## David E. Kelleher

David E. Kelleher was one of the founders of Indiana's first managed care organization, a prepaid group practice in Central Indiana. He served as its Executive Vice President from 1973 to 1986. He then founded HealthCare Options, Inc. ("HOI") in 1986 and is its president. HOI has developed and managed HMOs and PPOs, provided turnaround services for managed care companies and provided consulting services to health plans, medical groups, hospitals and employers in thirty-eight states. HealthCare Options, Inc. participated in founding the Employers Forum of Indiana and Mr. Kelleher serves as the Executive Director of this multi-stakeholder health care organization. HOI is also a consultant to the Employers Health Forum of Lafayette/West Lafayette. Mr. Kelleher holds a Master of Science (Economics) from Butler University and a Bachelor's degree from Indiana University.

## J. Marc Overhage

- J. Marc Overhage, M.D., Ph.D., is President and CEO of the Indiana Health Information Exchange ("IHIE"), Senior Scientist at the Regenstrief Institute, Inc. and Professor of Medicine in the Department of Medicine at the Indiana University School of Medicine.
- Dr. Overhage is author of almost one hundred papers in the scientific literature, has contributed to several books and is a sought after speaker for national and international meetings. His research has focused on supporting clinical decisions with information and clinical knowledge. Over the last eighteen months with IHIE, Dr. Overhage has led the deployment of the nation's first sustainable health information exchange and is overseeing the operational launch of a community wide clinical quality initiative which has been developed in collaboration with leading payors, provider groups and employers.

Dr. Overhage is a fellow of the American College of Medical Informatics and the American College of Physicians and serves on the Editorial Board of the Journal of the American Medical Informatics Association. He serves as the chair or member of numerous national leadership groups including Connecting for Health and Connecting Communities for Better Health. Dr. Overhage holds a B.A. from Wabash College and a M.D. and Ph.D. from the Indiana University School of Medicine.

# PAY-FOR-PERFORMANCE IN CENTRAL INDIANA

David E. Kelleher\*
J. Marc Overhage\*\*

#### INTRODUCTION

Evidence continues to show that healthcare providers deliver care inconsistently. This has led many payers, including HMOs, commercial carriers and Medicare to advocate a strategy which better aligns the incentives of providers with the payers by paying providers explicitly for quality improvement. In this essay, we discuss the status of a novel community-wide pay-for-performance ("P4P") program in Central Indiana. The program has achieved broad support from a coalition of employers, health plans, physicians, hospitals and public health officials and much of its architecture is now clear. This article reviews the coalition's conception, development of the program and the unresolved issues remaining to be addressed. Although the Indiana Health Information Exchange ("IHIE") will manage much of the future P4P activity, this initiative grew out of the Employers' Forum of Indiana ("Forum"). Thus, a brief history of that organization is necessary.

## I. BRIEF HISTORY OF THE FORUM

The Employers' Forum of Indiana, formed in late 2001 by a small number of large employers as a "forum" in which to discuss common strategies to improve the value of health care expenditures received by employers and their employees, took a rather circuitous route to the P4P program.<sup>2</sup> During 2002, the Forum expanded its non-health employer membership and, in September, invited local hospitals to participate as members. In June of 2003, the Forum formally invited health plans, physician groups, physician-hospital organizations ("PHOs") and other organizations to

<sup>\*</sup> President, HealthCare Options, Inc., and Executive Director of the Employers Forum of Indiana; Master of Science (Economics) Butler University.

<sup>\*\*</sup> President and CEO, Indiana Health Information Exchange; M.D. and Ph.D. (Biophysics), Indiana University.

<sup>1.</sup> This variation has been widely documented by Dr. John E. Wennberg and his colleagues at the Dartmouth Medical School. For a recent study, see John E. Wennberg, Variation in Use of Medicare Services Among Regions and Selected Academic Medical Centers: Is More Better?, COMMONWEALTH FUND PUB. No. 874 (Dec. 2005).

<sup>2.</sup> Initial organizers included Dr. Gregory Larkin of Eli Lilly and Company, Russ Towner of Daimler Chrysler and James Mills of General Motors along with HealthCare Options, Inc., a health care consulting firm. These firms were soon joined by Indiana University, Cinergy, the City of Indianapolis and Marion County, Indiana State Personnel, Marsh Supermarkets, Ivy Tech and Meijer.

join.<sup>3</sup> This expansion was vital as it broadened the discussion to include diverse perspectives and allowed the Forum to develop a process whereby all significant stakeholders participated in defining Forum initiatives.

Initial Forum meetings concentrated on understanding how the health care market functioned and why it was not performing to the satisfaction of its participants. For example, Forum members reviewed and discussed selected works by Alain Enthoven<sup>4</sup>, John Wennberg<sup>5</sup> and the Institute of Medicine's report, *Crossing the Quality Chasm.*<sup>6</sup> These discussions led to a set of principles supporting the goal of value improvement from which common initiatives would be developed. These principles include the following:

- Inclusion and Transparency: The Forum includes employers, providers, health plans, public officials and others invited to achieve the Forum's goal. Meeting minutes are posted on the Forum's web site.<sup>7</sup>
- Measurement and Reward: The Forum will seek to fairly measure provider performance and reward providers who deliver superior value.
- Consumer Involvement: Where possible, the Forum will promote programs wherein the employee can become a consumer, armed with the information and incentives necessary to act in this capacity.
- Incentive Alignment: The Forum seeks to improve the "business case" for provider investments in value improvement activities and programs, specifically including health information technology.

## II. FORMATION OF THE QUALITY COMMITTEE

One of the first initiatives undertaken by the Forum was an attempt to change the way employers purchased coverage from HMOs. The Forum asked the HMOs to do three things:

1. Begin to measure patient acuity for each Physician-Hospital Organization ("PHO") and adjust payments to these organizations

<sup>3.</sup> Other organizations included the Indiana State Department of Health, Health Care Excel, representatives of the state Medicaid authority and IHIE.

<sup>4.</sup> See Alain C. Enthoven, Why Managed Care Has Failed to Contain Health Costs, 12(3) HEALTH AFF. 27, 27-43 (1993).

<sup>5.</sup> See John E. Wennberg et al., Geography and the Debate Over Medicare Reform, HEALTH AFF. SUPPL. WEB EXCLUSIVE, W96-W114, (2004).

<sup>6.</sup> See Inst. of Med., Crossing the Quality Chasm: A New Health System for the 21st Century (2001).

<sup>7.</sup> Health Care Options, Inc., at http://www.hoi.com/hoi/?forum&hoiwebsite=6ab116d6a06799eb305ed8a1f7e4806c (last visited Feb. 27, 2006).

to reflect differences in health status. At that time, both providerowned HMOs (M Plan<sup>8</sup> and Advantage<sup>9</sup>) required members to choose a single PHO for all of their care. The health plans transferred financial risk to the PHOs by paying them a capitation (either dollar-denominated or percentage of their premium) for essentially all services, regardless of utilization, cost or patient health status. The Forum believed this payment mechanism was potentially unfair to providers and would prevent value-based competition among PHOs.

- Measure the quality of care each PHO delivered and provide this
  information to prospective members at the time of enrollment.
  The purpose was to arm the patient/employee with information
  necessary to make an informed choice in selecting his or her
  provider.
- 3. Provide differential premiums by PHO rather than a common premium for all. In combination with the above, the intention was to stimulate value-based competition among the delivery systems (PHOs) within the HMOs.

At the suggestion of the HMOs, the Forum assembled a committee to investigate acuity measurement systems. A high priority was to promote physician involvement so the resulting committee was "provider-heavy," even though it included health plans and employers. After a year's effort, all parties concurred on the selection of an acuity measurement system which was later adopted by both HMOs.<sup>10</sup>

This committee, now called the Quality Committee, turned its attention to selecting quality measures for the second part of this initiative. As it did so, the committee's membership expanded to include the State Health Commissioner, representatives of the State Medicaid authority ("FSSA"), Health Care Excel (the Quality Improvement Organization or "QIO" serving Indiana and Kentucky)<sup>11</sup> and eventually, the Indiana Health Information Exchange.

<sup>8.</sup> M Plan is a provider-owned health plan, providing health care coverage to more than 160,000 people in northern and central Indiana. M Plan, at http://www.mplan.com (last visited Feb. 20, 2006).

<sup>9.</sup> Advantage Health Solutions, Inc. is a statewide managed care plan. It is owned by four Catholic health care systems: Ancilla Systems, Ascension Health, Sisters of St. Francis of Perpetual Adoration and Saint Joseph Regional Medical Center. Advantage Health Solutions, Inc., at http://www.advantageplan.com (last visited Feb. 20, 2006).

<sup>10.</sup> The system selected was DxCG, the commercial version of the predictive modeling system chosen by CMS to risk-adjust payments to Medicare Advantage HMOs, available at http://www.dxcg.com (last visited Feb. 27, 2006).

<sup>11.</sup> In early 2003, Dr. Larkin, the Forum's Chairman, arranged a meeting with the Health Commissioner, Dr. Gregory Wilson, to determine how the private and public sectors might work in concert to promote value improvement. This led to the very active participation of ISDH, Medicaid ("FSSA") and Health Care Excel on the Forum's Quality Committee.

The Quality Committee and the HMOs agreed upon a set of quality metrics and the first PHO-specific quality reports became available in late 2004 (and were issued again in late 2005). The third leg of the initiative, differential premiums by PHO, failed to materialize due to provider resistance.<sup>12</sup> The expansion of the committee, however, broadened its focus and led directly to the P4P initiative, which is described after discussing the formation of IHIE.

#### III. THE RISE OF INDIANA HEALTH INFORMATION EXCHANGE

In February 2004, IHIE was formed by merging the efforts of three separate community endeavors: ICareConnect, the Indiana Network for Patient Care and BioCrossroad's evidence-based medicine initiative. ICareConnect evolved out of a "grass roots" community physician initiative that focused on the need for an electronic infrastructure to connect the region's healthcare community. It created a plan for deploying clinical messaging<sup>13</sup> throughout the market and was seeking a technology partner and funding. The Indiana Network for Patient Care ("INPC") was created by the Regenstrief Institute, Inc. ("RI") which is a non-profit medical research organization that pioneered clinical information technology and clinical information standards. The INPC captures clinical data from numerous sources and provides for secure electronic exchange to make the information available to providers at the point of care as well as for other purposes. Finally, BioCrossroads identified evidence-based medicine as a focus area during a strategic planning process designed to uncover Central Indiana's sectors of greatest opportunity in the life sciences. Their plan provides a unified vision for various regional efforts.

IHIE is a non-profit organization that supports the communal efforts of thirteen organizations representing hospitals, physicians, researchers, public health organizations, citizens in the community and economic development groups. Its purpose is to improve the quality, safety, efficiency and efficacy of health care in Indiana; create research capabilities for health services researchers; and establish a successful model of health information exchange for the rest of the country. IHIE is creating a common, secure, electronic infrastructure that expands communication and information sharing among physicians, hospitals, public health organizations and other health care entities. An important goal is to offer providers better information at the point-of-care for treatment purposes. IHIE is creating sustainable business models and providing implementation, support and process that surround the health information infrastructure created by the Regenstrief Institute. IHIE's clinical messaging service provides secure electronic results deliveries from

<sup>12.</sup> A number of the PHOs decided not to participate in a product that contained tiered premiums.

<sup>13.</sup> Clinical messaging is the secure electronic delivery of clinical information from sources such as laboratories and radiology centers to the patient's physicians.

hospitals, laboratories, public health agencies and radiology centers to providers improving the quality and efficiency of care. DOCS4DOCS®, the clinical messaging software developed by Dr. Michael Barnes of the Regenstrief Institute, now delivers approximately 30,000 clinical results to over 3,000 physicians each day.

For the pay for performance program, IHIE will combine clinical observations from laboratories, radiology centers, hospitals and other providers with clinical data from physician offices and claims data from payers to create a robust view of clinical care.

### IV. THE DEVELOPMENT OF THE PAY FOR PERFORMANCE PROGRAM

During the latter half of 2003 and early 2004, the Forum's Quality Committee engaged in a wide ranging discussion of how to improve the business case for provider adoption of technologies which hold the promise of improving patient care, such as registries or electronic medical records, especially for patients with chronic illnesses. At that time, the state (ISDH and FSSA with Health Care Excel) was promoting the adoption of a chronic care registry for Medicaid and Medicare patients, but having difficulty gaining physician support for its implementation, even though the system would be provided without charge.

After several meetings with participating medical groups where the registry system was reviewed, it was learned that physicians resisted implementation because it required double entry of information, which was both expensive and intrusive to work flow and because the potential rewards for implementation (from the Medicaid program alone) were relatively small. The discussions also revealed these issues, which included extra effort with rewards confined to a small proportion of the patient population, applied to other programs such as the Bridges to Excellence ("BTE") program. In fact, only one medical group in Central Indiana participated in the BTE program and it did so despite the additional expense and lack of economic returns.<sup>14</sup>

This led the Committee to review what other communities were doing in this arena. It reviewed the programs of Independent Health in Buffalo, the BTE program, the developing multi-HMO program in California (Integrated Healthcare Association) and others. For various reasons, none of these programs were entirely suited to the situation in Central Indiana.

The Committee concluded that, in addition to its other goals, a successful program needed to address the following issues that confounded the state in its promotion of chronic care registries:

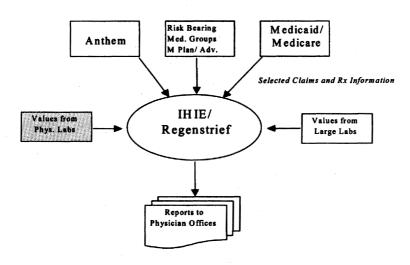
 Any reporting system must be minimally intrusive at the practice level: and

<sup>14.</sup> Methodist Medical Group, at http://www.methodistmedicalgroup.org (last visited Feb. 20, 2006).

 Any incentives must apply to enough patients to be meaningful to physicians.

Subsequent discussion focused on how to collect information in a minimally intrusive fashion. It began with the question of what information would be valuable and how then to collect important clinical values. <sup>15</sup> As the Committee explored options for capturing clinical values, it discovered IHIE, which was already making electronic connections with hospital-based and large independent reference laboratories. The idea emerged that IHIE, with the support of Regenstrief Institute, might also collect claims information, match this information with clinical values and provide valuable information to individual physicians. In August of 2004, the Quality Committee formally proposed an alliance with IHIE to develop a community-wide quality reporting system, supported by a multi-payer pay-for-performance system. <sup>16</sup> This produced the first crude schematic of the program (Diagram 1).

# Diagram 1



<sup>15.</sup> During the spring of 2004, the Quality Committee developed a list of information that would be valuable to practicing physicians, which included a small number of high priority lab values (INR, HbA1C, Microalbumin, Lipid profiles, Triglycerides, and Creatinine). Using their HMO claims data, each PHO produced a list of where these tests were preformed with the intention that, working with IHIE, we could find a way to collect this information.

<sup>16.</sup> The committee at that time included: Dr. Gregory Larkin (Lilly and Forum Chairman), Dr. Gregory Wilson (Health Commissioner), Dr. Lee Campbell (SHO), Dr. Dick Need (St. Francis), Dr. John Ellis (M Plan), Dr. Chuck Stemple (United Healthcare), Dr. Tim Hobbs (Community Physicians), Dr. Tom Diller (MMG), Dr. Randy Howard (Anthem), Dr. John Fitzgerald (IUMG), Dr. Isaac Myers (Advantage), Dr. Joe Fox (M Plan), Micky Tripathy, Ph.D. and Dr. J. Marc Overhage (IHIE), James Mills (GM), Russ Towner (DaimlerChrysler), Tina Hayes (Cinergy), Phil Morphew (HCE), Melanie Bella (FSSA) and David Kelleher and Dick Schnute (HealthCare Options).

IHIE emerged as the trusted intermediary with the skills and structure necessary for this community-wide program. It earned part of this trust through participation on the Quality Committee, but more so by virtue of its structure, goals and its focus on providing actionable information to providers.

The Quality Committee then turned its attention to developing initial quality measures. It started by recognizing that collecting the information needed for the reports had to be minimally intrusive to physician practices and the data had to be readily available or easily and affordably assembled. The committee interpreted these two requirements to mean that data for any quality metric should be available from health plan claims or administrative data or amenable to electronic capture by IHIE (e.g., laboratory values). In addition, it was concluded that the selected measures should have:

- A clear and compelling evidence-based link between the process measured and their outcomes.
- National standing, i.e., preference for measures that are endorsed and used by reputable organizations of national standing such as: the Health plan Employer Data Information Set ("HEDIS"), the National Quality Forum ("NQF"), Medicare's Doctor Office Quality ("DOQ-IT") program<sup>17</sup>, or the Bridges To Excellence ("BTE") program.
- Interest to physicians, providing information that they consider important but are not likely to possess.

The committee also decided on a stepwise development, starting with primary care physicians, then specialists and, finally, hospitals. Over the next nine months, it reviewed the measures used in many other programs and selected a "starter set" of thirty initial measures (Exhibit 1). The committee then approved an overview of the program, outlining its expectations of the program's operation, information handling and participant roles.

## V. WHERE THE PROGRAM STANDS TODAY

As manager of the program, IHIE will:

 Collect membership and primary care provider information, medical and pharmacy claims data from each participating health plan.

<sup>17.</sup> The DOQ-IT program is a national initiative that promotes the adoption of Electronic Health Record ("EHR") systems to improve quality and safety for Medicare beneficiaries in small- and medium-sized physician offices. CMS expects data from EHRs to enable them to measure quality improvement

- Collect relevant clinical data from reference laboratories, imaging centers, hospitals and from physician offices and match these data to individual patients.
- o For programs wherein a covered member does not formally select a PCP, IHIE will, when feasible, algorithmically assign a relationship between each patient and a physician.
- Produce reports or databases for health plans and physicians using metrics and definitions approved by the participating health plans, providers and employers summarizing providers' performance, including individual patient level reminders and securely deliver these reports to providers.
- Collect incentive payment information from the health plans and provide quarterly reports to each physician or physician group summarizing the incentives paid under the P4P initiative.

The estimated program costs are \$3-4 million in developmental funds and about \$2 million per year to operate, which will depend only minimally upon the number of participating plans, physicians and patients. IHIE is in the process of raising the developmental funds through foundation support. Operations will be funded by the participating health plans with each plan paying a pro-rata share of IHIE's costs based upon membership (with respect to the provider-owned HMOs, funding will be shared between the HMOs and their capitated PHOs).

Two committees will provide guidance for the P4P program. IHIE will form a program administrative committee, which is analogous to the clinical messaging steering committee that IHIE created to guide the clinical messaging project. This committee will represent the interests of participating health plans and employers. It will be composed of participating health plans, selected employers and at least one physician from the Measures Committee, formerly called the Quality Committee, and its function will include:

- Reviewing IHIE's program budget and allocate participation fees among the health plans;
- Establishing rules for participation by all parties, including issues such as incentive compensation parity and reporting; and
- Evaluating IHIE's performance.

The second committee, the Forum's Measures Committee, will be populated, much as it is today, by the medical directors of the large participating medical groups, PHOs and health plans. Its charge is:

- To develop or approve new measures as the program matures.
- To recommend to the Administrative Committee how payers should use measures in compensation arrangements in order to achieve improvements in or maintain high levels of quality.

- To ensure fairness in reporting, for example:
  - When and how to use demographic adjustments in quality reporting.
  - ➤ How non-compliant patients are factored into metrics (and how their metrics interact with incentive compensation).
- O To determine when to make physician level quality information available to employers and patients. The intention is to ensure that that the information is accurate and that physicians have an opportunity to improve results before the information becomes more widely distributed.

## Participating Health Plans (and PHOs) will receive:

- A quality report for each of *its own members* with full detail (i.e., the plan will be able to identify each patient and each physician and the metrics for each patient).
- A summary quality report, by physician, across all patients from all participating health plans, with a breakdown for commercial, Medicaid and Medicare patients. However, these reports will not include patient identification or patient-level detail. Summary reports are intended to serve as the basis for P4P payments and to allow the plan to produce comparative reports (the plan's patients vs. total) for internal quality improvement activities and as information for employers.
- A quarterly summary of the incentive payments made to participating physicians by all participating plans.

In addition to funding operations, health plans will be required to develop an incentive system, if one is not currently in place, and base a "meaningful portion," defined by the Administrative Committee, of its relevant provider incentive payments on the common quality measures. The purpose is to concentrate physician attention on improving the quality measures selected by the Measures Committee.

#### VI. SIGNIFICANT REMAINING ISSUES AND PROCESS

A number of important processes and issues remain under development. These include:

## A. Obtaining Binding Commitments to Participate

The committee is now developing "term sheets" for signature by each potential participant—health plan, PHO and physician. These documents will include contingencies and will detail what the community expects of each party, reflecting the Program Overview approved by the Forum's Quality

Committee. For example, program costs and benefits depend upon the number of patients involved. Term sheets will specify a health plan's commitment to participate will not commence until we have commitments from health plans covering a minimum of 500,000 patients. Because Anthem has already committed, this threshold should be obtainable.

## B. Performance Incentives

After we obtain sufficiently broad participation, we will convene the Administrative Committee. One of the Committee's first tasks is to address the issue of performance incentives. We expect that each participating plan will develop its own performance incentive system. It is unlikely that all plans will be able to adopt the same methods (e.g., periodic bonuses, capitation payments, different fee schedules, etc.) or incentive amounts, especially since the endeavor includes both self-funded and insured commercial members as well as those eligible for Medicare and Medicaid. While the Forum believes it has selected and will continue to select measures that have a potentially high return on investment, each health plan must justify its own incentive payments to the end payer and each plan may establish its own incentive payment-related weighting system for the common measures.

In order for the overall program to succeed, however, we expect incentive payments to be roughly comparable across plans. The administrative committee is responsible for ensuring this equivalence. When incentive payments from all plans are considered, it is the Forum's intention that incentives for the highest performers will add materially to their incomes. For instance, evidence suggests total incentives of \$10,000 to \$20,000 per physician are required to fully engage physicians, recognizing that providers will invest a portion of these incentives to reach the quality goals.<sup>18</sup>

In addition, this committee will address the issue of the distribution of incentives between high performance and improving performance. For example, a recent article concluded, "[p]aying clinicians to reach a common, fixed performance target may produce little gain in quality for the money spent and will largely reward those with higher performance at baseline." 19

During the first year, as information is being developed and verified, incentive payments may include physician participation components evidenced by providing laboratory results and other information from their practices and using the reports to improve patient care.

<sup>18.</sup> For a discussion of the importance of combining incentives across payers to achieve meaningful rewards levels, *see* Arnold M. Epstein et al., *Paying Physicians for High-Quality Care*, 350 New Eng. J. Med. 406, 406-10 (2004).

<sup>19.</sup> Meredith B. Rosenthal et al., Early Experience With Pay-for-Performance: From Concept to Practice, 294 JAMA 1788, 1788 (2005).

## C. Measurement Issues

The Measures Committee may develop a weighting system so that we can provide physicians with a peer comparison of performance across measures. The committee will also continue to develop additional measures, including measures of efficiency, in order to focus physician attention on the cost side of the value improvement equation.

#### D. Medicare

The intention is to include Medicare in this program and seek CMS's approval as a demonstration program. One such opportunity is to respond to the RFP issued under the authority of the Medicare Modernization Act, Section 646.<sup>20</sup>

# E. Expansion

Finally, the issue of geographic expansion must be addressed. In response to a request by the Employers Health Forum of Lafayette/West Lafayette, Indiana, we are committed to expanding the program to that community in 2006. In addition, other requests to expand to other parts of Indiana and Ohio have been received. This suggests the need for a developmental plan that ensures the program does not become over-extended.

#### CONCLUSION

As we noted earlier, we were unable to find a program elsewhere that serves the needs of our community. The Integrated Healthcare Association ("IHA") in California provides a working example of what can be done, but its HMO focus will not work in Indiana. In our judgment, a successful payfor-performance program needs to address two imperatives. First, reports to providers must contain evidence-based measures that providers support and cover a significant proportion of the provider's patient population if providers are to use them to improve care. Second, incentives must be large enough to provide a meaningful impetus to quality improvement. For the Indiana community, this means that the program must cover insured and self-funded commercial populations, span the managed care spectrum from TPA to insurer to HMO (and, in Indianapolis) to PHO and include Medicare and Medicaid patients. This also suggests that an inclusive process—one whereby all stakeholders participate in a manner that is acceptable to them—is important. If we also recognize that our current ability to measure performance is

<sup>20.</sup> Medicare Modernization Act (MMA), Pub. L. No. 108-173, 117 Stat. 2066 et. seq. (2003) (codified in scattered sections of 26 U.S.C.).

imperfect, the most durable feature of the program may, in fact, be its inclusive structure.

Over this lengthy developmental period, the overarching purpose of the program has remained the same. Its purpose is to improve value from the perspective of the patient and the payer, i.e., to improve the quality and consistency of care while reducing its cost. This program will not immediately accomplish this goal. Employers, however, view it as an important first step toward re-aligning the financial interests of the provider community with those of the patient and payer. The hope for the future is that this realignment will improve the business case for the provider adoption of the technology, organizational forms and programs that are necessary to achieve lasting and continuous value improvement.

The P4P program would not have been possible without the concurrent development of the Employers Forum of Indiana and IHIE, organizations that share a commitment to improving quality on a community wide basis. It also would not have been possible without strong community-focused leadership<sup>21</sup> and the active participation and support of the community's largest health insurer—Anthem Blue Cross and Blue Shield.

<sup>21.</sup> Many people contributed to the Forum's agenda. Five deserve special mention for their leadership, enthusiasm and generous donation of time and ideas—the Forum's chair, Dr. Gregory Larkin of Lilly, the former State Health Commissioner Dr. Gregory Wilson, Dr. Tim Hobbs of Community Physicians of Indiana, Dr. David Lee of Anthem and Mr. Russell Towner of DaimlerChrysler and GM.

**Exhibit 1** – Performance Measures

Physician Name:	Description of Measures
Children	
Appropriate strep testing	The percentage of children 2-18 years of age, who were diagnosed with pharyngitis, prescribed an antibiotic and received a group A streptococcus (strep) test for the episode. This measure assesses the adequacy of clinical management of pharyngitis episodes for members who received an antibiotic prescription.
Appropriate treatment - URI	The percentage of children 3 months—18 years of age who were given a diagnosis of upper respiratory infection (URI) and were not dispensed an antibiotic prescription on or three days after the Episode Date. This process measure assesses whether antibiotics were inappropriately prescribed for children with URI.
Women's Health	
Breast Cancer Screening	The percentage of women 50-69 years of age who had a mammogram during the measurement year or year prior to the measurement year.
Cervical Cancer	The percentage of women 18-64 years of age who received one or
Screening	more Pap tests during the measurement year or the two years prior
	to the measurement year.
Chlamydia Screening	The percentage of women 16-25 years of age who were identified as sexually active and who had at least one test for chlamydia during the measurement year.
age 16 to 20	• 16-20 year-old women
age 21 to 25	• 21–25 year-old women
Overall rate	overall rate.
Diabetes	
HbA1c Testing	The percentage of members 18-75 years of age with diabetes (type 1 and type 2) who received an HbA1C test
Poor HbA1c control (>9)	The percentage of patients with levels of poor control
Lipid Profile	The Percentage of patients 18-75 years of age with diabetes (type 1
	and teyp 2) who receive an LDL-C screening test
Lipid Control LDL < 130	% of above where LDL-C <130
	% of above where LDL-C <100
Monitoring Diabetic Nephropathy	This measure is intended to assess if diabetic patients are being monitored for nephropathy: members who have been screened for microalbuminuria, or members who have nephropathy, as demonstrated by either evidence of medical attention for nephropathy, visit to nephrologist or a positive macroalbuminuria test (not included for trace readings).

Asthma - appropriate medications	The percentage of enrolled members 5-56 years of age during the measurement year who were identified as having persistent asthma during the year prior to the measurement year and who were appropriately prescribed medication during the measurement year.
Age 5 to 9	Percentage by age category
Age 10 to 17	Percentage by age category
Age 18 to 56	Percentage by age category
Combined	The combined rate will be the sum of the three numerators divided by the sum of the three denominators.
Beta to steroid ratio	Definition under development
Antidepression Medication Management	
Optimal practitioner contacts for medication management	The percentage of members 18 years of age and older as of the 120th day of the measurement year who were diagnosed with a new episode of depression and treated with antidepressant medication, and who had at least three follow-up contacts with a non-mental-health practitioner or mental health practitioner coded with a mental health diagnosis during the 84-day (12-week) Acute Treatment Phase. At least one of the three follow-up contacts must be with a prescribing practitioner (e.g., licensed physician, physician assistant or other practitioner with prescribing privileges). This process measure assesses the adequacy of clinical management of new treatment episodes for adult members with a major depressive disorder.
Effective Acute Phase Treatment	The percentage of members 18 years of age and older as of the 120th day of the measurement year who were diagnosed with a new episode of depression and treated with antidepressant medication, and who remained on an antidepressant drug during the entire 84-day (12-week) Acute Treatment Phase. This intermediate-outcome measure assesses the percentage of adult members initiated on an antidepressant drug who received a continuous trial of medication treatment during the Acute Treatment Phase.
Effective Continuation Phase Treatment	The percentage of members 18 years of age and older as of the 120th day of the measurement year who were diagnosed with a new episode of depression and treated with antidepressant medication, and who remained on an antidepressant drug for at least 180 days (6 months). This intermediate-outcome measure assesses the effectiveness of clinical management in achieving medication compliance and the likely effectiveness of the established dosage regimen by determining if adult members completed a period of Continuation Phase Treatment adequate for defining a recovery, according to Agency for Healthcare Research and Quality (AHRQ, formerly AHCPR), Depression in Primary Care.

Cardiovascular Health	,
Cholesterol Mngt after Acute CV Event	The percentage of members 18-75 years of age as of December 31 of the measurement year who were discharged alive in the year prior to the measurement year for acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous transluminal coronary angioplasty (PTCA) and who had each of the following between 60 and 365 days after discharge:
Screening (lipids)	LDL-C Tested
Control < 130	LDL-C < 130 mg/dL
Control < 100	LDL-C < 100 mg/dL
Other Clinical Measures	
Colorectal Cancer Screening	The percentage of adults 50-80 years of age who had appropriate screening for colorectal cancer (CRC). The hybrid method is recommended to calculate this measure.
Hospital Readmissions - same Dx	Readmission rate for patients within 30 days of an admission for the same diagnostic category as the admission. Metric not fully specified - from PacifiCare rather than HEDIS
Optimal OP Care to Avoid Hospitalization	Medical experts agree that for certain chronic conditions, hospital admissions can sometimes be prevented with optimal outpatient care. This measure reflects the percentage of all hospital admissions for these select conditions. Example is Asthma. Measure not fully specified.
Imaging for low back pain	This measure assesses whether imaging studies (plain X-ray, MRI, CT scan) are overused in evaluating patients with acute low back pain.