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REFERENCE PRICING: A SMALL AND MIGHTY SOLUTION TO BEND THE HEALTH CARE COST CURVE

SRISHTI MIGLANI*

“Healthcare [is] . . . undoubtedly the most complex of all social systems. Perturbations of complex systems always produce unintended and unexpected consequences, even when all we are doing is eliminating perversion”¹

I. INTRODUCTION

There is no single antidote to the problem of rising health care costs. These costs can be attributed to: the aging population; current payment and delivery structures; administrative burdens; demand for newer medical technology; lack of transparency in price and quality of care; increased health care utilization; insurance benefit design; market consolidation; high per-unit price of medical services; the legal, regulatory, and tax environment; the current structure of the health care workforce; and restrictions on the practice of medicine.² With a multitude of cost drivers, it is naïve to expect a one-size-fits-all solution. Unrealistic expectations can create an unwelcoming atmosphere for strategies that only address one or may be two of the factors that continue to make health care expenditures a greater percentage of our gross domestic product (GDP). To reduce health care costs, we need multiple strategies that, when combined, will address the inefficiencies in health care and lessen the extensive control providers have over prices of medical procedures and services.³

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¹ JOHN GOODMAN, PRICELESS 309 (2012).

² *What is Driving U.S. Health Care Spending: America’s Unsustainable Health Care Cost Growth*, BIPARTISAN POLICY CTR. 1, 17 (Sept. 2012), available at <http://bipartisanpolicy.org/wp-content/uploads/sites/default/files/BPC%20Health%20Care%20Cost%20Drivers%20Brief%20Sept%202012.pdf>.

³ *Trends in Health Care Cost Growth and the Role of the Affordable Care Act*, The White House (Nov. 2013), http://www.whitehouse.gov/sites/default/files/docs/healthcostreport_final_noembar go_v2.pdf; Amitabh Chandra, Jonathan Holmes & Jonathan Skinner, *Is This Time*

One strategy that has proven its effectiveness is reference pricing (RP). RP is an insurance benefit design mechanism in which a “reference” price is set for a specified service or procedure, which the health plan sponsor uses to cap its contribution. The beneficiary is responsible for any amount above the defined contribution.⁴ RP seeks to address the significant price variations that exist for medical procedures and services.⁵ RP combines both consumer- and provider-targeted strategies to lower health care costs. On the consumer side, RP originates from the consumer-driven health care movement. It aims to put the consumer’s “skin in the game” to help steer the health care market in the right direction. By giving the insurers some clout, it aims to reduce providers’ market power and control over the prices of medical services. This paper will examine how and why RP shifts risks to consumers and why it is a more effective form of risk sharing than the ones currently being used.

Different? The Slowdown in Healthcare Spending, THE NAT’L BUREAU OF ECON. RESEARCH (2013).

⁴ Francois de Brantes et al., *Reference Pricing and Bundled Payments*, CATALYST FOR PAYMENT REFORM, 1 (Oct. 2013), <http://www.catalyzepaymentreform.org/images/documents/matchtochangemarkets.pdf>.

⁵ For example, the price for a colonoscopy varies from \$800 to \$3,160 in the U.S., which is an approximately a 300 percent price variation. *Colonoscopy*, HEALTHCARE BLUE BOOK (2012), <http://consumerhealthchoices.org/wp-content/uploads/2012/10/Colonoscopy-HCBB.pdf>; see also Elizabeth Rosenthal, *The \$2.7 Trillion Medical Bill: Colonoscopies Explain Why U.S. Leads the World in Health Expenditures*, N.Y. Times, A1 (June 1, 2013) (discussing the price variation of colonoscopies around the country); The Editorial Board, *The Weird World of Colonoscopy Costs*, N.Y. Times SR10 (June 9, 2013). Castlight Health’s price comparison tool for medical services across the nation shows that a lipid panel costs \$26 in Los Angeles, \$40 in Phoenix, Arizona, \$34 in Las Vegas, Nevada, and \$76 in Salt Lake City, Utah. *Analysis Details Most and Least Expensive Cities for Common Medical Services: Pricing for the Same Medical Services is All Over the Map (Literally), Lipid Panel*, CASTLIGHT HEALTH (Oct. 23, 2014), <http://www.castlighthealth.com/price-variation-map/>. This shows a price variation of 192 percent between the price offered in Los Angeles and Salt Lake City. The average price for a head/brain CT scan in Norfolk, Virginia is \$1,230 with prices ranging from \$218 to \$1,703 and in Richmond, Virginia, the average price is 1,307 with prices ranging from \$218 and \$2,009 (This price variation could be the result of many factors which are not discussed here). *Analysis Details Most and Least Expensive Cities for Common Medical Services: Pricing for the Same Medical Services is All Over the Map (Literally), Head/brain CT scan*, CASTLIGHT HEALTH (Oct. 23, 2014), <http://www.castlighthealth.com/price-variation-map/>.

Although RP's application to procedures and services is a novel concept, RP has been used in the international pharmaceutical market for some time and has achieved success in lowering drug prices. RP's success in reducing overall costs for large U.S. employers that have implemented it in their plan design has laid the groundwork for widespread adoption by other similarly-situated employers. A 2013 survey conducted by Aon Hewitt found that out of more than 1,230 employers surveyed, sixty-two percent planned to adopt RP in the next three to five years.⁶ RP is here to stay; however, its place and role in the current health care system has to be understood and its limitations need to be acknowledged and monitored to ensure it does not adversely impact the quality, access, and affordability of care.

At this early stage, it is important to recognize that RP is not *the* solution to address rising health care costs, it is merely *one* solution. Its success and widespread adoption, however, should be accompanied by cautious optimism. This paper argues that RP can be structured to reap its price-saving potential, but it requires proper regulatory oversight to ensure it does not negatively impact quality, affordability, and access to care. If implemented in a systematic and cautious manner, it can become a useful tool for employers and health plans, especially when combined with bundled payments. Section II of this paper defines RP and explains its origins in the consumer-driven health care movement. Section III highlights RP's application in the international market for pharmaceuticals and domestic market for medical services and procedures. Sections IV explores the short-term and long-term considerations respectively that health plans need to examine and evaluate to implement RP appropriately while balancing the interests of the consumer and cost-saving effects of RP. Section V touches on the possibility of combining RP with bundled payments.

⁶ *Aon Hewitt 2013 Health Care Survey*, AON HEWITT, 13 (June 11, 2014), http://www.aon.com/attachments/human-capital-consulting/2013_Health_Care_Survey.pdf; Another survey conducted by Towers Watson and the National Business Group on Health also showed increased adoption of RP in the coming years. *Reshaping Health Care: Best Performers Leading the Way, 18th Annual Towers Watson/National Business Group on Health Employer Survey on Purchasing Value in Health Care*, TOWERS WATSON/NAT'L BUS. GRP. ON HEALTH, 20 (2013), <http://www.towerswatson.com/en-US/Insights/IC-Types/Survey-Research-Results/2013/03/Towers-Watson-NBGH-Employer-Survey-on-Value-in-Purchasing-Health-Care?page=3>.

II. RP AND ITS ORIGINS

A. DEFINITION

RP is a type of defined contribution approach in which the plan sponsor either pays a fixed amount or sets a limit for how much it will pay towards the cost of a health care service.⁷ If a plan member chooses a health care provider or service that costs more than the limit set by the plan sponsor, then the plan member has to pay the difference, which I will refer to as the “gap price.”⁸ The price limit that is set by the plan sponsor is called the “reference price.”⁹ The insurer selects a service or procedure (“reference-priced service” or “reference-price procedure”) for which it wants to set a reference price. It negotiates the cost of a certain service or procedure with the health providers in a defined geographic area. After taking the average of the prices quoted by the providers, the plan sponsor evaluates the quality of services provided by the different providers and decides on a reference price.¹⁰

RP functions like a “reverse-deductible”: the health plan or employer pays the initial part of the allowed cost and the consumer pays the remainder of the charge for the care.¹¹ Once established, the reference

⁷ Paul Fronstin, *Reference Pricing for Health Care Services: A New Twist on the Defined Contribution Concept in Employment-Based Health Benefits*, EMP’T BENEFIT RESEARCH INST., 4 (Apr. 2014), http://www.ebri.org/pdf/briefspdf/ebri_ib_398_apr14.refprcng.pdf. Project Millennial refers to RP as “micro-voucherization” of health care.” Mike Miesen, *The “Micro-Voucherization” of Health Insurance: Can Reference Pricing Bend the Curve?*, PROJECT MILLENNIAL (June 27, 2013), <http://projectmillennial.org/2013/06/27/the-micro-voucherization-of-health-insurance-can-reference-pricing-bend-the-curve/>.

⁸ *Id.*

⁹ Amanda E. Lechner, Rebecca Gourevitch & Paul B. Ginsburg, *The Potential of Reference Pricing to Generate Health Care Savings: Lessons from a California Pioneer*, CTR. FOR STUDYING HEALTH SYS. CHANGE, 1 (2013).

¹⁰ *Id.* at 3. Although quality determinations are difficult to conduct, CalPERS’ experiment with RP provides a blueprint for other insurers looking to adopt RP to conduct their quality determinations. Also, it is important to acknowledge that insurers might have an incentive to sacrifice quality for price. But for an insurer looking to lower its costs for certain procedures by adopting RP, it is in the best interests of the insurer to balance quality with price to ensure that its clients do not have to go for repeat procedures or require more than usual follow-up care, which in turn might result in higher overall costs for the insurer.

¹¹ Fronstin, *supra* note 7, at 5.

price becomes the maximum amount the insurer will pay, whether a patient sees an in-network or out-of-network provider. “For out-of-network services, the reference price is identical to a [usual, customary, and reasonable (UCR)]-based ‘allowed amount.’”¹² But for in-network services subject to RP, the reference prices are different than, and essentially an override, of the previously negotiated prices for those services.¹³

RP’s goals are three-fold: (1) to make the consumer an active participant in choosing where to receive the health care services, while being cognizant of the price; (2) to direct the plan members towards low-price providers; and (3) to motivate high-price providers to lower their prices to retain market share.¹⁴ An RP program can achieve its goals with participation from insurers, providers, and consumers and the development of processes that create a transparent and informed atmosphere. First, the plan sponsor has to obtain pricing information from the providers for the negotiated services.¹⁵ Then the health plan sponsor has to inform consumers about the reference prices and quality of care information for the providers. Lastly, the plan sponsor must continuously monitor the reference prices and quality of care to determine which providers to include in its reference-priced network. Although the development of an RP program might appear simple, it comes with several caveats and preconditions for success, all of which will be discussed in Section V.

B. ORIGINS

Catalyst for Payment Reform—an independent, national nonprofit organization that aims to effect change in the health care system—defined reference pricing as a market-based approach that works at the

¹² Jon Gludemans et al., *Reference Pricing and Network Adequacy Standards: Conflict or Concord?* HEALTH AFF. BLOG (Sept. 18, 2014), <http://healthaffairs.org/blog/2014/09/18/reference-pricing-and-network-adequacy-standards-conflict-or-concord/>.

¹³ *Id.*

¹⁴ Fronstin, *supra* note 7, at 5. As I discuss in Section V, putting the onus on consumers has its disadvantages and those have to be recognized and acknowledged in order for RP to become an acceptable and cost-saving tool for the insurance industry.

¹⁵ *How to Make Reference Pricing Work for Consumers*, FAMILIES USA, 5 (June 2014), <http://familiesusa.org/product/how-make-reference-pricing-work-consumers>.

“intersection of consumer engagement and provider contracting.”¹⁶ RP nudges consumers to take an active role in the purchase of health care services, while forcing providers to provide the reference-priced procedure or service at or below the reference price. By “restoring some control to the health care purchasers and prompting providers of health care services to innovate and compete on both price and quality,” RP addresses both the demand and supply side of the health care system.

The health care system has actively reduced the amount of control consumers have over prices, and has made the purchasing process a passive, mindless experience. The consumer-driven health care (CDHC) movement began to put consumers in the driver seat and help regain some of the lost control. CDHC is based on the idea that patients can be better economically-responsible consumers of health care if they are forced to pay a larger share of the health care they consume.¹⁷

Additionally, CDHC is rooted in the belief that moral hazard is one reason for rising health care costs.¹⁸ Moral hazard is “the intangible loss-producing propensities of the individual assured.”¹⁹ In other words, it is the idea that an individual who possesses health insurance tends to consume more medical care than an uninsured individual.

The RAND Health Insurance Experiment (RAND HIE) confirmed the existence of moral hazard. The RAND HIE was a randomized-controlled study designed to answer whether free medical care, when compared to insurance plans with cost-sharing requirements, leads to better health.²⁰ Three thousand five-hundred fifty-eight non-disabled individuals between the ages of fourteen and sixty-one were assigned to a set of insurance plans containing varying levels of cost-sharing for either three or five years. The health effects of these groups were measured and compared.²¹ The study found that “the more people had to pay for medical

¹⁶ *Provider Market Power in the U.S. Health Care Industry: Assessing its Impact and Looking Ahead*, CATALYST FOR PAYMENT REFORM, 4 (Nov. 14, 2012), http://www.catalyzepaymentreform.org/images/documents/Market_Power.pdf.

¹⁷ James C. Robinson & Paul B. Ginsburg, *Consumer-Driven Health Care: Promise And Performance*, 28 HEALTH AFFAIRS, w272, w278 (2009).

¹⁸ *Id.* at 18.

¹⁹ Mark V. Pauly, *The Economics of Moral Hazard; Comment*, 58 THE AMER. ECON. REVIEW 531, 535 (1968).

²⁰ Robert H. Brook et al., *The Effect of Coinsurance on the Health of Adults: Results from the Rand Health Insurance Experiment*, RAND CORP. i., v (1984).

²¹ *Id.* at 3. The people in the cost-sharing group were further divided further into three groups: (1) individual deductible plan: “the family paid 95 percent of the cost of all outpatient care for up to an annual out-of-pocket expenditure of \$150

care, the less they used. Adults who had to share the cost of care made about a third fewer ambulatory visits and were hospitalized about a third less often.”²² While free health care “did not improve the health status across the range of measures or income groups examined, it did confer demonstrable benefits for patients with selected conditions that physicians are trained to manage.”²³ The RAND HIE concluded that there is an inverse relationship between cost sharing and consumption of health care. The increase in consumption of health care is attributable to many factors, including the effect of insurance on reducing the price from market price to zero at the time of service, and the knowledge that an individual’s excess usage is spread over all other purchasers.²⁴ Therefore, the RAND HIE indicated that making the consumer more price-sensitive to the cost of medical services at the point of service can be a solution to the problem of moral hazard.²⁵

Restoring control to the consumer, by itself, is not sufficient to address the power imbalance in our health care system. The other problem that needs to be addressed is the great market power that providers have over the prices of health care services and procedures.²⁶ With big hospital

per person (\$450 per family)”; (2) intermediate coinsurance plan: “the family paid 25 or 50 percent of all health bills each year, inpatient and outpatient, until it had spent 5, 10, or 15 percent of its income or \$1000 (whichever was less)”; or (3) income-related catastrophic plans: “the family paid 95 percent of its health bills up to the same ceiling as in the intermediate plans.” *Id.* The effect of cost-sharing on people’s health was evaluated by looking at the following eleven measures: physical health, role functioning, mental health, social contacts and general health ratings, smoking behavior, weight, cholesterol level, diastolic blood pressure level, visual acuity, and an index of risk of dying from certain risk factors, specifically systolic blood pressure, cholesterol, and smoking habits. *Id.* at vi.

²² *Id.* at 25.

²³ *Id.* at 28.

²⁴ Pauly, *supra* note 19, at 532, 535.

²⁵ Brook et al., *supra* note 20, at 25–28. Other research shows that moral hazard does not explain why all kinds of health care expenditures. See John A. Nyman, Is ‘Moral Hazard’ Inefficient? The Policy Implications Of A New Theory, 23 *Health Affairs* (2007). Nyman argues that moral hazard “makes sense for cosmetic surgery or drugs to improve sexual functioning or designer-style prescription sunglasses, but not for serious treatments such as coronary bypass operations or organ transplants.” *Id.* Therefore, cost sharing mechanisms might not be the solution to reduce health care consumption for those procedures which are not prone to moral hazard. *Id.*

²⁶ Katherine Baicker & Dana Goldman, *Patient Cost-Sharing and Healthcare Spending Growth*, 25 *THE J. OF ECON. PERSPECTIVES* 47, 53–54 (2011).

chains and provider groups dominating most local markets, providers are able to get extremely high rates from dominant insurers that feel compelled to pay those high rates to maintain the providers in their networks.²⁷ Additionally, the consolidation of the health care market has increased the monopoly power of the large providers and given them bargaining power over insurers.²⁸ Insurers have little incentive to negotiate lower rates because they know they can pass on the additional costs to consumers and businesses.²⁹ This market failure, resulting from insufficient competition, has nurtured providers' expectations of higher prices, which has, in turn, not only adversely impacted the private insurance sector, but public programs, as well. Diane Archer, Special Counsel and Co-Director of the Health Care for All Project at the Institute for America's Future, explains:

[T]he private health care marketplace will continue to set excessive rates until they are stopped. These exorbitant rates are not only hurting working people, they are also driving up Medicare costs and imposing a massive burden on taxpayers and the federal government. Doctors and hospitals are conditioned to expect higher and higher rates and demand higher payments from public programs.³⁰

So in order to address the market failures that have not been corrected by the market, insurers need to have greater bargaining power to dictate prices. Even though the consolidation and merger wave cannot be stopped, a market in which the providers and insurers can negotiate with approximately the same amount of bargaining power can be created. As an economic matter, the increased competition will hopefully reduce health care prices for consumers and curb the growth of health care spending.³¹ Use of RP in the pharmaceutical, medical procedures, and medical services markets has shown that (1) consumers can be empowered to have greater control over their health care expenditures and (2) insurers and providers

²⁷ Diane Archer, *No Competition: The Price of a Highly Concentrated Health Care Market*, HEALTH AFF. BLOG (Mar. 6, 2013), <http://healthaffairs.org/blog/2013/03/06/no-competition-the-price-of-a-highly-concentrated-health-care-market/>.

²⁸ BIPARTISAN POLICY CTR., *supra* note 2, at 17.

²⁹ *Id.*

³⁰ Diane Archer, *No Competition: The Price Of A Highly Concentrated Health Care Market*, HEALTH AFFAIRS BLOG (March 6, 2013).

³¹ See Lawrence C. Baker et al., *Physician Practice Competition and Prices Paid by Private Insurers for Office Visits*, 312 JAMA 1653 (2014).

can successfully use their respective market power to negotiate and bring health care expenditures down to reasonable levels.

III. APPLICATION OF REFERENCE PRICING

A. PHARMACEUTICAL INDUSTRY

The history of RP in the pharmaceutical sector provides some important insights into its potentials and shortcomings. The use of RP in the pharmaceutical industry has been successful because of the lack of significant heterogeneity between different drugs, and as a result, RP's implementation has been easier. The goal of using RP in the pharmaceutical industry is to "reduce the price of [reference-priced] products either through a relative decrease in the demand for high-priced products (a demand-side approach) or through cuts in drug prices by encouraging self-restraint (a supply-side approach)."³² The only difference in its application in the pharmaceutical industry, compared to the market for procedures and services, is the manner in which the reference price is set for classes of interchangeable drugs.³³ Drugs are grouped by either general referencing or therapeutic referencing.³⁴ Generic referencing applies to only generically equivalent products with the same active ingredient and formulation.³⁵ On the other hand, therapeutic referencing only applies to drugs with different molecules for the same indication.³⁶ A third party payer sets a maximum reimbursement price for a group of

³² Jaume Puig-Junoy, *What is Required to Evaluate the Impact of Pharmaceutical Reference Pricing*, 4 APPLIED HEALTH ECON. AND HEALTH POL'Y 87, 87 (2005).

³³ M.N.G. DUKES ET AL., DRUGS AND MONEY: PRICES, AFFORDABILITY, AND COST CONTAINMENT 85 (7th ed. 2002). "Several options exist [to determine classes of interchangeable drugs]: one can for example limit the system to certain drug categories, usually those representing a major share of a drug budget; one can apply different criteria to the various classes in order to decide on the degree of interchangeability of the drugs within each; and one can choose to introduce the method gradually, experimentally or incrementally, perhaps in order to arrive ultimately at a comprehensive reference system." *Id.* at 86.

³⁴ Patricia M. Danzon & Jonathan D. Ketcham, *Reference Pricing of Pharmaceuticals for Medicare: Evidence from Germany, The Netherlands, and New Zealand*, NAT'L BUREAU OF ECON. RES., 2 (2003), <http://www.nber.org/papers/w10007.pdf>.

³⁵ *Id.* at 3.

³⁶ *Id.*

pharmaceutical products called “clusters.”³⁷ If a patient chooses a drug within the cluster, then he does not have to incur any out-of-pocket costs.³⁸ Otherwise, the patient pays the difference between the reference price and the reimbursement level set for the cluster.³⁹

Before an RP system for drug pricing can be set up, the number and scope of interchangeable drugs have to be defined, the manner in which reimbursement levels for each individual class of drugs will be calculated has to be formulated, a procedure to define the classes of drugs and set reimbursement levels has to be determined, and methods to allow exceptions have to be established.⁴⁰

Some countries determine the reference price by comparing within the domestic or international markets and using the weighted average of the prices of drugs in the group as sold on the domestic market.⁴¹ In a market with substantial generic competition resulting in large price differences among products, the price of the cheapest generic product is used.⁴² Drug classification techniques vary from country to country, and some use a combination of these methods.⁴³ RP policies within a country can, however, vary greatly by insurer.⁴⁴ The Netherlands, for example, uses price comparisons from other countries with similar purchasing power, such as France, Germany, Belgium, and the United Kingdom.⁴⁵ Setting reimbursement levels can be a highly politicized process because of its potential economic impact on the pharmaceutical industry. There is no easy

³⁷ Puig-Junoy, *supra* note 32, at 87.

³⁸ *Id.*

³⁹ *Id.*

⁴⁰ M.N.G. DUKES ET AL., *supra* note 33, at 86.

⁴¹ *Id.* at 87.

⁴² *Id.* at 85, 87. The ways in which countries set their reimbursement levels are not limited to these two methods. For example, British Columbia uses the reference drug that is “most cost-effective within its class,” based on scientific evidence accepted by the national regulatory agency, as the standard. *Id.* Netherlands, on the other hand, uses the defined daily dose to set the price for each drug group within the Netherlands’s pharmaceutical reference pricing system. *Id.*

⁴³ *Id.* at 86–87.

⁴⁴ The RP policies vary according to: “equivalence level and criteria; determination of the reference price level; inclusion of patented drugs; therapeutic groups included; system of exemptions from the co-payment associated with RP; level and type of pre-existing co-payment; incentives for doctors and pharmacists; price regulation system; number of producers competing in the market; possibilities of parallel trade; relationship between domestic prices and price regulation in other countries.”

⁴⁵ DUKES ET AL., *supra* note 33, at 88.

solution to take politics out of pharmaceutical price-setting because of the size and power of the pharmaceutical industry. However, a market-based solution that is overseen by a consumer-friendly regulatory framework can work to counteract political forces.

The mechanisms in place to determine exceptions to RP are fundamental to the pharmaceutical RP program. Due to the individualized nature of medicine and health, the drugs in a cluster might not be safe or effective for a certain patient's diagnosis, or the patient's condition might demand a drug that is not reference priced. For example, the RP program implemented by Pharmacare in British Columbia, Canada, allows physicians to apply for a "special authority" exemption from the program when switching drugs would be inadvisable.⁴⁶ So "the physicians can choose not to switch medications for particular patients if side effects or other adverse consequences are expected to result. A physician may present the case to the sick fund, arguing that the patient should be fully refunded, but the patient may ultimately have to pay the difference in order to receive a more expensive drug."⁴⁷ Certain new innovative drugs that do not fit into the existing clusters can be exempted in some cases.⁴⁸ Exemptions work as a relief valve for patients who might have difficulties switching medications.⁴⁹

In countries such as Germany and the Netherlands where reference groups are defined broadly, the heterogeneity of the medications within each group increases.⁵⁰ The effectiveness of the different drugs within a group, despite their interchangeability, varies. Exceptions are allowed to ensure that heterogeneity does not compromise quality. Exceptions have also been granted when there is a concern of patient frailty or if there is a record of previous failure with the treatment.⁵¹

⁴⁶ Paul v. Grootendorst et al., *Impact of Reference-Base Pricing of Nitrates on the Use and Costs of Anti-Anginal Drugs*, 165 CANADIAN MED. ASSOC. J. 1011, 1012 (2001).

⁴⁷ DUKES ET AL., *supra* note 33, at 88.

⁴⁸ Lisa L. Ioannides-Demos et al., *Reference Based Pricing Schemes: Effect on Pharmaceutical Expenditure, Resource Utilisation and Health Outcomes*, 20 PHARMACOECONOMICS 577, 589 (2002).

⁴⁹ *Id.* at 583.

⁵⁰ Stevens Simoens & Sandra de Coster, *Sustaining Generic Medicines Markets in Europe*, RESEARCH CTR. FOR PHARMACEUTICAL CARE AND PHARMACO-ECONOMICS, 68 (2006), http://www.assogenerici.org/articolihome/simoens-report_2006-04.pdf.

⁵¹ Sebastian Schneeweiss et al., *Outcomes of Reference Pricing for Angiotensin-converting-Enzyme Inhibitors*, 346 NEW ENG. J. MED. 822, 823

B. EFFECTS OF PHARMACEUTICAL RP

In the pharmaceutical sector, RP has been instituted in Germany, Denmark, Netherlands, Spain, Italy, British Columbia (Canada), New Zealand, and several other Central and Eastern European countries. Due to the different RP programs in place in each country and other cost-control measures instituted by some countries, it is difficult to compare and generalize the effects of one country's RP program to others. However, data collected from different countries has allowed researchers to understand the short- and long-term effects of RP.

RP has faced criticism and opposition from several groups. The pharmaceutical industry has opposed RP because it does not take into account the "unique advantages" of each new drug that demands a higher reimbursement rate.⁵² Physicians and patients have expressed their fears owing to the unknown health effects that switching a drug might have on the patient.⁵³ Similarly, payers and health care organizations fear increased consumption of health care resources by patients who have been asked to switch to a reference priced drug and who have adverse effects as a result of the switch.⁵⁴ Despite many criticisms,⁵⁵ RP has the potential to become an effective price control tool. Pharmaceutical prices in the classes of drugs where RP is implemented have adjusted to the reference price levels.⁵⁶ RP has motivated physicians to prescribe and patients to consume less expensive options, and the robust exceptions process has provided flexibility for clinical decisionmaking. Also, patient cost sharing has decreased.⁵⁷ More research, however, is needed to better understand the impact of RP on patient outcomes.

RP has emerged as a policy solution to control the costs of U.S.

(2002).

⁵² *Id.*

⁵³ *Id.*

⁵⁴ *Id.*

⁵⁵ Some arguments against using RP in the pharmaceutical industry are that it: (1) has unfairly harsh effects on people with lower income who cannot afford a drugs outside the reference-priced clusters, (2) interferes with physician's clinical judgment, (3) requires the physician to devote time to getting exceptions to prescribe non-reference-priced products, (4) can give rise to other health care costs for patients who might react adversely to switching the drug, (5) introduces a financial component to the physician-patient relationship, and (6) promotes inappropriate prescribing. Ioannides-Demos et al., *supra* note 48, at 587.

⁵⁶ DUKES ET AL., *supra* note 33, at 89.

⁵⁷ *Id.*

drug pricing. Its adoption in the domestic market, however, has been extremely limited.⁵⁸ Kroger Co. implemented RP for its prescription medication program in 2012 and, as a result, experienced \$4.3 million in savings that year. The international experience with RP provides an evidence base to estimate its potential benefits for the U.S. pharmaceutical market.⁵⁹ Some health care experts have recommended RP as “an attractive policy strategy” to control costs without negatively affecting medication use or resource consumption.⁶⁰ Economists Panos Kanavos and Uwe Reinhardt, however, have cautioned against overenthusiasm for replicating the RP system in the US:

Given the importance of the U.S. pharmaceutical industry to the nation’s and, indeed, the world’s health care systems, the uncertainty still surrounding the impact of RP on health care, and the political capital that must be spent to implement such a system, U.S. public policymakers probably will want to venture cautiously into this terrain.⁶¹

Factors including (1) centralization of the RP system, (2) breadth of therapeutic clusters of drugs, (3) administrative structures to support such a program, and (4) effect of RP on the quality, cost, and innovation in health care have to be carefully examined before the existing RP systems can be replicated and adopted by the U.S. pharmaceutical market.

C. US HEALTH CARE SERVICES AND PROCEDURES MARKET: CALPERS, KROGER, AND SAFEWAY

The experience with RP in the pharmaceutical industry prompted its adoption by a handful of US purchasers of prescription drugs as well as outpatient, elective procedures. This section will highlight the experience of a large health benefit provider, CalPERS, with RP as applied to hip and

⁵⁸ Joy Li-Yueh Lee et al., *A Systematic Review of Reference Pricing: Implications for US Prescription Drug Spending*, 18 AM. J. OF MANAGED CARE e429, e429 (2012).

⁵⁹ Kate Sullivan, *Reference Pricing Saves Insurance, Patients Money*, FIERCE HEALTH PAYER (Nov. 19, 2013), <http://www.fiercehealthpayer.com/story/reference-pricing-saves-insurers-patients-money/2013-11-19>.

⁶⁰ Li-Yueh et al., *supra* note 58, at e430, e436.

⁶¹ Paul Kanavos & Uwe Reinhardt, *Reference Pricing For Drugs: Is It Compatible With U.S. Health Care?*, 22 HEALTH AFF. 16, 28 (2003).

knee replacement surgeries.

CalPERS is the third largest purchaser of employee health benefits in the nation offering health benefits to more than 1.3 million public employees, retirees, and their families.⁶² CalPERS members include current and retired employees of the state of California and some local governments.⁶³ Employees can choose between three types of plans: (1) preferred provider organizations (PPOs), (2) health maintenance organizations (HMOs), and (3) exclusive provider organizations (EPOs) (limited to members in certain counties in California).⁶⁴ More than two-thirds of CalPERS members are enrolled in an HMO plan, and all plans offer separate Medicare supplemental plans for Medicare eligible members.⁶⁵ Seven different providers—Anthem, Kaiser Permanente, Health Net, Sharp Health Plan, United Healthcare, and CVS Caremark—provide the health plans offered by CalPERS.⁶⁶

Seven-and-a-half percent of CalPERS' total insurance-related costs were related to joint and muscle conditions, and out of those, ten percent

⁶² *Health Benefits Overview*, CalPERS (Apr. 5, 2012), <http://www.calpers.ca.gov/index.jsp?bc=/about/benefits-overview/health/benefits-overview.xml> (last visited Nov. 30, 2014); *Health Benefits*, CalPERS (May 20, 2012), <http://www.calpers.ca.gov/index.jsp?bc=/about/benefits-overview/health/home.xml> (last visited Nov. 30, 2014). CalPERS has a total of 1,678,996 members with 1,104,237 active and inactive members and 574,759 retirees, beneficiaries, and survivors receiving a monthly allowance. *Facts at a Glance*, CalPERS, 1 (Nov. 2014), (<http://www.calpers.ca.gov/eip-docs/about/facts/facts-at-a-glance.pdf>).

⁶³ *Facts at a Glance*, CALPERS, 1 (Nov. 2014), <http://www.calpers.ca.gov/eip-docs/about/facts/facts-at-a-glance.pdf>.

⁶⁴ *Health Benefits Overview*, CALPERS (Apr. 5, 2012), <http://www.calpers.ca.gov/index.jsp?bc=/about/benefits-overview/health/benefits-overview.xml>.

⁶⁵ *Id.*

⁶⁶ Currently, CalPERS offers HMO and PPO plans through Anthem. BlueShield of California offers HMO plans. Health Net offers two HMO plans and a Medicare Advantage plan for CalPERS retirees in the Southern California region. Kaiser offers plans for non-Medicare and Medicare enrollees. Sharp Health Plan offers plans for members in the San Diego County. United Healthcare of California offers and HMO plan to CalPERS members in some counties in Northern and Southern California. CVS serves as the pharmacy benefit provider for the PPO and newly contracted HMO plans. *Presenting the CalPERS 2014 Health Plans Transcript*, CALPERS (Sept. 2014), <http://www.calpers.ca.gov/eip-docs/about/video-web-center/videos/health-benefits/transcript-all-videos.pdf>.

were for routine knee and hip replacements.⁶⁷ Noting major price variations within geographic regions, in 2011, CalPERS teamed up with Anthem to implement RP for its hip and knee replacement procedures covered by Anthem's PPO plans.⁶⁸ Anthem's data showed a "fivefold variation in prices with no measurable difference in quality," with some hospitals charging anywhere from \$15,000 to \$110,000 for hip and knee replacement surgeries.⁶⁹ Relying on this data, while ensuring that sufficient choices were available to CalPERS' members, Anthem set a reference price of \$30,000⁷⁰ for knee and hip replacements.⁷¹ The reference price only applied to the hospital's facility fee and not to physicians' fees or fees for other providers, such as physical therapists.⁷²

Anthem selected forty-one hospitals as "value-based purchasing design" (VBPD) facilities after determining that the prices those facilities offered for knee and hip replacements were less than or equal to \$30,000, the quality of care was acceptable, and in the aggregate the hospitals provided sufficient access to CalPERS members.⁷³ The hospitals classified as non-VBPD facilities charged more than \$30,000 for knee and hip replacements. Members still had to pay the coinsurance amounts for up to a maximum of \$3,000.⁷⁴ If a member chose a facility with a negotiated reference price of less than or equal to \$30,000, he would only have to pay

⁶⁷ Lechner et al., *supra* note 9, at 2.

⁶⁸ *Id.*

⁶⁹ *Id.*; James C. Robinson & Timothy T. Brown, *Increases in Cost Sharing Redirect Patient Volumes and Reduce Hospital Prices for Surgery*, 32 HEALTH AFF. 1392, 1393 (2013). Lechner et al., *supra* note 9, at 2. "[E]ven when hospitals' quality scores—based on readmission rates, infection rates and the rate of revision of the original surgery—were held constant, the price variation remained." *Id.*

⁷⁰ Medicare on average paid \$14,324 for inpatient knee and hip replacements in 2011. *National and State Summaries of Inpatient Charge Data, FY2011, Microsoft Excel Version*, CTRS. FOR MEDICARE AND MEDICAID SERVS., <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Inpatient2011.html>.

⁷¹ *Id.*

⁷² Robinson & Brown, *supra* note 69, at 1393.

⁷³ *Id.* at 1393. "Quality measurements included whether the facility had been accredited by a recognized quality accrediting entity, whether it performed a sufficient number of joint replacement surgeries annually (because surgical volume is associated with positive outcomes), and its scores on the surgical prevention indicators reported by hospitals to the Joint Commission, as well as its participation in the California hospital quality reporting system and its results reported by that system." *Id.*

⁷⁴ Lechner et al., *supra* note 9, at 2.

the capped coinsurance amount for the procedure. But if a member selected a facility with a procedure price of more than \$30,000, then he would be responsible for the gap price in addition to the capped coinsurance amount.⁷⁵

As a result of the RP, CalPERS saved \$2.8 million in the first year of implementation and patient cost-sharing decreased by approximately \$300,000.⁷⁶ An extended examination of the program from 2008 to 2012 and comparison with non-CalPERS Anthem members showed that the RP program incentivized patients to choose lower-priced facilities.⁷⁷ Figure 1 shows that in 2010, before the RP program began, forty-eight percent of the patients chose non-VBPD facilities for hip and knee replacement surgeries, whereas that number decreased to thirty-seven percent in 2011 after the RP program began.⁷⁸ Also, the number of CalPERS members choosing VBPD facilities increased from fifty-two to sixty-three percent from 2010 to 2011.⁷⁹ This increase was not observed for the non-CalPERS Anthem population.⁸⁰ Controlling for other confounding factors, the analysis concluded that in 2011, RP itself caused a 28.5 percent increase in the volume for VBPD facilities among CalPERS enrollees.⁸¹

⁷⁵ *Id.* For example, a member with a ten percent coinsurance who got a hip replacement at a facility charging \$29,000 for the procedure would pay \$2,900. But, if the same member chose a facility that charged \$32,000 for the hip replacement, he would have to pay \$3,000 coinsurance amount (ten percent of \$32,000 would be \$3,200, but that amount is capped at \$3,000). Also, the member would be responsible for the difference between the reference price (\$30,000) and the price the facility charged (\$32,000), which is \$2,000. So the member will pay a total of \$5,000.

⁷⁶ Lechner et al., *supra* note 9, at 3.

⁷⁷ *Id.*

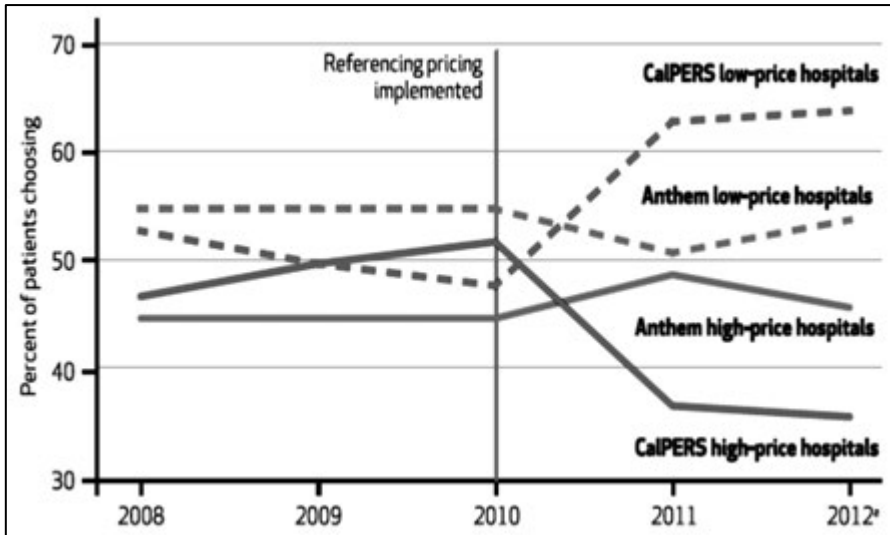
⁷⁸ Robinson & Brown, *supra* note 69, at 1393.

⁷⁹ *Id.* at 1393–94.

⁸⁰ *Id.* at 1394.

⁸¹ *Id.* at 1395.

Figure 1: Patients Choosing non-VBPD (high price) or VBPD (low-price) Hospitals for Hip or Knee Replacement Surgery, 2008–2012⁸²



The RP program also had an effect on hospital prices. Figure 2 shows a comparison between the prices charged by VBPD and non-VBPD hospitals for knee and hip replacement surgeries from 2008 to 2012. After the implementation of the RP program in 2011, the average price charged by the VBPD hospitals decreased by 5.6 percent and then increased slightly. But, the prices charged by non-VBPD hospitals decreased by 34.3 percent in 2011.⁸³ Although, in 2011, half of the non-VBPD hospitals continued to increase their prices and half of them reduced prices, the average price reductions were “more than twice as large for the facilities that reduced the prices (\$11,048 per patient) [when compared to] the average price increase for those that increased prices (\$4,097).”⁸⁴ Overall, hospitals decreased the prices they charged to CalPERS enrollees for hip and knee replacement procedures.⁸⁵

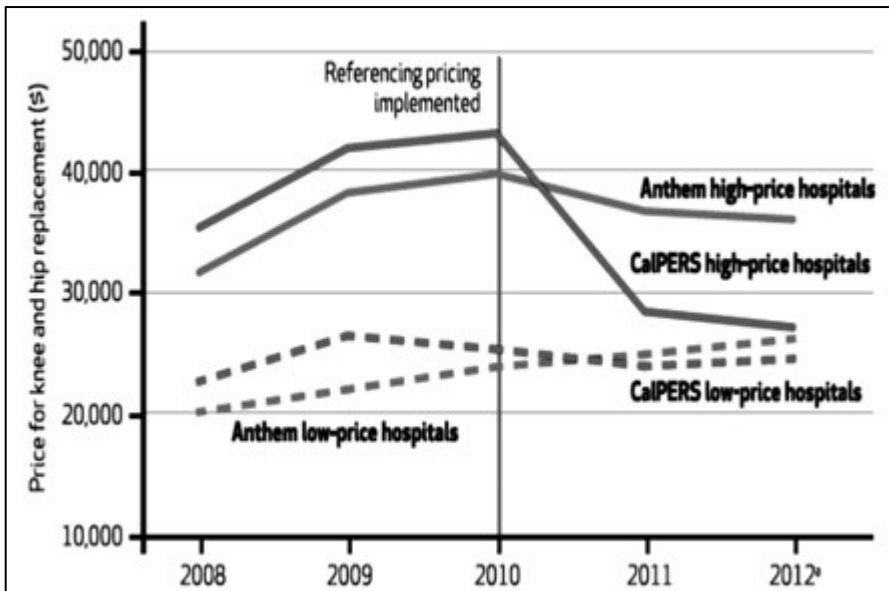
⁸² *Id.*

⁸³ Robinson & Brown, *supra* note 69, at 1395.

⁸⁴ *Id.*

⁸⁵ *Id.*

Figure 2: Prices Paid for Knee and Hip Replacement Surgery in VBPD (low-price) and non-VBPD (high-price) California Hospitals, 2008–2012⁸⁶



In addition to the cost savings to both CalPERS and its members, there were positive outcomes for patients' health. Furthermore, CalPERS did not observe any evidence of adverse health or quality outcomes for patients participating in the RP program.⁸⁷ The thirty-day general complication and infection rates and ninety-day follow-up admission rates were compared for CalPERS members who got hip and knee replacements in the year before and after the implementation of RP. The analysis found no significant difference in quality outcomes between the two years.⁸⁸ Furthermore, CalPERS members who had their hip or knee replacement surgeries at a VBPD hospital had “nearly equal or better outcomes” on the infection and readmission measures when compared with members who used non-VBPD hospitals.⁸⁹ After CalPERS's success with hip and knee replacements, it extended the program to ambulatory surgical and imaging

⁸⁶ *Id.* at 1396.

⁸⁷ *Id.* at 1393.

⁸⁸ Robinson & Brown, *supra* note 69, at 1393.

⁸⁹ *Id.*

procedures, including cataract surgeries, knee arthroscopies, and colonoscopies.⁹⁰ Results from the evaluation of RP's application to these additional procedures are not yet available.

With the application of RP to knee and hip replacements, CalPERS realized modest savings. Even though it did not significantly lower CalPERS' overall costs, it provided a solution to reduce the costs of certain expensive, highly price-variable medical procedures. In addition, RP helped steer the health care market in the right direction when non-VBPD hospitals significantly reduced their prices. Granted, some VBPD hospitals raised their prices slightly, but CalPERS and its employees still realized overall savings. Overall, the RP program as implemented by CalPERS was a win-win-win combination resulting in cost-savings for the employer, price reduction by the hospitals, and benefits for the employees in terms of lower cost sharing and greater accountability for their health care costs.

Other large employers have also adopted RP as a strategy to lower costs of their self-insured plans. Kroger Co., one of the world's largest retailers, with 375,000 employees, collaborated with WellPoint to set up its own RP program for radiology services and prescription medications.⁹¹ The radiology program includes services such as abdomen computerized tomography (CT), pelvic CT, chest CT, brain CT, and spine magnetic resonance imaging (MRI).⁹² Using two years of health claims data, the company set a reference price for those services while ensuring adequate access for its employees.⁹³ It set a reference price of \$800 for certain imaging scans in ten of the thirty-one states where it operates.⁹⁴

⁹⁰ Lechner et al., *supra* note 9, at 5; The Self-Insured School of California has also set up its own RP program. *Id.* at 5. One of the respondents of that program stated, "Before this program went into place, most members just knew how much their copays were and how much their deductible was. Some members will look at the EOB [explanation of benefits], and they are shocked [at the prices hospitals charge], but most people don't pay attention to that information. This initiative brought to light the fact that there are huge differences in prices for procedures, and you can get most procedures done affordably without sacrificing quality." *Id.*

⁹¹ Kroger calls its RP program "target pricing program." For consistency, I will refer to it as RP. Letter from Theresa Monti, Vice President, Corporate Total Rewards, Kroger Co., to Phyllis C. Borzi, Assistant Secretary of Labor, Employee Benefits Security Administration (Aug. 1, 2014), <http://www.dol.gov/ebsa/pdf/faq-xix-0017.pdf>.

⁹² *Id.* at 3.

⁹³ *Id.* at 3-4.

⁹⁴ Alex Nussbaum, *Surgery Cost Caps Save Pension Fund 19% Without Hurting Health*, BLOOMBERG (June 23, 2013, 11:00 PM),

Similarly, Safeway, a national grocery store chain with 150,000 employees in separate health plans, also implemented its own RP program.⁹⁵ Safeway, like CalPERS, also noticed significant price variations for colonoscopies within certain geographic markets.⁹⁶ In San Francisco, the prices for colonoscopies varied from \$848 to \$5,984.⁹⁷ Safeway implemented a pilot program in which it set the reference price for colonoscopies at \$1,500. This only included the facility fee; the physicians were paid according to a uniform fee schedule.⁹⁸ After the success of its program, Safeway extended RP to arthroscopy, hernia repair, gall bladder removal, cardiac catheterization and laboratory tests, and other medical procedures.⁹⁹ Kroger Co., along with CalPERS and Safeway, have pioneered the application of RP and successfully controlled their rising health care costs by targeting certain medical services and procedures which suffer from great price variation.

IV. SHORT AND LONG-TERM CONSIDERATIONS

A. SHORT-TERM CONSIDERATIONS

With the success of RP's application to medical services and procedures, large employers now have an evidence base which they can rely on when implementing their own RP programs. Although implementing RP can require some initial investment, the long-term savings and the benefits of implementing a change in the value system of employees can be enormous. However, RP's success is contingent on careful weighing of short- and long-term considerations.

<http://www.bloomberg.com/news/2013-06-24/surgery-cost-caps-save-pension-fund-19-without-hurting-health.html>.

⁹⁵ James C. Robinson & Kimberly MacPherson, *Payers Test Reference Pricing And Centers Of Excellence To Steer Patients To Low-Price And High-Quality Providers*, 31 HEALTH AFF. 2028, 2032 (2012); In 2008, before the colonoscopy RP program, Safeway implemented RP for pharmaceuticals. Lechner et al., *supra* note 9, at 5.

⁹⁶ Robinson & MacPherson, *supra* note 95, at 2032.

⁹⁷ *Id.*

⁹⁸ *Id.* The pilot was extended to other markets where the RP was set at \$1,250.

⁹⁹ Robinson & MacPherson, *supra* note 95, at 2032–33. 451 of the 847 laboratory tests covered by Safeway's benefit plan have been subject to RP. *Id.* at 2033.

1. Ensuring Network Adequacy

Maintaining proper network adequacy is a critical area that should be considered by health plans looking to adopt RP. RP programs should not be a subterfuge, allowing insurers to create the “appearance of maintaining a broad network.”¹⁰⁰ By reducing the amount that is fully reimbursable for a certain procedure, an insurer can disincentivize consumers from choosing the in-network providers that charge more than the reference price. In essence, an insurer can create smaller networks within the larger in-network provider sphere

Network adequacy is generally defined by states as “a health plan’s ability to deliver the benefits promised by providing reasonable access to a sufficient number of in-network primary care and specialty physicians, as well as other health care services included under the terms of the contract.”¹⁰¹ RP programs can blur the line between in-network and out-of-network providers and, therefore, make it difficult to ascertain network size. By treating in-reference priced providers as out-of-network providers, RP creates mini networks within the already established network. A provider that negotiates with the insurer to be considered in-network can be treated as out-of-network for a reference-priced procedure while still being in-network for other procedures and services. It is important to note that so far, only large employers with self-insured plans have implemented RP. Self-insured plans are not subject to state regulations relating to health insurance¹⁰² and “there are no federal network adequacy standards for large group health plans and no state or federal network adequacy standards for self-insured group health plans.”¹⁰³ These mini networks-within-networks for reference priced procedures are generally immune from network adequacy requirements.

Glaudemans et al. raise concerns with the unregulated nature of network adequacy for self-insured plans implementing RP.¹⁰⁴ First, RP programs have the potential to confuse customers since they have to

¹⁰⁰ Letter from Robert Restuccia, *available at* <https://www.dol.gov/ebsa/pdf/faq-xix-0012.pdf>.

¹⁰¹ Sally McCarthy & Max Farris, *ACA Implications for State Network Adequacy Standards*, ROBERT WOOD JOHNSON FOUND. (2013), *available at* <http://www.rwjf.org/en/research-publications/find-rwjf-research/2013/08/aca-implications-for-state-network-adequacy-standards.html>.

¹⁰² FURROW ET AL., *HEALTH LAW: CASES, MATERIALS, AND PROBLEMS* 696 (7th ed. 2013).

¹⁰³ Glaudemans et al., *supra* note 12.

¹⁰⁴ *Id.*

navigate the in-network and out-of-network lists and also the referenced-priced provider list.¹⁰⁵ This confusion can hamper customers' ability to access medical services, and the access problem can be worsened if consumers receive insufficient information.¹⁰⁶ Second, "[p]lans may seek to develop broad networks with seemingly generous payment rates, only to subsequently adopt aggressive reference pricing structures that render the seemingly generous contracts moot."¹⁰⁷ This strategy can undermine consumers' ability to choose a plan that includes their regular providers and create uncertainty as to which provider is in-network or out-of-network. Lastly, there is concern that the traditional methods of assessing network adequacy based on "ratios, totals, and drive times"—number of primary care providers in a given population or service area, appropriate mix of community hospitals and tertiary care facilities, and distance a patient has to drive to access a particular specialty—might not be adequate to assess the adequacy of mini RP networks.

Having sufficient providers participate and become a part of the reference-priced networks is not only critical for consumer choice but also for RP's mainstream adoption in to the health care system.

2. Quality of Care

Quality of care has to be carefully balanced when finding providers to participate in RP programs. The fear is that, in choosing a provider for the RP program, an insurer's choice will be based on whether a provider offers a price at or below the reference price without considering the quality of care provided. Measuring quality of care¹⁰⁸ is not an easy task,¹⁰⁹

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ *Id.*

¹⁰⁸ "High-quality care" has been defined by the Institute of Medicine (IOM) as "care that is safe, effective, patient-centered, timely, efficient, and equitable (with no disparities between racial or ethnic group)." Christina Bielaszka-DuVernay, *Improving Quality and Safety*, 33 HEALTH AFF., 1, 2 (2011).

¹⁰⁹ Robert H. Brook et al., *Defining and Measuring Quality of Care: A Perspective from US Researchers*, 12 INT. J. FOR QUALITY IN HEALTH CARE 281, 281 (2000); Elizabeth A. McGlynn, *Six Challenges in Measuring the Quality of Health Care*, 16 HEALTH AFF. 7, 7 (1997) ("patients, providers, and payers each define quality differently, which translates into different expectations of the health care system and thus differing evaluations of its quality"); *Measuring and Improving Quality of Care: A Report From the American Heart Association/American College of Cardiology First Scientific Forum on Assessment*

Although measuring quality in health care is not a new endeavor, the development of proper, effective measures has been slow.¹¹⁰

The concern about quality has to be addressed on two levels: (1) in selecting procedures for which price variation is not related to variation in quality, and (2) in measuring quality of providers within the reference-priced network. For example, in deciding the connection between price and quality for hip and knee replacement surgeries, CalPERS examined the difference in quality scores for hospitals charging prices ranging from \$15,000 to \$110,000 and looked at the hospitals' readmission rates, infection rates, and rates of revision of the original surgery.¹¹¹ Also, CalPERS monitored the quality of providers within the reference-priced network. It looked at the reference-priced "hospital's quality based on accreditation by recognized quality accrediting entities, whether the hospital performed a sufficient number of joint replacement surgeries annually, and the hospital's scores on surgical prevention indicators, as well as participation in California's hospital quality reporting systems."¹¹² This provided CalPERS with the means to measure quality variation for purposes of RP among the broader provider base and within the reference price network to ensure that the quality of care its members were receiving was not inadequate and would not negatively impact its members' health. CALPERS' experience can serve as a starting point in thinking about

of Healthcare Quality in Cardiovascular Disease and Stroke, AM. HEART ASS'N 1484–1485 (2000), available at <http://circ.ahajournals.org/content/101/12/1483.full.pdf+html> (Defining the methodological challenges in measuring health care quality).

¹¹⁰ The National Committee for Quality Insurance's Healthcare Effectiveness and Data Information Set Standards (HEDIS) are used by health plans to track quality and services. Christina Bielaszka-DuVernay, *supra* note 108, at 2. The National Quality Forum, a nonprofit organization formed at the recommendation of the President's Advisory Commission on Consumer Protection and Quality in Health Care Industry, has "certified 34 separate health care practices and procedures to be effective in reducing the occurrence of adverse events." *Id.* The Joint Commission, a private nonprofit organization, accredits hospitals and other health care organizations. *Id.* For a discussion of the improvements to be made in the area of quality measurements in health care, see *Improving Health Care Quality: The Path Forward, Hearing before the Senate Comm. on Finance*, 113th Cong. 1 (2013) (statement of Mark B. McClellan, Dir., Engelberg Ctr. for Health Care Reform, Brookings Inst.).

¹¹¹ Letter from Robert Restuccia, *supra* note 100; James Robinson & Kimberly MacPherson., *Payers Test Reference Pricing And Centers Of Excellence To Steer Patients To Low-Price And High-Quality Providers*, 31 HEALTH AFFAIRS (2012).

¹¹² *Id.*

effective and efficient ways of measuring and monitoring quality in RP programs.

3. Adequacy of the Reference Price

The reference price should be set at a level that encourages provider participation, does not limit access to care, and allows the issuer to attain cost savings.¹¹³ But setting the price inappropriately low can have the following adverse consequences: (1) the consumer will pay more out-of-pocket for the procedures above the reference price; (2) with time, hospitals will lower their price and join the RP program; (3) participating hospitals will increase the prices for other services and procedures not subject to RP; (4) there will be “consolidation among providers, which will increase negotiating power among providers”; or (5) RP programs will fail due to insufficient provider participation and increased patient cost-sharing.¹¹⁴ If the reference price is set too high, it will provide an abundance of choices for the consumer but it will not lead to maximization of savings, as desired by the plan sponsor.¹¹⁵ Community Catalyst suggested that the reference price should be “set high enough so that the price reflects what the majority of high-quality providers within that region charge for care.”¹¹⁶ With these limitations and with the great variation in prices for procedures around the nation in mind, prices for RP programs for services and procedures have to be set locally or regionally.¹¹⁷ Some organizations have even warned against setting a reference price across states because providers will negotiate higher prices in regions where they have significant market power.¹¹⁸ Reference prices will be a critical factor in ensuring a meaningful choice for the consumers and RP’s success in the long term.

4. Consumer Education

Consumer education is the keystone of RP’s success because it ensures that participants have the necessary tools to make informed

¹¹³ Paul Fronstin, *supra* note 7, at 10.

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ Letter from Robert Restuccia, *supra* note 100. Community Catalyst is a non-profit consumer advocacy organization.

¹¹⁷ *Id.*

¹¹⁸ FAMILIES USA, *supra* note 15, at 7.

decisions when choosing providers for procedures and services subject to RP. For example, before an insured consumer enters into a plan, he should be informed by the insurer of the procedures subject to RP, the reference price for each procedure, the amount in excess of the reference price that does not fall under the insurer's definition of out-of-pocket costs, and what does and does not count towards the annual out-of-pocket maximums.¹¹⁹ Furthermore, before a consumer receives a service that is subject to RP, the insurer should inform him as to which providers charge at or below the reference price,¹²⁰ the reference price for that service and the insured's obligation if a higher priced provider is chosen, and guidance on requesting an exception from the RP program.¹²¹

5. Exceptions

Allowing exceptions prevents consumers from being subject to RP if they do not have the time or ability to make a price-sensitive decision, and also provides flexibility to the RP program to accommodate the individualized nature of health and sickness. Consumers suffering from certain serious conditions might require referenced-priced procedures and services from providers who are not in the reference-priced network. Providers treating patients with chronic conditions need to be involved in the management and treatment of the chronic condition in order to ensure continuity of care. Exceptions should also be allowed for patients whose health conditions require services of a non-reference-priced provider or specialist.

Additionally, RP programs should allow for exceptions if a patient's health needs or circumstances require him to see a non-reference priced provider for a reference-priced procedure. An exceptions process should include a case-by-case evaluation with fair outcomes. The specific

¹¹⁹ Letter from Yvonne Clearwater, Acting Deputy Dir. Health Products, Illinois Dep't of Ins., to U.S. Dep'ts of Labor, Health and Human Servs, and Treasury (July 30, 2014), <http://www.dol.gov/ebsa/pdf/faq-xix-0009.pdf>; Letter from Edward Potanka, Vice President Chief Counsel, Legal and Pub. Affairs, Cigna, to Emp. Benefits Sec. Admin., U.S. Dep't of Labor (Aug. 1, 2014), <http://www.dol.gov/ebsa/pdf/faq-xix-0027.pdf>.

¹²⁰ Letter from Karin Feldman, Benefits and Social Ins. Policy Specialist, Am. Fed'n of Labor and Congress Indus. Org. to Office of Health Plan Standards and Compliance Assistance, Emp. Benefits Sec. Admin., U.S. Dep't of Labor (Aug. 1, 2014), <http://www.dol.gov/ebsa/pdf/faq-xix-0031.pdf>.

¹²¹ Letter from R. Douglas Lemmerman, *available at* <https://www.dol.gov/ebsa/pdf/1210-AB52-0076.pdf>.

situations that will give rise to the granting of an exception might be different under each program. For example, American Cancer Society (ACS) and Families USA suggested that exceptions should be available in situations in which requiring the consumer to choose a provider within the reference price would harm the consumer's care coordination,¹²² cause the consumer to travel a great distance to go to that provider, or involve long wait times for the consumer.¹²³ The individualized nature of health and health care requires that RP programs incorporate a process by which a patient's case can be evaluated on an individual basis.

Additionally, exceptions should be granted for a consumer receiving an emergency procedure and who might not have the time or ability to browse reference-priced providers.¹²⁴ That is why CalPERS excluded any emergency knee or hip replacement surgeries received by an employee from the restrictions of the RP program.¹²⁵ Lastly, exceptions should be considered when a consumer's health conditions or complications require more costly care services and procedures that are not provided by every healthcare facility or provider.¹²⁶ For many consumers, especially with certain co-morbidities or serious health conditions, continuity of care trumps cost savings.

B. LONG-TERM CONSIDERATIONS

Besides the concerns that the current RP programs raise, there are many larger concerns that need to be addressed when deciding the long-term viability of RP. RP is a blunt mechanism for cutting health care costs that needs to be carefully implemented with a proper evaluation of both short- and long-term considerations.

¹²² Letter from Lydia Mitts, Senior Policy Analyst, Families USA, to Sec'y Jack Lew, U.S. Dep't of Treasury, Sec'y Thomas E. Perez, U.S. Dep't of Labor, and Sec'y Sylvia Matthews Burwell, U.S. Dep't of Health and Human Servs. (July 31, 2014), <http://www.dol.gov/ebsa/pdf/faq-xix-0014.pdf>.

¹²³ Letter from R. Douglas Lemmerman, *supra* note 121.

¹²⁴ Hau Liu, *Closing the Gap: Reducing Price Variance in Health Care with Reference-Based Pricing*, CASTLIGHT HEALTH, 6 (July 2012), http://content.castlighthealth.com/rs/castlighthealth/images/RBP-White-Paper_July-2012_draft4.pdf.

¹²⁵ Lechner et al., *supra* note 9, at 2.

¹²⁶ Paul Fronstin, *supra* note 7, at 8.

1. Rewarding Efficiency and Quality

Even though the main goal of RP is to reduce and control the rising cost of health care services, it does not adequately focus on efficiency. After a reference price has been set, there is a perverse incentive for hospitals already charging below the reference price to increase their prices to match the reference price. This phenomenon was seen in the CalPERS experiment where the VBPD hospitals that were already charging less than \$30,000 for hip and knee replacements raised their prices after the RP program was put in place.¹²⁷ RP will, however, motivate hospitals charging more than the reference price to bring down their prices. As Amanda Lechner et al. stated, RP “is a ‘blunt instrument’ that excludes providers with the highest prices but does not reward extremely efficient providers.”¹²⁸ This phenomenon is similar to what has been observed in the Medicare Prospective Payment System (PPS). Under the PPS, provider reimbursement is based on paying the same rate for the same services by categorizing health care services into diagnostic related groups (DRGs).¹²⁹ Karen Davis and Stuart Guterman explained:

Such a system of payment rewards those hospitals and physicians that efficiently produce those units of care (hospital stays and physicians’ visits and procedures) because they can pocket any difference between the fixed price they are paid for each unit and the amount it costs them to produce it. The main disadvantage of this approach is that although it rewards providers for producing each

¹²⁷ Robinson & Brown, *supra* note 69, at 1396; “The benefit design does not reward the provider that charges \$15,000 any more than the provider that charges \$30,000.” Lechner et al., *supra* note 9, at 8.

¹²⁸ Lechner et al., *supra* note 9, at 8.

¹²⁹ “The DRG payment rates cover most routine operating costs attributable to patient care, including routine nursing services, room and board, and diagnostic and ancillary services. The CMS creates a rate of payment based on the “average” cost to deliver care (bundled services) to a patient with a particular disease. The DRG rates do not expressly include direct medical education costs, outpatient services, or services covered by Medicare Part B . . . The DRGs classify all human diseases according to the affected organ system, surgical procedures performed on patients, morbidity, and sex of the patient.” *Medicare Hospital Prospective Payment System: How DRG Rates are Calculated and Updated*, OFFICE OF INSPECTOR GEN., DEP’T OF HEALTH AND HUMAN SERVS., 5 (Aug. 2001), <https://oig.hhs.gov/oei/reports/oei-09-00-00200.pdf>.

unit of care efficiently, it also rewards providers for producing a greater quantity of services, even if the same or better patient outcomes could be achieved with fewer services or a less expensive combination of services. As a result, Medicare's payment policy still does not encourage efficiency in its overall provision of care over time or over an episode of illness.¹³⁰

In the PPS, payments do not reward efficiency but instead pay for the care provided. Similarly, in an RP program, once the reference price is set, already-efficient hospitals charging below the reference price have no incentive to keep costs at that level, or try to become even more efficient, because of the reference price guarantee. Additionally, the outcome of the procedure or quality of care provided does not change the level of payment that the hospital will receive for a reference-priced procedure. The price-saving potential of RP should be carefully weighed against efficiency and quality of care.

2. Preventing Disruption of Continuity of Care

RP's effect on continuity of care is especially critical for patients with chronic conditions. Although there are multiple definitions of continuity of care, it has several accepted dimensions: informational continuity, chronological or longitudinal continuity, geographic continuity, interdisciplinary continuity, interdisciplinary or team-based continuity, and family continuity.¹³¹ RP brings into question informational continuity, chronological or longitudinal continuity, and team-based continuity.

Informational continuity is defined as "the availability of patient information to providers throughout a healthcare system."¹³² With slower than expected acceptance and use of electronic health record systems

¹³⁰ Karen Davis & Stuart Guterman, *Rewarding Excellence and Efficiency in Medicare Payments*, 85 THE MILIBANK Q. 449, 451 (2007).

¹³¹ John W. Saultz, *Defining and Measuring Interpersonal Continuity of Care*, 1 ANNALS OF FAM. MED. 134, 136 (2003). (Geographic continuity is defined as "care that is provided with continuity regardless of the location of the patient (office, home, hospital, etc.)." Interpersonal continuity refers to a "special type of longitudinal continuity in which an ongoing personal relationship between the patient and care provider is characterized by personal trust and responsibility").

¹³² Gina Agarwal & Valorie A Crooks, *The Nature of Informational Continuity of Care in General Practice*, 58 BRIT. J. OF GEN. PRAC. e1, e1 (2008).

within hospitals,¹³³ it is difficult to imagine how the flow of information between reference-priced providers and a patient's regular providers will allow continuity of care. Chronological or longitudinal continuity is defined as "a patient seeing the same provider over time and developing a relationship based upon trust."¹³⁴ Since laboratory and imaging services—some of the common services subjected to RP—are generally not performed by a patient's usual physician, the disruption of care might not be an issue if RP is applied to those services. For hip and knee replacement surgeries, however, the relationship of trust that a patient establishes with his or her provider before the surgery is essential to a patient's decision when and where to get the surgery. In addition, a patient's care can be disrupted when he receives the pre-surgery care and the surgery itself from different providers who might not be able to effectively share the patient's information. This could have harmful effects on the patient's health and post-surgery care. The same problem exists with the lack of team-based continuity. Team-based continuity is defined as "care that allows previous knowledge of the patient to be present even when the patient requires a wide range of services spanning the traditional medical specialties."¹³⁵ If a the patient's usual provider is not part of the same team as the reference-priced provider who performs the surgery that causes a disruption in team-based continuity.

These scales of continuity of care play an even more significant role for patients with chronic conditions and the elderly. For example, a person suffering from Ulcerative Colitis would prefer that his regular gastroenterologist performs the colonoscopy to check his colon and look for any signs of tumor formation. If this specialist does not work for a reference-priced hospital, then the patient will have to make an unfair choice between having his specialist perform the colonoscopy and paying the gap price or choosing a reference-priced provider and disrupting the care and management of his chronic condition. Continuity of care is essential for the management of chronic conditions and RP can hinder that

¹³³ Only twelve percent of the 2,952 hospitals surveyed "had instituted electronic physicians' notes across all units," and only seventeen percent of the hospitals has "computerized provider-order entry for medications was reported as having been implemented across all clinic units." Ashish K. Jha et al., *Use of Electronic Health Records in U.S. Hospitals*, 360 NEW ENG. J. OF MED. 1628, 1631 (2009).

¹³⁴ Paul Beattie et al., *Longitudinal Continuity of Care Is Associated With High Patient Satisfaction With Physical Therapy*, 85 PHYSICAL THERAPY 1046, 1047 (2005).

¹³⁵ John Saultz, *supra* note 131, at 136.

flow if RP is blindly applied to all categories of patients.

A study conducted by Mainous III and Gill found that continuity of care with a clinician decreases the likelihood of future hospitalizations.¹³⁶ Also, continuity with a provider has been found to be more important than continuity with a health care site.¹³⁷ Patients with a continuous relationship with their physicians are “more satisfied with their care, are more likely to take medications correctly, and are more likely to have problems identified by their physician.”¹³⁸ Besides these benefits, continuity of care is significantly associated with decreased emergency department visits. Having continuity of care is important for patients, especially those suffering from chronic conditions,¹³⁹ and forcing consumers to obtain procedures from reference-priced providers, if different from their regular providers, might compromise the continuity of care their illness demands. Health plans looking to adopt RP should consider whether and to what extent continuity of care will be affected for procedures and services subject to RP and how to prevent patients with chronic health conditions from disruption of care.

3. Improving Cost Savings

RP can compromise continuity and efficiency of care for cost savings. But, if those cost savings are insignificant, they do not provide an incentive to insurers to use such a harsh cost-cutting tool and spend the time, effort, and money to institute an RP program. A recent study conducted by the Center for Studying Health System Change (CSHSC) showed that RP for “shoppable health care services” will only lead to

¹³⁶ Arch G. Mainous III & James M. Gill, *The Importance of Continuity of Care in the Likelihood of Future Hospitalization: Is Site of Care Equivalent to a Primary Clinician?*, 88 AM. J. OF PUB. HEALTH 1539, 1540 (1998); “An explanation for this finding is that continuity with a physician leads to increased knowledge and trust between a patient and a physician. This increased knowledge and trust may make it easier for the physician to manage medical problems in the office or over the telephone and thereby avoid hospitalization.” James M. Gill et al., *The Effect of Continuity of Care on Emergency Department Use*, 9 ARCHIVES OF FAM. MED. 333, 333 (2000).

¹³⁷ Mainous III & Gill, *supra* note 136, at 1540.

¹³⁸ Gill et al., *supra* note 136, at 333.

¹³⁹ See generally Anton R. Miller et al., *Continuity of Care for Children with Complex Chronic Health Conditions: Parents’ Perspectives*, 9 BMC HEALTH SERVS. RES. 1, 1 (2009).

modest savings.¹⁴⁰ The study quantified the share of spending attributable to “shoppable health care services” and simulated the effect of RP on those services.¹⁴¹ The study analyzed RP for both inpatient and outpatient services using 2011 enrollment and claims data from 528,000 active and retired nonelderly U.S. autoworkers and their dependents.¹⁴² The study was limited to nineteen metropolitan markets in the Midwest, each with at least 4,000 enrollees.¹⁴³

While imaging and laboratory tests accounted for 13.9 percent of total health care spending in the claims data, the savings, after applying RP to the shoppable imaging and laboratory services, accounted for only 1.9 percent of total spending.¹⁴⁴ Savings for other shoppable services did not look too promising: inpatient hospital stays: 0.6 percent; outpatient hospital services/ambulatory procedures and physician office visits: 2.1 percent; uncomplicated hip and knee replacements: 0.2 percent; and all other shoppable services: 4.8 percent.¹⁴⁵ Overall, regardless of the percentage of total spending that the procedure accounted for, the resulting savings, after applying RP to those procedures, were minimal.¹⁴⁶ Generalizing from these findings, the authors of the study cautioned against drawing broad conclusions from CalPERS’ success with RP because even though there was “a dramatic percentage decline in prices and spending on knee and hip replacements,” there was only “an extremely small percentage decline in total spending.”¹⁴⁷ Despite the capped contribution approach for highly price-variable procedures, RP might not have a significant impact on the health plan sponsors’ total spending. However, the study did not discourage

¹⁴⁰ Chapin White & Megan Eguchi, *Reference Pricing: A Small Piece of the Health Care Price and Quality Puzzle*, NAT’L INST. FOR HEALTH CARE REFORM, 6 (2014), file:///C:/Users/Srishti/Downloads/Research_Brief_No._18%20(2).pdf. A “shoppable health care service” was defined as must typically be scheduled in advance, there must be more than one provider in a market that can perform the service, and there has to be price data available for the different providers,” and for which patients would have information about the quality of providers. *Id.* at 2.

¹⁴¹ *Id.*

¹⁴² *Id.*

¹⁴³ *Id.*

¹⁴⁴ *Id.* at 6.

¹⁴⁵ White & Eguchi, *supra* note 140, at 6.

¹⁴⁶ *Id.* Percentages of total spending by types of procedures were as follows: Inpatient procedures: 6.4 percent; outpatient hospital services/ambulatory procedures and physician office visits: eighteen percent; and all other shoppable services: 35.3 percent.

¹⁴⁷ *Id.*

using RP as a tool to cut health care costs; instead, it recommended applying RP to broader categories of procedures, realizing that RP can be “a useful step on the path to more reasonable pricing.”¹⁴⁸ If RP is being touted as a cost-saving tool, evidence of small savings casts doubt on its usefulness and viability. But, greater cost savings will be realized as more employers and insurers adopt RP, the number of procedures subject to RP increases, and RP is combined with payment reform strategies.¹⁴⁹

4. Monitoring Potential Cost Shifting

RP’s potential to shift costs should be closely monitored to prevent its negative effects on affordability of care. The fact that RP can be used as a way to shift costs from providers to consumers is a matter of concern.¹⁵⁰ But, this cost shifting can be prevented if consumers are provided sufficient information to understand RP and choose providers within the reference price.¹⁵¹

However, another type of cost shifting is more nuanced and not addressed by RP.¹⁵² In order to understand this cost-shifting phenomenon, let’s look at an example. A health plan has decided to impose a reference price of \$30,000 on hip replacements. An area hospital lowers its price for that procedure from \$40,000 to \$30,000 in order to keep its market share and prevent losing the health plan’s customers. That hospital can make up that difference of \$10,000 by increasing the price of one or more procedures that are not capable of being reference priced, such as emergency cardio thoracic surgery. This cost shifting seems natural for a hospital to do but it also chips away at one of the goals of RP—to lower prices of health care services by reducing the amount paid to providers.

¹⁴⁸ *Id.* at 6–7.

¹⁴⁹ *See infra* Section V.

¹⁵⁰ Letter from Karin Feldman, *supra* note 120; Timothy Jost, *Implementing Health Reform: Third-Party Payments and Reference Pricing*, HEALTH AFF. BLOG (May 22, 2014), <http://healthaffairs.org/blog/2014/05/22/implementing-health-reform-third-party-payments-and-reference-pricing/> (“if employers move to defined-contribution payment for employee benefits and insurers move toward reference pricing, we may reach a point where the combined premium and cost-sharing expenses shifted to employees simply become intolerable”).

¹⁵¹ Price transparency is discussed in the next section.

¹⁵² *From Reference Pricing to Value Pricing*, CATALYST FOR PAYMENT REFORM, http://www.catalyzepaymentreform.org/images/documents/CPR_Action_Brief_Reference_Pricing.pdf.

Also, consumers do not stand to benefit in the end when on one hand, they save money by choosing a reference-priced provider for a reference-priced service, while on the other, they are the targets of balanced billing for an emergency, non-reference-priced procedure.

Lastly, there is cost shifting from facility to non-facility charges. In the CalPERS RP experiment, the “\$30,000 payment limit applied only to the hospital’s allowed charges, not to the fees charged by the surgeons and other physicians involved in the patient’s care.”¹⁵³ Facility fees typically account for seventy-five to eighty percent of the total cost of joint replacements.¹⁵⁴ With only the facility fee subject to RP, hospitals have an incentive to shift some of the cost to physician fees, especially since hospitals are buying out physician practices and increasing their non-facility charges.¹⁵⁵

With multiple levels of cost shifting, health plans need to evaluate RP’s effects on affordability of care for consumers because if cost shifting is not controlled, the “balloon effect” of RP will lead to minimal overall savings for the health care system.

5. Price Transparency: Availability and Comprehensibility

One of the important pillars of a RP program is price transparency—making price information available to consumers so they can make informed choices. However, the gaps in price data can hinder both the flow of information necessary for consumers to make educated

¹⁵³ Robinson & Brown, *supra* note 69, at 1393.

¹⁵⁴ Randy Cox, *Reference Pricing--Just Scratching the Surface*, PRICING HEALTHCARE BLOG (Aug. 21, 2014), <http://blog.pricinghealthcare.com/reference-pricing-taken-to-the-next-level/>; *Total Hip Replacement*, HEALTHCARE BLUEBOOK, https://healthcarebluebook.com/page_ProcedureDetails.aspx?id=28&dataset=md&g=Total+Hip+Replacement (last visited Oct. 26, 2014) (total fair price of a hip replacement was listed as \$22,606, out of which facility fees were \$18,671 (82.59% of the total cost), physician fees were \$2,764 (12.22% of the total cost), and anesthesiologist fees were \$1,171 (5.18% of the total cost)); *Total Knee Replacement*, HEALTHCARE BLUEBOOK, https://healthcarebluebook.com/page_ProcedureDetails.aspx?id=31&dataset=MD&g=Total+Knee+Replacement (last visited Oct. 26, 2014) ((total fair price of a knee replacement was listed as \$22,720, out of which facility fees were \$18,671 (82.17% of the total cost), physician fees were \$2,950 (12.98% of the total cost), and anesthesiologist fees were \$1,098 (4.83% of the total cost)).

¹⁵⁵ Cox, *supra* note 154.

decisions and the success of RP programs. Without proper price and quality data, RP programs can push consumers into making tough health care decisions without appropriate information.

Price transparency is “the availability of provider-specific information on the price for a specific health care service or set of services to consumers and other interested parties.”¹⁵⁶ Price information should ideally include a consumer’s total cost for health care services—any negotiated discounts; all fees for the facility, physician, lab, and other fees; out-of-pocket costs, including co-payments, coinsurance amounts, deductibles; and the gap price.¹⁵⁷ But the problem is that “[e]ven very large plans will lack the historical data to accurately measure the prices they typically pay to smaller hospitals.”¹⁵⁸ Some of the transparency tools used by health plans are limited because of the pressure from the providers with whom they negotiate, the operational challenges they face with respect to the data, and the limitations of existing consumer portals.¹⁵⁹ Therefore, price information might not be that easily accessible to a health plan itself. That further hinders consumers’ access to that information.

Price transparency should accompany information about the quality of care provided at the reference-priced facilities. After equipping consumers with the information they need, it is important that the information readily available at the time of purchasing and is presented in an understandable way. Helping consumers realize that high prices do not necessarily mean better quality and that some of the lower-priced hospitals often have high quality scores¹⁶⁰ requires displaying price and quality data

¹⁵⁶ *Price Transparency*, CATALYST FOR PAYMENT REFORM, <http://www.leapfroggroup.org/media/file/PriceTransparencyActionBrief.pdf> (last visited Oct. 26, 2014).

¹⁵⁷ *Id.* For example: “An insurer has negotiated a rate of \$1,000 with a particular in-network provider for a chest MRI, and therefore, the cost is \$1,000. A consumer has \$200 remaining to meet his/her deductible and the coinsurance is \$160; the individual is responsible for \$360 and the insurer pays \$640. In this case the consumer’s “price” for the MRI is \$360. Price transparency exists when, for example, prior to seeking care, a consumer knows his price will be \$360 for that particular provider and can compare the price for chest MRIs with other providers. It is also important for consumers to understand the total payment for the service, including what the plan (or purchaser) pays and the remaining price they owe for that service”).

¹⁵⁸ White & Eguchi, *supra* note 140, at 6.

¹⁵⁹ CATALYST FOR PAYMENT REFORM, *supra* note 152, at 4.

¹⁶⁰ Bobbi Coluni, *Save \$36 Billion in U.S. Healthcare Spending Through Price Transparency*, THOMSON REUTERS, 4 (2012),

side-by-side. Also, providing independent information about quality will allow consumers to consider the cost of care of services and not rely solely on their physician's advice.¹⁶¹ Creating an infrastructure that can obtain and support such information will require a significant investment, which might be a deterrent for employers planning to adopt RP programs.

In addition to initial consumer education about a RP program, continued support should be available for consumers to understand this new layer of complexity. Differentiating between in-network, out-of-network, referenced-priced-in-network providers, and non-reference-price-in-network providers will be a difficult task, even if applied to non-urgent procedures. Some form of assistance should be available to consumers to choose from and between reference-priced providers that best suit their health and financial concerns. Those who adopt RP must keep these long-term considerations in mind to ensure RP's continued success, prevention of any adverse effects on consumers, and widespread adoption by health plans.

V. VARIATIONS OF RP

As the health care industry works to develop standards to evaluate the current RP programs, it is important to keep in mind how RP programs can work with the emerging health delivery and payment models. Some variations improve the current RP programs, while others are designed to lift RP from a mere cost-saving tool to an important component of the payment delivery system.

Unlike CalPERS, Kroger Co.'s RP program included both the facility fees and professional charges.¹⁶² This prevented any cost shifting between the different fees and allowed consumers to see the total cost of a reference-priced procedure. This method, however, does not prevent providers from shifting costs to other post-procedure services, and it falls short of taking RP out of its role as a benefit-design mechanism and placing it alongside the payment reform tools. But it is important to note that cost-

http://www.hreonline.com/pdfs/06022012Extra_ThomsonReutersStudy.pdf; Anna D. Sinaiko & Meredith B. Rosenthal, *Increased Price Transparency in Health Care — Challenges and Potential Effects*, NEW ENG. J. MED. 891, 892 (2011) (“The belief that higher-cost care must be better is so strongly held that higher price tags have been shown to improve patients’ responses to treatments through the placebo effect”).

¹⁶¹ Sinaiko & Rosenthal, *supra* note 160, at 892.

¹⁶² Letter from Theresa Monti, *supra* note 91, at 3.

shifting between different fees can be reduced if most of the costs and fees associated with a procedure can be included in the reference price. Similarly, RP can be applied to a single or multiple CPT¹⁶³ codes, thereby allowing the health plan to inform consumers of their finite costs. However, with complex procedures involving multiple CPT codes, a patient can be left with a large bill even if he or she chooses a reference-priced provider. Francois de Brantes et al. points out:

For example, a physician might decide to perform multiple diagnostic imaging tests prior to and after the procedure, or to select different types of imaging tests than some of their peers. Similarly, after the procedure, the orthopedist might recommend a stay at a rehabilitation facility, while another might recommend a few sessions of physical therapy. Finally, the price might vary depending on the setting in which the plan member receives the service. As such, the price, mix, and frequency of services in a joint replacement procedure can vary, even when adjusting for the severity of the patient.¹⁶⁴

This problem can be solved if RP is coupled with payment reform mechanisms, such as bundled payments. A bundled payment “is a single payment to providers or health care facilities (or jointly to both) for all services to treat a given condition or provide a given treatment.”¹⁶⁵ It shifts the risk to the providers for the cost of services for a particular treatment or condition and any resulting preventable complications.¹⁶⁶ Providers are protected in case of serious complications in which they have to incur unexpected costs. Since it is a single payment to the provider, it lends itself

¹⁶³ CPT stands for current procedural terminology. “The CPT-4 codes are used to describe medical procedures and physicians services, and is maintained and distributed by the American Medical Association.” *Code Sets*, CTRS. FOR MEDICARE & MEDICAID SERVS. (Sept. 26, 2014, 4:01 PM.), <http://www.cms.gov/Regulations-and-Guidance/HIPAA-Administrative-Simplification/TransactionCodeSetsStands/CodeSets.html>.

¹⁶⁴ Francois de Brantes et al., *supra* note 4, at 3.

¹⁶⁵ Suzanne Delbanco, *The Payment Reform Landscape: Bundled Payment*, HEALTH AFF. BLOG (July 2, 2014), <http://healthaffairs.org/blog/2014/07/02/the-payment-reform-landscape-bundled-payment/>.

¹⁶⁶ *Id.*; see also *Analysis of Bundled Payment*, RAND CORP., http://www.rand.org/pubs/technical_reports/TR562z20/analysis-of-bundled-payment.html (last visited Oct. 26, 2014).

to be a natural partner of RP. According to Catalyst for Payment Reform, “[c]oupling a reference pricing strategy with a bundled payment to providers for the entire episode of care could make pricing easier and create alignment among consumers, employers, and providers in a number of ways.”¹⁶⁷ As with the current RP program, a consumer will select a provider that offers a reference-priced bundle and the consumer will only incur out-of-pocket costs if he chooses a provider with a higher priced bundle.¹⁶⁸

This combination of RP and bundled payments can result in “alignment” between the provider, the insurer, and the insured.¹⁶⁹ It will also allow for cost predictability for both the insurer and the consumer.¹⁷⁰ Another benefit will be greater provider accountability for defined outcomes and financial liability for the provider for costs above the bundled reference price.¹⁷¹ Additionally, by including a stop loss cap at the 95th percentile of costs, the employee and the provider can be protected from catastrophic out-of-pocket expenses resulting from factors outside of their control.¹⁷² Due to the administrative complexities,¹⁷³ legal hurdles,¹⁷⁴ and required technological capabilities,¹⁷⁵ bundled payments have not been widely accepted, despite their cost-saving potential.

In addition to bundled payments, Catalyst for Payment Reform predicts that RP will be incorporated with other payment reform methods, including centers for excellence contracting¹⁷⁶ and global payments.¹⁷⁷ RP

¹⁶⁷ Francois de Brantes et al., *supra* note 4, at 1.

¹⁶⁸ *Id.* at 4.

¹⁶⁹ *Id.* at 6.

¹⁷⁰ *Id.*

¹⁷¹ *Id.* at 7.

¹⁷² Francois de Brantes et al., *supra* note 4, at 7.

¹⁷³ Brook et al., RAND CORP., *supra* note 20.

¹⁷⁴ *Legal Issues in Designing Bundled Payments and Shared Savings Arrangements in the Commercial Payor Context*, ROBERT WOOD JOHNSON FOUND.,

http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2013/rwjf407662 (“the legal framework for compliance has not become more flexible for bundled payments in the commercial payor context”).

¹⁷⁵ *Information Technology for Bundled Payment*, THE MITRE CORP. (Dec. 16, 2011), http://www.ahcancal.org/facility_operations/hit/Documents/IT_Bundled_Payment.pdf.

¹⁷⁶ Robinson & MacPherson, *supra* note 111, at 2029. (“Centers-of-excellence contracting channels patients to hospitals that provide high-quality care and are willing to discount their prices in exchange for the higher volume of patients”).

has the potential to become a valuable cost-saving tool, but its limitations need to be recognized and monitored closely. The Department should start by taking a closer look at the current RP programs to assess whether RP is a strategy that is compatible with the goals of the evolving health care system.

VI. CONCLUSION

RP is an effective benefit-design model that is helping to bend the health care cost curve. Andrea Caballero, Program Director at the Catalyst for Payment Reform, perfectly stated that even though RP is a “short-term fix,” it is “one of the few short-term fixes that is actually seeing positive results.”¹⁷⁸ With its success in both the international pharmaceutical market and the U.S. market for medical procedures and services, it has proven its potential as a cost-saving device. But, it has its limitations, in terms of scope and application, that must be recognized so that regulators overseeing its implementation can effectively track its progress, monitor its effect on access, cost, and quality of care, and allow its incorporation into new payment reform mechanisms. While the health care system should be wary of new strategies which can potentially impact consumers’ access to affordable, high-quality care, bending the cost curve will require disruptive innovations that can transform the power dynamics in the health care marketplace.

¹⁷⁷ “Global payment models vary based on the amount of risk assumed by the provider organization and the methods used to limit risks. Risks can be limited based on what services are included in the global payment and what, if any, adjustments are considered when evaluating provider performance.” Ann Robinow, *The Potential of Global Payment: Insights from the Field*, THE COMMONWEALTH FUND (Dec. 2010), http://www.commonwealthfund.org/~media/Files/Publications/Fund%20Report/2010/Feb/1373_Robinow_potential_global_payment.pdf.

¹⁷⁸ Monday, November 18, 2013: Reference Pricing: Will Price Caps Help Contain Healthcare Costs?, YOUTUBE, https://www.youtube.com/watch?v=VJmlo_A678 (last visited Dec. 14, 2014).