take many forms, but generally attempt to reduce barriers through financial or regulatory means. External to Oregon. purchasing collaboratives such as the Leapfrog Group²⁶ and Bridges to Excellence²⁷ have launched campaigns to increase adoption of electronic health record and health information exchange through the creation of specifications for high quality care (e.g. presence of CPOE) and future financial incentives for doing so. Payers such as Massachusetts Blue Cross / Blue Shield have contributed \$50 million to enable sharing between providers in the hopes of recouping their expenditures through reduced future costs. In addition, the multiple organizations concerned with the quality and safety of health care such as the National Quality Form, the Agency for Healthcare Quality, and others recognize the benefits of electronic health records and health information exchange in achieving higher quality care and have funded a variety of projects related to barrier reductions. The 'pay for performance' initiatives – altering payment strategies based on adherence to quality measures - began by the Centers for Medicare and Medicaid Services (CMS) and other payers all have need of standardized, appropriately shared electronic information. Similarly, the Doctor's Office Quality - Information Technology (DOQ-IT) initiative from CMS recognized the need for electronic health records to ensure high quality care in the outpatient settings, changing its initial aims from performance reporting to electronic health record deployment. California and other

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states have analyzed local and state laws to determine what liability exists and to limit liability wherever possible.

A key federal action was the appointment of a Health Information Technology Coordinator, Dr. David Brailer, and the creation of a special office within the federal government to facilitate the adoption of electronic health record and health information exchange. Dr. Brailer has had private and public experience, providing quality information through technology to hospitals through a private venture and spearheading the public health information exchange efforts in Santa Barbara. Federal regulations such as those outlined in the Health Information Portability and Accountability Act of 1996 (HIPAA) have helped move standards for exchange forward by formally adopting appropriate standards for payer-provider electronic claims. The infrastructure created as a result of HIPAA to protect privacy, confidentiality, and security of data will be useful to form health information exchange agreements and keep the public informed. In addition, a number of states have adopted or are considering adoption of legislation that would attempt to further the integration of information technology into the practice of medicine. These activities range from formation of centers to study health information exchange to financial incentives for exchange (such as tax credits) to creations of actual networks for health information sharing.

Opportunities for Oregon in electronic health records and health information exchange Oregon possesses many potential advantages, but does not escape from the barriers. Advantages include a number of innovative groups who seek quality and a rational health system. The state itself, through the Public Employees' Benefit Board (PEBB) and the Oregon Medical Assistance Program, has long explored new avenues to improve access, cost, and quality. Recently, the work that PEBB is doing in exploring new incentives for quality and cost-effective care was commended on a national level.

The efficiencies in the health care system gained by adoption of electronic health records and health information exchange would improve the competitiveness of Oregon's economy. Rapidly increasing health care costs create burdens on business, increasing their costs and narrowing their margins. By aggressively pursuing health information technology and achieving the gains denoted above, the State of Oregon can reduce this burden on business, making Oregon more attractive for future investors. Since multiple other states are already engaged in this process, Oregon stands to benefit from their example by carefully examining their work and avoiding their costly mistakes. The time to act is now.

Health care purchasers are organized and eager to see a transition take place. Many of the large health systems in Oregon, such as Kaiser Permanente Northwest, Providence, PeaceHealth, and OHSU, are recognized for their significant contributions to changing health care delivery for the better, including innovations in medical informatics and electronic health record use. Provider groups from the Mid-Valley IPA and around Roseburg are actively seeking to adopt electronic health records and trying to reduce the barriers to connectivity agreements.

The infrastructure and capacity to deploy in Oregon should be put to use. An innovative group of independent telephone companies, cooperatives, cable companies, wireless companies and competitive access service providers offering an extensive mix of voice, video and data services

serves Oregon communities. Catalyzed by SB 622, multiple optical fiber networks were created and deliver reliable but underutilized high capacity digital services throughout the state. These are valuable assets for healthcare delivery (especially in rural Oregon), but infrastructure only adds value when it is put to use.

The State of Oregon can play an extremely important role as a catalyst in this process. Many barriers remain. Cost is a pre-eminent concern in Oregon, and collaboration between all manner of stakeholders will be needed to address the significant cost of starting and maintaining electronic health records and health information exchange. Legal and privacy uncertainties in the state still hinder efforts. Lack of public awareness of the benefits of information technology in health care slows progress. This report contains specific recommendations for how the State of Oregon can act to speed this process and benefit all its constituents.

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RECOMMENDATIONS

States including Maryland, Florida, Wisconsin, and Tennessee are investing funds to build infrastructure for interoperable electronic health records. Oregon should too, although the Subcommittee recognizes the serious state budget constraints during this biennium. The Subcommittee also recognizes that the most fruitful recommendations at this time are those that set a long-term direction and seek to do the most with current available funding. Most of the investment in EHR/Connectivity infrastructure will come from redirecting the dollars already in the system and wasted on inefficient processes. Even the smallest of investment now by the State of Oregon to support collaboration and coordination will assure maximum benefit from the private sector investments currently underway. Following are the subcommittee's recommendations for the State to provide leadership in the development of Oregon's health information infrastructure.

Goals

Adopt the following goals to support high quality health care:

Oregonians' health record information is available to them and their healthcare provider anytime and anywhere that it is needed.

Oregonians' health records are confidential and secure at all times.

These goals are best achieved through widespread adoption of robust, secure, interoperable electronic health records that support the delivery of high-quality efficient health care.

Principles for Recommending the State Role

Standards

Endorse and encourage the use of national and federal standards for EHRs and adopt specific standards as they emerge. In this rapidly evolving field, it is vital that state government NOT independently pursue standard setting. The State has an essential role in helping Oregon's innovators contribute to the creation of, and be knowledgeable about, emerging federal standards, industry standards and leading-edge efforts by innovators outside of Oregon. In the absence of standards, the State's primary role is to embrace a partnership model with the private sector to facilitate cooperation and common approaches to interoperability.

Coordinated Regions

Embrace a partnership model with communities to foster a coordinated regional framework for sharing electronic health information. Developing too many regions will waste resources in duplicative efforts; developing too few regions will inhibit creation of trusted partnerships of stakeholders across the care spectrum. Community-based initiatives are rapidly emerging. The State must make a substantial investment in bringing these community-based projects together for coordination, efficiency and consolidation. Without State involvement, too many local information exchanges will be created, they will not be interoperable across the state, and they will waste resources in duplicative efforts.

Financing

Embrace a partnership model with business leaders in the health and information industries to better understand the costs and benefits of adopting EHRs that efficiently exchange information. The State should track emerging national cost-benefit data, apply the models using Oregon data, and identify principles and strategies that redirect existing funds to invest in EHR infrastructure. As the financial picture emerges, the State should coordinate development of, and possibly administer, financial incentives and sustainable financing for interoperable EHR implementation.

Regulations & Laws

With the assistance of pertinent stakeholders and professional liability experts, determine whether any Oregon laws or regulations create barriers to implementation of interoperable EHRs or are inadequate to protect privacy. If identified, recommendations for remedies should be addressed. Issues that may need action include (a) regulations of electronic prescribing, (b) assurances of patient record confidentiality and strengthening of penalties for misuse, and (c) protection for providers in the event of an unintentional good-faith disclosure of patient information.

Healthcare Purchaser

Coordinate with private sector healthcare purchasers to leverage resources that encourage investment in information technology. Possible strategies include direct subsidies for implementation of EHRs, pay-for-performance incentives to providers for adoption and use, transaction fees for information exchanged electronically, pilot projects to develop health information exchanges, and designated insurance premiums for information technology investment. The Public Employees Benefit Board (PEBB) should continue its excellent ground-breaking work and should seek partners to use its purchasing power to foster investments in interoperable EHRs and to require demonstrable progress in using, sharing and reporting health information.

The State of Oregon's Office of Medical Assistance Programs (OMAP) should coordinate with the pilot projects of the federal Centers for Medicare & Medicaid Services (CMS) that encourage implementation of EHRs and emerging community health information exchanges so that Oregon can improve service and decrease costs to the program. OMAP should continue its investment in modernizing its information systems, and with private sector partners aggressively provide technical assistance to health care providers in order to achieve the long-range financial benefits of electronic data exchange.

Monitoring & Assurance

Commission a study, alone or with partners such as OMPRO and business leaders, that assesses the current state of adoption of interoperable EHR functionality in medical practices throughout Oregon. The study is essential if Oregon is to focus activities with high potential return on investment and to participate in emerging financial incentive programs.

Identify markets in which adoption of EHRs and development of regional information infrastructure lag. State leadership as a catalyst may be particularly important for small provider practices, in some rural communities and in communities with highly competitive markets. The State should be particularly attentive to the role of the Oregon Community Health Information Network (OCHIN)

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and technical support for safety net providers to assure their participation in health information exchange.

Engaging the Public and Public Expectations

Coordinate with the private sector to conduct communication campaigns that increase the public's understanding of the value of electronic health data that can be shared and that increases public demand for access to their personal health records. The campaign should center on helping the public use personal and population information to improve their own health. The State should specifically address the privacy and security concerns of the public and engage them in developing guidelines for practice.

Public Health, Research, and Outcomes Reporting

Collaborate with the private sector to identify opportunities to assure that interoperable EHRs are used to support good policy development, decision-making and planning through its public health infrastructure. Systems should be developed in a way that supports compatibility with the emerging Public Health Information Network built to monitor, promote and protect population health. Where possible, the state should support electronic systems that help providers report legally-mandated public health conditions. Collaborative programs to determine best practice for standards and ease of use will have the greatest improvement in reporting frequency.

Identify opportunities to participate in research that evaluates successes and failures of interoperable EHRs and to disseminate results to broad audiences.

Education and Training

Coordinate with health professions training institutions and health professions leadership groups to increase the workforce's understanding and skills in managing electronic health information and systems. Low interest loans for informatics education may be useful for increasing the availability of health professionals with the needed technical skills for implementation.

Pilot Projects

Participate in collaborative demonstration and pilot projects that accelerate the adoption of interoperable EHRs in Oregon and assure broad application to leverage public and private resources.

Leadership & Governance

The State of Oregon needs a high-level, visible, respected, Health Information Technology Coordinator, comparable to the federal-level position held by David Brailer at the Department of Health and Human Services. This person and appropriate staff should be dedicated to carrying out these recommendations, and should be accountable to the Administrator of the Office for Oregon Health Policy & Research (OHPR) and the Oregon Health Policy Commission.

Convene a high-level Health Information Technology Advisory Board of experts broadly representing constituencies to guide its work. Although the State does NOT have a role in the governance of and actual operations of the regional networks that exchange information, the State should have a catalyst role in creating an environment in which such organizations can thrive.

The State of Oregon Action Plan

In order to promote electronic health records (EHR) and health information exchange (HIE) that leads to improved quality of care and reduced costs, this committee recommends the following actions:

- 1. The Governor should direct the Administrator of the Office for Oregon Health Policy and Research (OHPR) to:
 - Appoint a state Health Information Technology leader and provide staffing within OHPR to encourage coordination and cooperation in public and private sector activities for electronic health record implementation and health information exchange
 - Appoint a high level advisory committee to provide state leadership and coordination for electronic health record implementation and development of health information exchange

OHPR would be responsible for seeking state and federal resources to fund the costs associated with the new position and the advisory committee.

- 2. Provide seed funding, to be matched by private sector funds, for a pilot project to demonstrate how Oregon's health care providers can cooperatively build a secure system to find and access patients' records across boundaries
- 3. Use Oregon's purchasing power through PEBB and OMAP to encourage adoption of electronic health record and health information exchange
- 4. The Committee recommends the following activities be conducted by the Health Information Technology leader and staff:
 - Convene a quarterly working session for the community-based projects for coordination and cooperation
 - Prepare and disseminate information to help the public understand the electronic health record and health information exchange issues
 - Prepare a report that applies known techniques to clearly identify how benefits and
 costs may accrue to various stakeholders for implementing electronic health records
 and health information exchange, and foster a public discussion of results
 - Conduct a systematic assessment of Oregon's current status in electronic health record adoption and creation of health information exchange systems. Publish results, monitor change and identify gaps in progress
 - Help sponsor statewide meetings to promote EHR/Connectivity and encourage cooperation on important topics such as architecture, governance and sustainability
 - Coordinate with existing and emerging public health information reporting systems to assure compatibility
 - Conduct a systematic assessment of Oregon laws to identify and then remedy barriers to electronic health record and health information exchange

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