

State of Oregon
Public Employees Benefit Board

Implementation of Vision 2007

Report on Communications and Technical Implementation Strategies

Part IV: Background summaries of models referenced

Foundation for Accountability
Portland, Oregon

November 30, 2004

Preface

Part IV of this report provides brief summaries of some of the projects and tools mentioned in Parts I and II. These are intended to serve as an extended glossary, with available internet and bibliographic references for more information. The extracted text is not authoritative or edited; it is offered only as a snapshot of each key concept.

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Bridges to Excellence (www.bridgestoexcellence.org)

- Incentives to both physicians and patients based on achieved results
- Operating in Cincinnati, Boston, Schenectady
- MDs must submit data revealing performance
- MD rewards up to \$160/patient peryear
- Patient rewards are vouchers for health care supplies
- Initial focus on diabetes, heart disease, systems adoption
 - Diabetes:
 - HbA1c tested and in control
 - LDL tested and in control
 - BP tested and in control
 - Eye, foot, urine exams
 - Heart:
 - LDL tested and in control
 - BP tested and in control
 - Aspirin
 - Smoking cessation

UK General Medical Contract: (<http://www.dh.gov.uk/assetRoot/04/07/02/31/04070231.pdf>, Chapter 3)

- Applies to all UK NHS general practitioners.
- Payment based on four standards:
 - Clinical – includes ten conditions
 - Organizational – includes records and information, communications, education and training, medication management, practice management
 - Additional (e.g., screening)
 - Patient experience
- Three payment types:
 - Preparation payments: to collect baseline data, allow each practice to determine where it is starting from; first 3 years
 - Aspiration payments: practice defines its goals, payment helps practice implement necessary infrastructure; years 2-3
 - Achievement payments: based on degree of goal achievement

Leapfrog Group (www.leapfroggroup.org)

The Leapfrog Group is made up of more than 160 companies and organizations that buy health care. Leapfrog and its members work together to:

- Reduce preventable medical mistakes and improve the quality and affordability of health care.
- Reward doctors and hospitals for improving the quality, safety and affordability of health care.
- Encourage public reporting of health care quality and outcomes so that consumers and purchasing organizations can make more informed health care choices.
- Help consumers reap the benefits of making smart health care decisions.

Leapfrog has endorsed several key practices and expects providers to report on their progress in implementing these practices. Provider reports are then made available to the public on the Leapfrog web site as well as several authorized commercial sites, including Healthgrades.com. The current “leaps” are:

- **Computer Physician Order Entry (CPOE):** With CPOE systems, hospital staff enter medication orders via computer linked to prescribing error prevention software. CPOE has been shown to reduce serious prescribing errors in hospitals by **more than 50%**.
- **Evidence-Based Hospital Referral (EHR):** Consumers and health care purchasers should choose hospitals with extensive experience and the best results with certain high-risk surgeries and conditions. By referring patients needing certain complex medical procedures to hospitals offering the best survival odds based on scientifically valid criteria — such as the number of times a hospital performs these procedures each year or other process or outcomes data — research indicates that a patient’s risk of dying could be reduced by **40%**.
- **ICU Physician Staffing (IPS):** Staffing ICUs with doctors who have special training in critical care medicine, called ‘intensivists’, has been shown to reduce the risk of patients dying in the ICU by **40%**.
- **Leapfrog Quality Index - The National Quality Forum’s 27 Safe Practices:** The National Quality Forum-endorsed 30 Safe Practices cover a range of practices that, if utilized, would reduce the risk of harm in certain processes, systems or environments of care. Included in the 30 practices are the original 3 Leapfrog leaps. For this new leap, added in April 2004, hospitals’ progress on the remaining 27 safe practices will be assessed.

PBGH/IHA incentive program: (<http://www.iha.org/Ihaproj.htm>)

- Part of IHA pay for performance (which also includes HEDIS measures and satisfaction scores at group level)
- Focus on IT adoption and use; 20% of total Pay for performance
- Two measures:
 - Population based management (e.g., producing reminder lists, HEDIS data)
 - Point-of-care clinical decision support (e.g., accessing lab results, e-prescribing, chronic care reminders)

IHA P4P 2005 Measurement Set
2005 Measurement Year / 2006 Reporting Year
Technical Committee Recommendations
Sept.24, 2004

Operational

(to be used for reporting and pay out)

	Current Year Measures: 2004 Measurement/ 2005 Reporting Year Final Measures – For information only	Recommended Measures: 2005 Measurement/ 2006 Reporting Year Proposed Measures – Open for Comment
Clinical	<ol style="list-style-type: none"> 1. Childhood Immunizations w/ 24 continuous enrollment 2. Cervical Cancer Screening 3. Breast Cancer Screening 4. Asthma Mgmt. 5. HbA1c Screening & Control 6. LDL Screening & Control⁵ <130 7. Chlamydia Screening <p>Encounter threshold ≥ 3.25 encounters/member year⁴</p>	<ol style="list-style-type: none"> 1. Childhood Immunizations w/ 24-month continuous enrollment 2. Cervical Cancer Screening 3. Breast Cancer Screening 4. Asthma Mgmt. 5. HbA1c Screening & Control 6. LDL (includes diabetics) Screening & Control <130 7. Chlamydia Screening 8. Appropriate Treatment for Children with Upper Respiratory Infection
Weighting	40%	50%
Patient Experience	<ol style="list-style-type: none"> 1. Specialty care 2. Timely access to care 3. Doctor-patient -communication 4. Overall ratings of care 	<ol style="list-style-type: none"> 1. Specialty care 2. Timely access to care 3. Doctor-patient communication 4. Care coordination (CAS Composite) 5. Overall ratings of care
Weighting	40%	30%
Information Technology Investment	<ol style="list-style-type: none"> 1. Integrate clinical electronic data sets at group level for population management 	<ol style="list-style-type: none"> 1. Integrate clinical electronic data sets at group level for population management

	<p>2. Support clinical decision making at point of care through electronic tools</p> <p>Requires 4 activities of which at least 2 are in Measure 2; each activity is worth 5%</p> <p>Added more qualifying activities</p>	<p>2. Support clinical decision making at point of care through electronic tools</p> <p>Requires 4 activities of which at least 2 are in Measure 2; each activity is worth 5%</p>
Weighting	20%	20%
Bonus Opportunity		<p>Physician Incentive Bonus: Provider groups can receive up to an additional 10% if an individual physician financial incentive program is in place for either clinical performance or patient experience¹</p>

Testing

(data to be collected and analyzed but not reported or paid out in that year)

<p>Testing Measures-- Measures to be collected but not reported</p>		<p>1. Flu shots for ages 50 to 64 – Survey-based HEDIS specification</p> <p>2. Colorectal Screening – Survey-based</p> <p>3. Nephropathy Monitoring for diabetics –HEDIS Administrative specification</p>
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Developmental

(measures for which specifications are still being developed)

<p>Development Measures-- Measures for which specifications will be developed</p>		<p>1. Antidepressant Medication Mgmt. (alternative to HEDIS)</p> <p>2. Obesity</p> <p>3. Diabetic Retinal Exam – modified from HEDIS Administrative specification</p>
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NBCH RFP (evalu-8): (<http://www.evaluate8.org/eValue8/>)

The National Business Coalition on Health has developed a uniform national Request for Proposals, named evalu-8, to assist purchasers in soliciting desired capabilities from health plans. NBCH summarizes its benefits:

“The eValue8 tool uses a standard annual request for information survey to gather hundreds of benchmarks in critical areas such as adoption of health information technology, member and provider communications, disease management, program administration, provider performance, patient safety, pharmacy management, behavioral health and financial stability. Standardized performance reports are prepared for HMO/POS plans as well as for PPO plans and networks. Content for the survey is coordinated using input from purchasers, coalitions, and health plans and incorporates guidance from experts from the Centers of Disease Control, the Substance Abuse and Mental Health Services Administration, George Washington University and others in public health and academia. eValue8 also works in concert with accrediting bodies, including the National Committee on Quality Assurance and the Joint Commission for the Accreditation of Healthcare Organizations, to prevent redundancy and build on existing standards.”

Selected portions of the full RFP can be reviewed on the web site.

Chronic care model: (<http://www.improvingchroniccare.org/>)

The chronic care model (now also called the planned care model) offers an approach for integrating multiple services in support of people with chronic illness. The model is outlined at the Improving Chronic Care web site, and in the recent empirical study below:

(Casalino et al, External incentives, information technology, and organized processes to improve health care quality for patients with chronic diseases. JAMA 2003; 289(4):434.)

- Assumes that adoption of care management processes are necessary to chronic care outcomes:
 - Case management
 - Physician feedback
 - Disease registry
 - Clinical practice guidelines
 - Self-management skills instruction
- Adoption of care management processes is helped by:
 - Public recognition for high performance
 - Financial rewards for high performance
 - Better contracts with health plans
 - Being required to report satisfaction, HEDIS data, etc.

Focused Care model (Albert diPiero & Dave Sanders)

- Global payment for delivering all services required to treat a condition
- Providers set own price and compete, in reference pricing environment

Focused Care [is] a health care delivery organization that specializes in comprehensive care for common, complex, expensive chronic conditions. Focused Care is paid “fee-for-solution”: a fixed, lump-sum payment for a diagnosis or condition.

What is the value proposition?

Focused Care reduces the per capita cost of care for each chronic condition by 20-40% while exceeding all community standards of quality. Focused Care reduces its cost basis and improves quality and service by *focusing* on a limited set of chronic medical conditions and organizing itself to deliver replicable, coordinated, evidenced-based care.

What do we mean by Quality?

By Quality we mean that Focused Care will achieve or surpass the top decile of process and outcomes measures in a community for each chronic condition. For example, if the top 10th percentile of providers achieves a hemoglobin A1c value less than 6.5% for 50% of their risk-stratified diabetic patients, Focused Care will achieve this benchmark for 50% or greater of similarly matched patients.

How is the promise fulfilled?

Today, specialty medical practices are either organ system-based, and hence encompass a diverse range of diseases, or concentrate on isolated procedures. Focused Care in contrast delivers care for a set of complex, chronic conditions with similar features that frequently co-exist in the same patient. This enables the concentration of expertise and the development of a common platform of organization and standardized processes that leads to economies of scale for common conditions that account for a disproportionate share of medical costs and population morbidity. This produces care that is highly personalized, convenient, efficient, and centered on the patient’s needs and goals, while costing less than traditionally organized care. The medical conditions covered include:

1. Diabetes
2. Congestive Heart Failure
3. Hyperlipidemia
4. Hypertension
5. Coronary Artery Disease
6. Asthma
7. COPD
8. Depression

For purchasers, the fee-for-solution payment facilitates budgeting and underwriting. And since payment is linked to a diagnosis, quality can be prospectively defined and tracked and results can be compared more easily between providers.

What is the operational model?

Organizationally, Focused Care fulfills its promise of cost control and quality enhancement through a set of operational approaches:

1. *Personnel approach*: Today, most care is based in isolated practices that try to care for a broad range of conditions. Physicians even in the same practice do not share similar approaches to care. Focused Care, by contrast, creates a practice based on teams of providers with specified roles and protocols. This enables the consistent, reproducible delivery of the best care on a greater scale in the most personal, patient-centric and cost-effective manner.
2. *Communication and intervention approach*: Today, communication is episodic and intervention is reactive and based at the office visit. Focused Care by contrast is organized around a planned visit model and uses continuous communication with the patients, including electronic communications, enabling monitoring, management and the adjustments of medications remotely. Focused Care concentrates on preventive care, proactive interventions and patient self-management techniques known to reduce complications, hospitalizations, and specialty services and prevent ER visits.
3. *Automation approach*: Today, automation is used mainly for billing tasks and information remains paper-based. Focused Care by contrast uses automation to takeover routine tasks preformed today by people, including scheduling, check-in, and reminders. For clinical data management, Focused Care concentrates on moving only specific high yield information to the digital format.
4. *Support services approach*: Focused Care leverages across all conditions aspects of the clinical and administrative infrastructure to achieve economies of scale, including:
 - Call center
 - Laboratory
 - Imaging
 - Electronic medical record and registry
 - Electronic patient communications
 - Billing
 - Social work
 - Patient self-management education

Medical home model: (*Annals of Family Medicine* 2004, 2(Supp1): 533; AAP principles: *Pediatrics* 2002; 110(1): 184.)

Table 4. Characteristics of the New Model of Family Medicine

Characteristic	Description
Personal medical home	The practice serves as a personal medical home for each patient, ensuring access to comprehensive, integrated care through an ongoing relationship
Patient-centered care	Patients are active participants in their health and health care. The practice has a patient-centered, relationship-oriented culture that emphasizes the importance of meeting patients' needs, reaffirming that the fundamental basis for health care is "people taking care of people" ⁶⁵
Team approach	An understanding that health care is not delivered by an individual, but rather by a system, ⁶⁶ which implies a multidisciplinary team approach for delivering and continually improving care for an identified population ^{41,67}
Elimination of barriers to access	Elimination, to the extent possible, of barriers to access by patients through implementation of open scheduling, expanded office hours, and additional, convenient options for communication between patients and practice staff
Advanced information systems	The ability to use an information system to deliver and improve care, to provide effective practice administration, to communicate with patients, to network with other practices, and to monitor the health of the community. ⁶⁸ A standardized electronic health record (EHR), adapted to the specific needs of family physicians, constitutes the central nervous system of the practice
Redesigned offices	Offices should be redesigned to meet changing patient needs and expectations, to accommodate innovative work processes, and to ensure convenience, comfort, and efficiency for patients and clinicians
Whole-person orientation	A visible commitment to integrated, whole-person care through such mechanisms as developing cooperative alliances with services or organizations that extend beyond the practice setting, but which are essential for meeting the complete range of needs for a given patient population. ³⁸ The practice has the ability to help guide a patient through the health care system by integrating care—not simply coordinating it

Care provided within a community context	A culturally sensitive, community-oriented, population-perspective focus
Emphasis on quality and safety	Systems are in place for the ongoing assessment of performance and outcomes and for implementation of appropriate changes to enhance quality and safety
Enhanced practice finance	Improved practice margins are achieved through enhanced operating efficiencies and new revenue streams
Commitment to provide family medicine's basket of services	A commitment to provide patients with family medicine's full basket of services—either directly or indirectly through established relationships with other clinicians

Personal Medical Home

In addition to the changes that family physicians can implement to enhance patient access to care, steps must be taken to ensure every American has a personal medical home* that serves as the focal point through which all individuals—regardless of age, sex, race, or socioeconomic status—receive a basket of acute, chronic, and preventive medical care services. Through their medical home, patients can be assured of care that is not only accessible but also accountable, comprehensive, integrated, patient-centered, safe, scientifically valid, and satisfying to both patients and their physicians.

* By the American Academy of Pediatrics, and incorporated herein, with appreciation.

Provider profiling; predictive modeling

PEBB has some interest in conducting risk-adjusted outcomes analysis to identify superior performing providers in the state. Third party vendors could also be used to help evaluate pricing or provide continuing provider or member feedback. Such services are in use by the Group Purchasing Alliance of Massachusetts (state employees), for example.

Products in this category are able to integrate all available electronic data sources, including medical claims, pharmacy claims, and lab orders and results and runs algorithms against the aggregated data set. Some algorithms are used to produce management reports, some to flag patients in need of case management services, some to flag providers with practice patterns that do not conform to guidelines, and some to trigger messages directly to patients about adherence or alerts.

Two products in this category are:

- Active Health Management (<http://www.activehealthmanagement.com/>)
- Resolution Health (<http://www.resolutionhealth.com>)

HCAHPS

Hospital CAHPS® (HCAHPS®)
CENTERS FOR MEDICARE & MEDICAID SERVICES
and
AGENCY FOR HEALTHCARE RESEARCH AND QUALITY
FACT SHEET

November 5, 2004

Overview

The goal of the Hospital CAHPS (HCAHPS) initiative is to uniformly measure and publicly report patients' perspectives on their inpatient care. While many hospitals currently collect information on patients' satisfaction with care, there is no national standard for collecting this information that would enable valid comparisons to be made across all hospitals. In order to make "apples to apples" comparisons to support consumer choice, it is necessary to introduce a standard measurement approach. The intent of the HCAHPS initiative is to provide a standardized survey instrument and data collection methodology for measuring patients' perspectives on hospital care. This methodology and the information it generates will be made available to the public. HCAHPS can be viewed as a consistent core set of questions that can be combined with a broader, customized set of hospital-specific items. HCAHPS is meant to complement the data hospitals currently collect to support improvements in internal customer services and quality related activities.

HCAHPS® Development

The Centers for Medicare & Medicaid Services (CMS) has partnered with the Agency for Healthcare Research and Quality (AHRQ), another Health and Human Services agency, to develop HCAHPS. AHRQ has carried out a rigorous, scientific process to develop and test the HCAHPS instrument. This process has entailed a public call for measures; review of existing literature; cognitive interviews; consumer focus groups; stakeholder input; public response to Federal Register notices; and a three-state pilot test in Arizona, Maryland, and New York.

The current version of the HCAHPS instrument and its administration protocol reflect additional input and feedback from public comments, consumer testing, and small-scale field tests. The 25-item HCAHPS instrument (i.e., the third draft) is composed of 20 questions that encompass seven key topics: communication with doctors, communication with nurses, responsiveness of hospital staff, cleanliness and noise level of the physical environment, pain control, communication about medicines, and discharge information. It also includes five additional items for adjusting the mix of patients across hospitals, which is done for analytical purposes.

This revised HCAHPS will be made available for another round of public comment, allowing all interested parties an additional opportunity to comment on the instrument and the proposed methodology for administration. CMS has also submitted the 25-item revised survey to the National Quality Forum (NQF) stakeholder consensus process for consideration and endorsement. Once the NQF consensus process and the Office of Management and Budget Paperwork Reduction Act process have been completed, and any changes are incorporated into the HCAHPS instrument and implementation strategy, CMS will begin training of hospitals and vendors for national implementation of HCAHPS.

National Implementation

Training for the implementation of the HCAHPS survey is planned for Spring 2005. There will be training sessions in select sites around the country. All survey vendors planning to administer HCAHPS will be required to attend a training session. Additionally, any hospitals planning to conduct HCAHPS on their own will also be required to attend a training session.

A “dry run” of HCAHPS is planned for Summer 2005. As part of the “dry run” vendors/hospitals will begin collecting HCAHPS data and reporting it to CMS. CMS will adjust the data for case-mix and mode of administration and then provide an opportunity for hospitals to review their data, although, the data collected during the “dry-run” period will not be publicly reported.

Hospitals will voluntarily begin using HCAHPS in 2005 under the auspices of the Hospital Quality Alliance, a private/public partnership which includes the major hospital associations, government, consumer groups, measurement and accrediting bodies, and other stakeholders who share a common interest in reporting on hospital quality. The first full national implementation of HCAHPS is planned for late 2005. This will be followed by the first public reporting of HCAHPS results on the Hospital Compare website, found at www.medicare.gov, in 2006.

For More Information

To learn more about HCAHPS, please visit the following Web sites:

- For general information: www.ahrq.gov or www.cms.hhs.gov/quality/hospital.
- To sign up for the HCAHPS listserv: www.ahrq.gov/qual/cahpsix.htm

To Provide Comments or Ask Questions:

- To communicate with AHRQ staff via e-mail: Hospital-CAHPS@ahrq.gov
- To communicate with CMS staff via e-mail: hospitalcahps@cms.hhs.gov CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality, a U.S. Government

Hospital CAHPS®

Please answer the questions in this survey about your stay at the hospital named on the cover. Do not include any other hospital stay in your answers.

YOUR CARE FROM NURSES

1. During this hospital stay, how often did nurses listen carefully to you?

- 1 Never
- 2 Sometimes
- 3 Usually
- 4 Always

2. During this hospital stay, how often did nurses explain things in a way you could understand?

- 1 Never
- 2 Sometimes
- 3 Usually
- 4 Always

3. During this hospital stay, after you pressed the call button, how often did you get help as soon as you wanted it?

- 1 Never
- 2 Sometimes
- 3 Usually
- 4 Always

9 I never pressed the call button

YOUR CARE FROM DOCTORS

4. During this hospital stay, how often did doctors listen carefully to you?

- 1 Never
- 2 Sometimes
- 3 Usually
- 4 Always

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5. During this hospital stay, how often did doctors explain things in a way you could understand?

- 1 Never
- 2 Sometimes
- 3 Usually
- 4 Always

THE HOSPITAL ENVIRONMENT

6. During this hospital stay, how often were your room and bathroom kept clean?

- 1 Never
- 2 Sometimes
- 3 Usually
- 4 Always

7. During this hospital stay, how often was the area around your room quiet at night?

- 1 Never
- 2 Sometimes
- 3 Usually
- 4 Always

YOUR EXPERIENCES IN THIS HOSPITAL

8. During this hospital stay, did you need help from nurses or other hospital staff in getting to the bathroom or in using a bedpan?

- 1 Yes
- 2 No If No, Go to

Question 10

9. How often did you get help in getting to the bathroom or in using a bedpan as soon as you wanted?

- 1 Never
- 2 Sometimes
- 3 Usually
- 4 Always

10. During this hospital stay, did you need medicine for pain?

- 1 Yes
- 2 No If No, Go to

Question 13

11. During this hospital stay, how often was your pain well controlled?

- 1 Never
- 2 Sometimes
- 3 Usually
- 4 Always

12. During this hospital stay, how often did the hospital staff do everything they could to help you with your pain?

- 1 Never
- 2 Sometimes
- 3 Usually
- 4 Always

13. During this hospital stay, were you given any medicine that you had not taken before?

- 1 Yes
- 2 No If No, Go to Question 16 on page 3

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14. Before giving you any new medicine, how often did hospital staff tell you what the medicine was for?

- 1 Never
- 2 Sometimes
- 3 Usually
- 4 Always

15. Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand?

- 1 Never
- 2 Sometimes
- 3 Usually
- 4 Always

WHEN YOU LEFT THE HOSPITAL

16. After you left the hospital, did you go directly to your own home, to someone else's home, or to another health facility?

- 1 Own home
- 2 Someone else's home
- 3 Another health facility

If Another, Go to Question 19

17. During your hospital stay, did doctors, nurses or other hospital staff talk with you about whether you would have the help you needed when you left the hospital?

- 1 Yes
- 2 No

18. During your hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?

- 1 Yes
- 2 No

OVERALL RATING OF HOSPITAL

Please answer the following questions about your stay at the hospital named on the cover. Do not include any other hospital stays in your answer.

19. Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital?

- 0 0 Worst hospital possible
- 1 1
- 2 2
- 3 3
- 4 4
- 5 5
- 6 6
- 7 7
- 8 8
- 9 9
- 10 10 Best hospital possible

20. Would you recommend this hospital to your friends and family?

- 1 Definitely no
 - 2 Probably no
 - 3 Probably yes
 - 4 Definitely yes
- 3 October 18, 2004

ABOUT YOU

There are only a few remaining items left.

21. In general, how would you rate your overall health?

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor

22. What is the highest grade or level of school that you have completed?

- 1 8th grade or less
- 2 Some high school, but did not graduate
- 3 High school graduate or GED
- 4 Some college or 2-year degree
- 5 4-year college graduate
- 6 More than 4-year college degree

23. Are you of Hispanic or Latino origin or descent?

- 1 Yes, Hispanic or Latino
- 2 No, not Hispanic or Latino

24. What is your race? Please choose one or more.

- 1 White
- 2 Black or African American
- 3 Asian
- 4 Native Hawaiian or other Pacific Islander
- 5 American Indian or Alaska Native

25. What language do you mainly speak at home?

- 1 English
- 2 Spanish
- 8 Some other language (please

print): _____

CMS hospital reporting initiative: (<http://www.cms.hhs.gov/quality/hospital/>)

CMS has implemented a pay-for-performance program under which non-participating hospitals will not receive 0.4% of FY2005 Medicare payments; virtually all Oregon hospitals are participating. Presumably, the ten initial measures (which will be expanded with H-CAHPS survey data in 2005 or 2006) will be publicly available sometime in 2005. In the first few months, only 18 Oregon hospitals have submitted data. The following table illustrates hospital performance on the CMS indicator that addresses prompt administration of antibiotics to pneumonia patients:

CMS Voluntary Hospital Quality Reporting System – Pneumonia example

Measure: Pneumonia inpatients who receive their first dose of antibiotic within 4 hours of arrival to the hospital.

		% meeting criterion	# pneumonia patients
Top 10% of Hospitals submitting data scored equal to or higher than: Bottom of Form		86%	
Top 50% of Hospitals submitting data scored equal to or higher than: Bottom of Form		71%	
ADVENTIST MEDICAL CENTER	PORTLAND, OR 97216	55%	44
Albany General Hospital - Albany, OR			
Ashland Community Hospital - Ashland, OR			
Bay Area Hospital - Coos Bay, OR			
Blue Mountain Hospital - John Day, OR			
Cascade Medical Clinic - Redmond, OR			
Central OR Community Hospital - Redmond,			
Coquille Valley Hospital - Coquille, OR			
Cottage Grove Community Hospital Cottage Grove, OR			
Curry General Hospital - Gold Beach, OR (OR)			
Doernbecher Children's Hospital - Portland,			
Eastmoreland Hospital - Portland, OR			
GOOD SAMARITAN REGIONAL MEDICAL	CORVALLIS, OR 97339	73%	45
GOOD SHEPHERD MEDICAL CENTER	HERMISTON, OR 97838	N/A	
Grande Ronde Hospital - La Grande, OR			
Holy Rosary Medical Center - Ontario, OR			
Hood River Memorial Hospital -	Hood River, OR		
KAISER SUNNYSIDE MEDICAL CENTER	CLACKAMAS, OR 97015	82%	62
Lake Health District - Lakeview, OR			
Lebanon Community Hospital - Lebanon, OR			
Legacy Emanuel Children's Hospital - Portland			
Legacy Emanuel Hospital & Health Center - Portland, OR			
Legacy Meridian Park Hospital - Tualatin(metro Portland), OR			
Legacy Mount Hood Medical Center - Gresham (metro Portland), OR			
McKenzie-Willamette Hospital - Springfield			
Mercy HealthCare - Roseburg, OR			

Background on relevant models

Mercy Medical Center - Roseburg, OR (OR) (Douglas County)			
Merle West Medical Center - Klamath Falls,			
MID-COLUMBIA MEDICAL CENTER	THE DALLES, OR 97058	82%	97
Morrow County Health District - Heppner, OR			
Mountain View Hospital - Madras, OR (OR)			
North Lincoln Hospital - Lincoln City, OR			
OHSU HOSPITAL	PORTLAND, OR 97239	60%	133
Pacific Communities Hospital - Newport, OR			
PEACE HARBOR HOSPITAL	FLORENCE, OR 97439	78%	73
Pioneer Memorial Hospital - Heppner, OR			
Pioneer Memorial Hospital - Prineville, OR			
Portland Shriners Hospital - Portland, OR			
PROVIDENCE HOOD RIVER MEMORIAL	HOOD RIVER, OR 97031	N/A	
Providence Medford Medical Center - Medford, OR (OR)			
Providence Milwaukie Hospital -	Milwaukie, OR		
Providence Portland Medical Center - Portland			
Providence Saint Vincent Medical Center - Portland, OR			
Providence Seaside Hospital -Seaside, OR			
Regional Medical Center - Corvallis, OR (OR)			
Rogue Medical Center - Medford, OR			
ROGUE VALLEY MEDICAL CENTER	MEDFORD, OR 97504	83%	112
SACRED HEART MEDICAL CENTER	EUGENE, OR 97440	80%	371
Salem Hospital - Salem, OR			
SAMARITAN ALBANY GENERAL HOSPITAL	ALBANY, OR 97321	N/A	
SAMARITAN LEBANON COMMUNITY	LEBANON, OR 97355	82%	38
Santiam Memorial Hospital - Stayton, OR			
Southern Coos Hospital & Health Center - Bandon OR			
ST CHARLES MEDICAL CENTER - BEND	BEND, OR 97701	64%	173
ST CHARLES MEDICAL CENTER -	REDMOND, OR 97756	81%	73
ST ELIZABETH HEALTH SERVICES	BAKER CITY, OR 97814	78%	68
THREE RIVERS COMMUNITY HOSPITAL	GRANTS PASS, OR	63%	206
Tillamook County General Hospital -	Tillamook, OR		
TUALITY HEALTHCARE	HILLSBORO, OR 97123	85%	198
Wallowa Memorial Hospital - Enterprise, OR			
WILLAMETTE FALLS HOSPITAL	OR CITY, OR 97045	83%	126
Willamette Valley Medical Center -	McMinnville, OR		
Woodland Park Hospital - Portland, OR			

Use of procedure volume data – by hospital

Leapfrog Group has identified seven procedures where the hospital volume-outcome relationship is strongly indicated. Leapfrog publishes ratings of how well each hospital attains the target levels (see examples below). Several lists of volume-sensitive procedures have been published.

MarkChassin's list: (Halm EA. Ann Intern Med 2002; 137(6): 511-20.)

Strong association:

- AIDS treatment
- Pancreatic cancer surgery
- esophageal cancer surgery
- abdominal aortic aneurysms
- Pediatric cardiac surgery

Less strong association:

- CABG
- Angioplasty
- Carotid endarterectomy
- Cancer surgery
- orthopedic surgery

Dudley's list from Calif. data (Dudley RA. JAMA. 2000; 23(9): 1159-66; used by Leapfrog):

- Elective abdominal aortic aneurysm
- Carotid endarterectomy
- Lower extremity arterial bypass
- CABG
- Angioplasty
- Heart transplant
- Pediatric cardiac surgery
- Pancreatic cancer surgery
- Esophageal cancer surgery
- Cerebral aneurysm surgery
- AIDS

Physician certification:

(<http://www.abms.org/Downloads/Publications/1-What%20is%20MOC.pdf>)

Most specialists practice within areas overseen by one of the medical specialty societies and are subsumed under the American Board of Medical Specialties. In recent years most societies have developed rigorous re-certification procedures, some of which also include patient evaluations of each physician. Patients can determine if physicians are certified or have been recently recertified by contacting the individual society or by consulting various information services. For example, patients can go to www.abms.org to get brief listings of all specialties, or to www.abos.org to get somewhat more information regarding board certification for orthopedic surgeons, or can pay \$10 to a commercial service, www.choicetrust.com, for more elaborate listings.

ABIM has strengthened the maintenance of certification program by developing tools for frequent assessment of physician performance. ABIM encourages board-certified physicians to take at least one PIM every two years or so. Practice improvement modules (PIMs) are available in the following areas:

- Clinical Preventive Services
- Preventive Cardiology
- Diabetes
- Asthma
- Hypertension
- Acute Myocardial Infarction
- Heart Failure
- Osteoarthritis
- Care of the Hospitalized Elderly
- End-of-Life Care
- Oncology
- Gastroenterology

CMS Physician Assessments and Patient Surveys:

(www.cms.hhs.gov/quality/doq/)

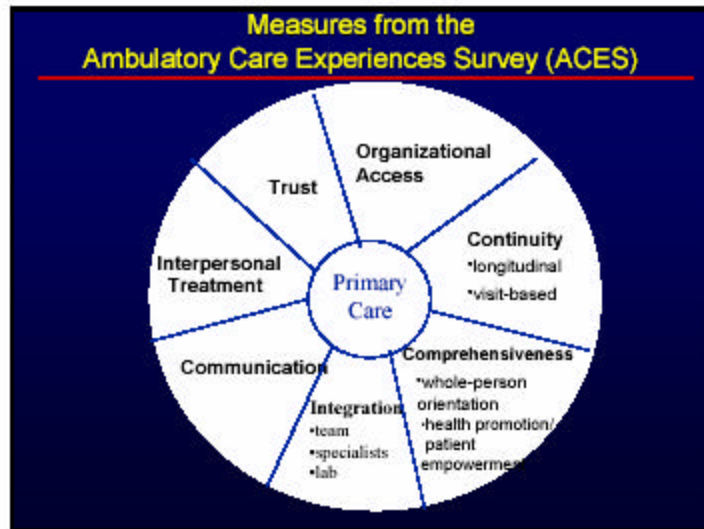
The Doctors' Office Quality (DOQ) project is designed to develop and test a comprehensive, integrated approach to measuring the quality of care for chronic disease and preventive services in the doctors' offices. The Medicare Quality Improvement Organizations (QIOs) in Iowa, California, and New York, under the auspices of CMS, are involved in the DOQ Project.

The measures focus on chronic conditions and preventive care that are prevalent in the Medicare population and treated in primary care. The DOQ project goals are to

1. assess quality of care in the doctors' offices, and
2. assess the feasibility of collecting data using a defined quality measurement set.

The quality measurement set is made up of three components

- [Clinical Performance Measures](#) (PDF 221K), include: coronary artery disease, diabetes mellitus, heart failure, hypertension, osteoarthritis and preventive care;
- Patient Experience of Care Survey, include: appointment access, continuity of care, communication, health promotion, interpersonal treatment, office staff, and integration of care; and
- [Physician Practice Connections](#) (PPC), which will collect information from doctors' office staff. This tool will evaluate three categories of standards: Clinical Information Systems, Patient Education Support and Care Management.



The DOQ project will develop and test a measurement set that will assess quality in doctors' offices. This will lead to a standard measures set for use in doctors' offices.

PHQ-9 for Depression

Do you suffer with any of the following for nearly every day over the last two weeks:

1. Little interest or pleasure in doing anything
2. Feeling down, depressed or hopeless
3. Trouble falling or staying asleep, or sleeping too much
4. Poor appetite or overeating
5. Feeling bad about yourself or that you are a failure or have let yourself or your family down
6. Trouble concentrating on things such as reading the newspaper or watching television
7. Feeling tired or little energy
8. Moving or speaking so slowly that other people may notice? Or the opposite- being so fidgety or restless that you have been moving around a lot more than usual
9. Thoughts that you would be better off dead or of hurting yourself in some way

Possible Answers to all Questions

- 0 = not at all
- 1 = several days
- 2 = more than half the days
- 3 = nearly every day

An example of family practice opinion on use of these tools is at:

http://www.jfponline.com/content/2003/02/jfp_0203_00118.asp

Texas Medication Algorithm Project - A Collaborative Effort

(<http://www.dshs.state.tx.us/mhprograms/TMAPover.shtm>)

TMAP, started in 1996, is designed to develop, implement and evaluate not just a set of medication algorithms, but an algorithm-driven treatment philosophy for major adult psychiatric disorders treated in the Texas public mental health sector. The ultimate goal of TMAP is to improve the quality of care and achieve the best possible patient outcomes for each dollar of resource expended. TMAP is a treatment philosophy for the medication management portion of care, consisting of:

- 1) evidence-based, consensually agreed upon medication treatment algorithms,
- 2) clinical and technical support necessary to allow the clinician to implement the algorithm,
- 3) patient and family education programs that allow the patient to be an active partner in care, and
- 4) uniform documentation of care provided and resulting patient outcomes.

The Texas Medication Algorithm Project (TMAP) is a public and academic collaborative effort that consists of four phases. A major result of this project has been the development of medication treatment guidelines for three major psychiatric disorders:

- Schizophrenia
- Major Depressive Disorder
- Bipolar Disorder

Algorithms At A Glance

At-a-Glance Depression Medication Algorithms

Visit Frequency: Weekly contact (office visit or by phone) for the first 4 weeks of each stage; then every 2 weeks until 50% improvement in symptoms is maintained for at least one month; then every 4 weeks until 75% improvement is maintained for at least one month; then every 3 months. Support personnel may contact patients by phone if the physician is unable to see them.

Assessment Frequency: Inventory of Depressive Symptomatology - Self-Report (IDS-SR) and Clinical Report Form (CRF) at each clinic visit. If the patient is contacted by phone, an Interim Contact Form (ICF) must be completed.

Duration of Acute Treatment: Until 75% symptom improvement is achieved for 4 weeks, then move to continuation phase. (See Critical Decision Points (CDP) Table 2, page 10.)

<u>Response:</u>	Nonresponse	(<25% improvement)
	Minimal response	(25–50% improvement)
	Partial response	(50–75% improvement)
	Full response/remission	(75–100% improvement)

Criteria for Medication Change: Anything less than 75% improvement or full response **may** require a medication change.

Evaluations: At each visit a physician assessment of core symptom severity, overall functional impairment, and side effect severity. Algorithm Coordinator (AC) assessments, using IDS-SR and patient global self-rating of symptom severity and side effects, should be done prior to patient contact with the physician.

Medication Switching: Discontinue or taper according to Table 11 on page 16 or the Guidelines for Switching Between Antidepressant Medications in the Appendix.

Medication Doses: See Tables 3, 5, and 7 on pages 11, 13, and 14 and the Guidelines in the Appendix for information on medications. ***Doses outside of the ranges should have a chart note indicating “change from algorithm recommended” and documentation of rationale for change.***

Augmentation and Combination: If a partial response is achieved, physicians may augment with lithium, thyroid medication (Cytomel), or buspirone to potentiate a greater response. A combination of 2 antidepressants, both at full doses, is suggested at Stage 5 of the algorithm.

E-prescribing: (<http://www.ehealthinitiative.org/initiatives/erx/>;
<http://www.tuftshealthplan.com/providers/provider.php?sec=pharma&content=eprescribing>)

Getting Physicians Connected

Pharmacy e-Prescribing

Physician Connectivity Pilot Program Results



Electronic prescription transmission can improve patient safety, efficiency and reduce costs.

In 2001, AdvancePCS, Tufts Health Plan (THP) and PocketScript, LLC, collaboratively launched a pilot program where PocketScript™ software was distributed to THP network providers on PDAs (Personal Digital Assistants).

PocketScript is an e-prescribing system that enables physicians to electronically write and fax prescriptions, generated in the physician's office, to the pharmacy via a secure fax. The e-prescribing system identifies possible drug interactions and supplies formulary information for all health plans to prescribers. In addition, some of the prescriber sites participating in the pilot were able to view patient drug history via a link to AdvancePCS.

STUDY OBJECTIVES

The purpose of the pilot was to analyze the impact of Pocketscript™ in 3 key areas:

- Patient safety
- Overall patient care
- Prescribing process efficiency

METHOD

- Distribution of Pocketscript™ to participating prescriber sites from April through December 2001.
- Pilot measurement ceased May 31, 2002.
- Study of pilot results conducted using a matched case/control, pre/post study design.

STUDY POPULATION

- 15 physician sites
- 113 THP network providers:
 - 77 Primary Care Physicians
 - 36 Nurse Practitioners/Physician Assistants

SATISFACTION RATINGS

Overall Satisfaction

(5 point scale; 5 = very satisfied)

- Prescribers – average rating of 4.25
- Office personnel – average rating of 4.10
- Pharmacists – average rating of 4.67

Prescriber PDA Feature Satisfaction

(5 point scale; 5 = very satisfied)

- E-Prescribing – average rating of 4.55
- Formulary lookup – average rating of 3.70
- Drug Interaction – average rating of 3.55
- Drug History – average rating of 3.63

STUDY FINDINGS

Improved Patient Safety

For physician groups with access to full drug history:

- Patient safety errors were reduced by 8.93 per physician per year.
- Inpatient admissions increased at a slower rate, and hospital days decreased for the pilot group, with an overall reduction in length of stay.
- Emergency Department visits decreased in the pilot group while increasing in the control group.

Improved Overall Patient Care

Prescribers cited numerous case examples of how e Prescribing and the link to patient history impacted patient safety. Examples included:

- The identification of a diabetic who had not picked up the previous two months supply of insulin.
- The identification of a patient not taking the prescribed dosage correctly.
- Verification that a patient had filled their narcotic prescription when the patient called for a new prescription claiming the original had been lost.

Improved Prescriber/Pharmacist Efficiencies

- Prescribers and office personnel reported a decrease of up to 2 hours per day in total time spent on prescriptions.
- Pharmacists reported saving almost an hour per day as a result of e Prescribing.
- Reduced telephone and fax volume between physician offices and pharmacies.
- Decrease in prescriptions being rejected due to illegibility and drug interactions

Improvement in Healthcare Spend

- Prescribers in the pilot group experienced a greater percentage increase over the control group in the utilization of both generic and preferred brand-name drug products, translating into potential pharmacy cost savings of \$0.30 to \$0.40 PMPM.
- Although medical costs increased for both groups during the study period, the increase for the pilot was 19.3% less than the control group.

Medication management: (<http://www.empowerx.gsm.com/index.html>)

eMPOWERx offers a complete, secure, wireless patient care and e-prescribing solution that enables providers to take their practice and patient care to the next level, seamlessly integrating. The eMPOWERx system helps Florida healthcare providers streamline their practice, reduce phone calls and improve their ability to provide top quality clinical care – at the point-of-care and beyond – with:

- A Toshiba 2032SP, Hitachi G1000 (or similar device) Integrated Pocket PC/PCS phone
- Unlimited PCS data minutes, including wireless internet, 300 minutes peak talk time, and 1,000 minutes on nights and weekends
- An up-to-date, comprehensive, and clinically-relevant drug information database that readily identifies the medications covered by Florida Medicaid without a prior authorization
- A current 100-day prescription history for Medicaid patients that is updated daily over a secure wireless connection. This information includes all medications dispensed to patients, and assists in identifying medications written by other providers
- One of the most robust drug interaction screening tools available – including an IV compatibility alert tool – fully integrated with the patient's medication history

Florida Medicaid

In mid-2003, Gold Standard and Florida Medicaid, with the support and approval of the Centers for Medicare & Medicaid Services, entered into a partnership to launch the wireless eMPOWERx system to 1,000 of the highest prescribing Florida Medicaid physicians. Since implementing eMPOWERx, Florida Medicaid has achieved a significant improvement in severe drug interactions, a major cost savings, and a reduction in fraud. Consequently, Florida has already approved expansion of the system from 1,000 to 3,000 physicians, which represents physicians writing 80% of all Medicaid prescriptions in Florida – approximately 25 million transactions.

Humana Family Medicaid

Gold Standard is supplying the eMPOWERx patient care system to one-third of Humana's Florida Medicaid HMO providers, including 200 primary care physicians who care for 70 percent of 56,000 Humana Medicaid members in South Florida. Using the secure, wireless, integrated Pocket PC/PCS PDA, physicians receive a real-time, 100-day prescription history for each of their Medicaid patients. That information is then integrated with Humana's and Florida Medicaid's Preferred Drug Lists (PDLs), as well as Gold Standard's Clinical Pharmacology drug information and interaction screening tools. eMPOWERx automatically selects the relevant PDL based on the patient's identification number, and then delivers the appropriate information to the physician.

Pharmaceutical care (see <http://www.aphanet.org/pharmcare/pharmcare.html>)

Christensen DB, Cranor CW. The Asheville Project: Short-Term Outcomes of a Community Pharmacy Diabetes Care Program. *J Am Pharm Assoc.* 2003;43:149–59.

Abstract

Objectives: To assess short-term clinical, economic, and humanistic outcomes of pharmaceutical care services (PCS) for patients with diabetes in community pharmacies. **Design:** Intention-to-treat, pre–post cohort-with-comparison group study. **Setting:** Twelve community pharmacies in Asheville, N.C. **Patients and Other Participants:** Eighty-five patients with diabetes who were employees, dependents, or retirees from two self-insured employers; community pharmacists who completed a diabetes certificate program and received reimbursement for PCS. **Interventions:** Patients scheduled consultations with pharmacists over 7 to 9 months. Pharmacists provided education, self-monitored blood glucose (SMBG) meter training, clinical assessment, patient monitoring, follow-up, and referral. Group 1 patients began receiving PCS in March 1997, and group 2 patients began in March 1999. **Main Outcome Measures:** Change from baseline in the two employer groups in glycosylated hemoglobin (A1c) values, serum lipid concentrations, health-related quality of life (HRQOL), satisfaction with pharmacy services, and health care utilization and costs. **Results:** Patients used SMBG meters at home, stored all readings, and brought their meters with them to 87% of the 317 PCS visits (3.7 visits per patient). Patients' A1c concentrations were significantly reduced, and their satisfaction with pharmacy services improved significantly. Patients experienced no change in HRQOL. From the payers' perspective, there was a significant \$52 per patient per month increase in diabetes costs for both groups, with PCS fees and diabetes prescriptions accounting for most of the increase. In contrast, both groups experienced a nonsignificant but economically important 29% decrease in nondiabetes costs and a 16% decrease in all-diagnosis costs. **Conclusion:** A clear temporal relationship was found between PCS and improved A1c, improved patient satisfaction with pharmacy services, and decreased all-diagnosis costs. Findings from this study demonstrate that pharmacists provided effective cognitive services and refute the idea that pharmacists must be certified diabetes educators to help patients with diabetes improve clinical outcomes.

Electronic health records standards:

http://www.whitehouse.gov/omb/egov/gtob/health_informatics.htm

<http://www.hl7.org>

There are many standards activities underway. For the purposes of Oregon health system standardization, PEBB should consider requiring providers to adhere to the standards endorsed by the Federal Consolidated Health Informatics program – which are required of all Federal agencies.

The standards all federal agencies will adopt are:

- Health Level 7® (HL7®) messaging standards to ensure that each federal agency can share information that will improve coordinated care for patients such as entries of orders, scheduling appointments and tests and better coordination of the admittance, discharge and transfer of patients.
- National Council on Prescription Drug Programs (NCDPCP) standards for ordering drugs from retail pharmacies to standardize information between health care providers and the pharmacies. These standards already have been adopted under the Health Insurance Portability and Accountability Act (HIPAA) of 1996, and ensures that parts of the three federal departments that aren't covered by HIPAA will also use the same standards.
- The Institute of Electrical and Electronics Engineers 1073 (IEEE1073) series of standards that allow for health care providers to plug medical devices into information and computer systems that allow health care providers to monitor information from an ICU or through telehealth services on Indian reservations, and in other circumstances.
- Digital Imaging Communications in Medicine® (DICOM®) standards that enable images and associated diagnostic information to be retrieved and transferred from various manufacturers' devices as well as medical staff workstations.
- Laboratory Logical Observation Identifier name Codes® (LOINC®) to standardize the electronic exchange of clinical laboratory results.

Standards Announced on May 6, 2004:

On May 6, 2004, the Departments of Health and Human Services, Defense, and Veterans Affairs announced the adoption of 15 additional standards agreed to by the CHI initiative to allow for electronic exchange of clinical information across the federal government. The 15 new standards build on the existing set of five standards adopted by HHS in March 2003 and complete the first phase of the CHI initiative. The new standards agreed to by federal agencies will be used as agencies develop and implement new information technology systems.

The specific new standards are:

- Health Level 7® (HL7®) vocabulary standards for demographic information, units of measure, immunizations, and clinical encounters, and HL7®'s Clinical Document Architecture standard for text based reports. (Five standards)
- The College of American Pathologists Systematized Nomenclature of Medicine Clinical Terms® (SNOMED CT®) for laboratory result contents, non-laboratory interventions and procedures, anatomy, diagnosis and problems, and nursing. HHS is making SNOMED-CT® available for use in the U.S. at no charge to users. (Five standards)
- Laboratory Logical Observation Identifier Name Codes® (LOINC®) to standardize the electronic exchange of laboratory test orders and drug label section headers. (One standard.)
- The Health Insurance Portability and Accountability Act (HIPAA) transactions and code sets for electronic exchange of health related information to perform billing or administrative functions. These are the same standards now required under HIPAA for health plans, health care clearinghouses and those health care providers who engage in certain electronic transactions. (One standard.)
- A set of federal terminologies related to medications, including the Food and Drug Administration's names and codes for ingredients, manufactured dosage forms, drug products and medication packages, the National Library of Medicine's RxNORM for describing clinical drugs, and the Veterans Administration's National Drug File Reference Terminology (NDF-RT) for specific drug classifications. (One standard.)
- The Human Gene Nomenclature (HUGN) for exchanging information regarding the role of genes in biomedical research in the federal health sector. (One standard.)
- The Environmental Protection Agency's Substance Registry System for non- medicinal chemicals of importance to health care. (One standard.)

Personal Health Records:

http://www.connectingforhealth.org/resources/eis_exec_sum_final_0704.pdf

The Personal Health Record (PHR) is an Internet-based set of tools that allows people to access and coordinate their lifelong health information and make appropriate parts of it available to those who need it. PHRs offer an integrated and comprehensive view of health information, including information people generate themselves such as symptoms and medication use, information from doctors such as diagnoses and test results, and information from their pharmacies and insurance companies. Individuals access their PHRs via the Internet, using state-of-the-art security and privacy controls, at any time and from any location. Family members, doctors or school nurses can see portions of a PHR when necessary and emergency room staff can retrieve vital information from it in a crisis. People can use their PHR as a communications hub: to send email to doctors, transfer information to specialists, receive test results and access online self-help tools. PHR connects each of us to the incredible potential of modern health care and gives us control over our own information.

The PHR has several distinct attributes:

- **Each person controls his or her own PHR.** Individuals decide which parts of their PHR can be accessed, by whom and for how long.
- **PHRs contain information from one's entire lifetime.**
- **PHRs contain information from all health care providers.**
- **PHRs are accessible from any place at any time.**
- **PHRs are private and secure.**
- **PHRs are "transparent."** Individuals can see who entered each piece of data, where it was transferred from and who has viewed it.
- **PHRs permit easy exchange of information** with other health information systems and health professionals.

- from Connecting for Health, Markle Foundation

