Comparative Ethics of Modern Payment Models: Does the Way We Pay for Care Align with Patient Care Ethics?

Jacob Riegler*

ABSTRACT

Payment models directly impact the way patients experience care. Historically, payment model innovations have been examined mostly from economic, organizational, and public health lenses. Financial incentives exist in all healthcare systems, whether a socialized, private or public insurance, or single payer system. This article examines the alignment of current predominant payment models of fee-for-service, capitation, and value-based payments with patient care ethics. The volume-based incentive of fee-for-service is misaligned with patient care, while capitation is a relatively neutral and highly modifiable model. Value-based payments offer a unique benefit in improving patient agency and have a larger benefit of cost control. However, no model adequately addresses health disparities, and a larger consideration for justice is needed by payment model designers when considering incentives. In consideration of related values, bioethics must expand the discourse around patient care ethics to cover patient interactions with the health system and market forces outside the clinical context.

Keywords: Incentive Design, Healthcare Payment Model, Health Disparities, Fee-For-Service, Incentive

INTRODUCTION

Healthcare payment models have always been controversial. Discussions about healthcare payment models broadly include economic, ethical, and medical realms. The “simple” act of one party paying for health care creates interactions between the payer, the provider, and the patient. Payments are based on an agreed-upon price between the paying party and the provider. While in most industries, at the level of retail delivery, the direct customer pays for the item received, in healthcare, the system is more complex.

* Jacob Riegler, MD/MBA Candidate, University of Central Florida. MS Candidate, Alden March Bioethics Institute, Albany Medical College.

Deciding what metrics to base healthcare prices on has become arduous. Whether organizations should charge a patient for healthcare in nations where it is considered a human right is a subject of debate. This ethical debate over providing care is combined with the theoretical framework of *how* to price and pay for healthcare. This paper examines the ethics of various approaches to paying for care.

Outside of the controversial notion of patients financing their care, existing payment models always involve some entity other than the patient paying for the bulk of the care – whether in a socialized system, single payer, or public or private insurance system. In these systems, an implicit financial incentive to provide care based on payment criteria arises.[1] Depending on the nature of the payment, the financial incentive may align with, be neutral toward, or misalign with a patient's best interest and goals of care. These payments create market forces in capitalistic or single payer healthcare models and drive organizational behavior in nationalized models.[2] We can see the organizational and marketplace adaptations to predominant volume-based payment models in the United States in the form of shorter visits, unnecessary care or increased volume of care, and medical determination of which care is provided based on coverage. Fee-for-service has incentivized higher patient volume over quality time with patients, leading to 10- to 25-minute patient visits.[3] Payments based on any metric implicitly direct patient care by moving provider action toward the metric the payment is based on, regardless of intent or conscious effort.[4] For example, when the paying body financially reward hospitals for shorter inpatient stays, then the average length of stay will decrease.[5]

Payment for care has numerous, widespread effects on how patients experience care and even the quality of care they receive, creating ethical and economic issues. Oddly, from a strictly financial perspective, patients are secondary consumers of their care in most healthcare systems. With this, providers have a financial responsibility to the paying body to act within the bounds of payment incentives (specifically, the paying body, such as an insurance company, is assured that the patient gets the care that is paid for based usually on pre-agreed terms) and an ethical and duty-based responsibility to the patient for patient care. As an example of misaligned interests, there is a clear financial incentive to deny prior authorization for a medication that is an expensive yet otherwise appropriate alternative for a patient's condition. This could result in an equal treatment, perhaps a generic version even, or an alternative that the provider and patient would not have chosen otherwise. It could result in the patient being deprived of a choice.

I. Patient Care Ethics and Payment

Using the four principles of bioethics, the tenets of ethics for patient care, the payment systems have clear effects on patient autonomy and agency, and may conflict with beneficence, non-maleficence, and justice.[6] The tension that providers experience in navigating payers while fulfilling their patient responsibility causes ethical dilemmas. Volume-based reimbursement schemes prioritize efficiency, regardless of these major bioethical principles. To truly evaluate a payment model, we need not vaguely consider the supposed moral intentions of a model – we need to evaluate the theoretical incentive design as it pertains to the tenets of bioethics. I propose a novel model for viewing incentives with a bioethical framework.

The motivation for viewing how the system design for payment models use incentives under a bioethical lens is summarized below.

a. Payments, by nature, create active and passive organizational incentives.

b. Incentives affect organizational and provider behavior, regardless of intent.

c. Changed behavior in response to a financial incentive directly and implicitly impacts the tenets of bioethics.

d. For payment models to be considered ethical, they must align organizational incentives with patient care goals and ethics.

The argument that incentives should not exist in healthcare because they foster competition and, therefore, cause disparities is acknowledged.[7] However, the argument against incentives ignores the reality of healthcare, especially in the United States, where the most progressive recommendations still retain a paying agency. Therefore, the focus in this paper concerns the existing payment models.

The alignment of predominant payment models—including fee-for-service, capitation or mixed models, and value-based payments —with patient care ethics is difficult. This paper argues that the value-based payment model is the most appropriately aligned model when considering health disparities, the Rawlsian difference principle, and distributive justice.

II. Payment Models and Patient Care Ethics Alignment

Payment models are highly varied. As it currently stands, the most widely used model globally is fee-for-service, a volume-based model in which insurance companies pay physicians and organizations for performed actions based on evaluations such as relative value units. Relative value units consider physician work, practice expense, service rendered, and professional liability.[8] Later models, like capitation, were enacted to control costs. Simply put, purely capitated payments consist of flat-term payments for patient care that do not change based on services rendered.[9] Within the past decade, value-based payments, which pay physicians based on patient value, as defined by outcomes divided by costs, became popular.[10] There are other approaches to paying for patient care, such as health savings accounts or direct primary care (patients directly pay physicians without insurance).[11] While these are assuredly interesting areas of study, the financial incentives mimic fee-for-service, in which physicians and organizations receive payments based on direct services rendered and will not be discussed further in this article.

III. Fee-For-Service

Fee-for-service is the main payment model worldwide.[12] It has played a large role in shaping the structural nature of healthcare, particularly in the United States.[13] Fee-for-service, although declining, is still pervasive in the US health system and has created market forces that indirectly affect the geographic distribution of care, with an obvious volume-based market force.[14] Even with the advent of alternative payment models, fee-for-service remains the primary mode of physician compensation by percentage in primary care in the US.[15]

Fee-for-service's financial and organizational incentives are based on the number of patients seen and services rendered. The World Health Organization stated in its 2010 Health System Financing report that this model likely leads to care overprovision, inefficiency, and upwardly spiraling costs.[16] The pervasive volume-based incentive in fee-for-service misaligns with patient care goals as patient care is not its primary goal. This rudimentary payment system attempts to finance health care as if it were any other good or industry. But more care is not necessarily better care, and fee-for-service leads to higher patient bills, higher system costs, and largely inefficient and unnecessary treatment schemes.[17] Tummalapalli, et al. found that capitated models had lower visit frequency and fewer interventional actions with no difference in outcomes compared to fee-for-service models. Care overprovision—in services rendered—and upwardly spiraling

costs are not in the best interest of patients, violating beneficence at the population level. The misalignment of incentives is at the root of the problem.

As a rudimentary payment system, fee-for-service does not have patient care in mind, nor has beneficence as its goal. To evaluate fee-for-service from its own goals, the question here should not center around whether this model is in the best interest of patients. Instead, it should focus on the principle of non-maleficence. Can we truly say that upwardly spiraling healthcare costs do not harm patients? In the US, fee-for-service has largely negative social effects on burdens in minority populations, enhancing disparity.[18] The system is arguably unjust, violating the principle of justice. Disadvantaged groups bear a disproportionally large brunt of the deleterious effects of fee-for-service.[19] With the wastefulness, the inefficiency, the failure to align with patient goals, and the injustice, it becomes clear that fee-for-service does not align with patient care ethics because of organizational and financial incentives.

IV. Capitation and Mixed Payment Models

Pure capitation is a less common model than fee-for-service. The maximum effectiveness of this model is generally achieved with some combination of fee-for-service or value-based payment modifiers.[20] Both in principle and practice, capping payments for a term or service period inherently controls costs by setting a payment "cap." From a theoretical perspective, the issue here is clear – there are minimal incentives in pure capitation to provide more care. In some cases, this can lead to care underprovision.[21] This neglect is a problem: whether intended, there are generally fewer visits and interventional approaches to care in pure capitation models.[22]

Some view the care under-provision as a disservice to patients. However, the true practice of capitation is rarely without some combined incentive model for organizations or physician salary.[23] Adding fee-for-service incentives to capitation balances these issues while maintaining a discordant theoretical incentive compared to patient care. Value-based modifiers add a more aligned incentive for reasons described in the following section. The overall nature of capitation is not inherently aligned or misaligned with patient care, given that it is a highly moldable model, and therefore is neutral regarding its alignment with patient care ethics.

V. Value-Based Payments

Since their inception, value-based payments have become a widespread and popular payment model internationally.[24] The payment revolves around value, defined as patient outcomes divided by costs. The assumption in adopting such a model is that outcomes and costs can be readily measured, which is a challenge in implementing this model. However, aligning payments with patient value has spurred the adoption of more accurate cost accounting systems and the innovation of patient-reported outcome measures. While the full details of cost accounting are beyond the scope of this paper, Robert Kaplan is a proponent of using time-driven activity-based costing, an essential component in calculating value and an empirically more accurate accounting method than the other predominant forms in healthcare and fee-for-service payments.[25]

While this is an accomplishment, perhaps the more ethically interesting innovation in value-based payments comes from measuring patient outcomes. These generally take form in two ways: objective measures and patient-reported measures. The objective measures include ideally controllable disease factors, such as hospital admissions or disease exacerbations in patients living with chronic obstructive pulmonary disease.[26] Such measures align payment incentives with quality and results, an important aspect

of patient care but not an absolute placeholder for ethical measures. One of the largest critiques of value-based payments has always been that value cannot simply be measured with empirical data but must account for patient values.[27] The solution to such a critique is patient-reported outcome measures (PROMs), which factor patient values and lifestyle into the empirical payment calculation.[28] A study by Groeneveld et al. showed that PROMs were useful in evaluating the progression of stroke patients at several different time intervals.[29] Bernstein showed that PROMs give insight into the sociodemographic factors a patient may be experiencing, which can guide targeted interventions.[30] To providers, these may not sound like innovative clinical tools, but they resemble the everyday scoring systems and social work consultations seen in patient care. PROMs are an attempt to formally incorporate such items directly to payment.

Value-based payments directly incentivize innovation, use of accurate costs and the consideration of patient values. However, there are valid critiques. This payment model has the potential to prioritize care for those who are healthy and more likely to achieve favorable outcomes. Adjustment for important social factors could worsen outcomes and undermine the model's propensity to drive value for all patients.[31] Comparatively, value-based payments still incentivize a market force that is more in line with patient care ethics when contrasted with the other predominant forms of payment. This payment model has the theoretical advantage of spurring competitive forces to work toward a goal-like value while outcomes consider patient priorities and costs to be more accurate. From an ethical standpoint, the ideal value-based payment model addresses beneficence toward patients with some (but comparatively less) potential for harm and worsening of disparities. Safeguards can protect patients in this realm. Another main ethical advantage of value-based payments is that they add more patient marketplace agency by allowing patient desires and priorities to play a direct role in the payment process. This is a unique benefit that value-based payments have over fee-for-service and pure capitation, where the latter models are simply modicums for payment, not modicums for patient agency. Based on these comparative ethics, the value-based payment models are the most aligned payment model with patient care ethics but require safeguards.

VI. Limitations of Payment Models in Addressing Disparities and Distributive Justice

The aforementioned payment models continually miss opportunities to explicitly incentivize care for underserved and at-risk populations. Studies have explicitly shown how fee-for-service can worsen care for minority groups. The greatest difference in care is seen in the chronically ill, the poor, and those with high burdens based on the social determinants of health.[32] While value-based payments have been touted as a potential route to incentivize care for these populations, comparative studies show that those of lower socioeconomic status experienced no benefit when using a value-based modifier.[33] Other scholars have pointed out that these payment models are both slower to roll out in low-resource areas and are more likely to have the unintended consequence of leading to lower funding in these areas.[34] Therefore, the disparity may be a lack of access to the model rather than a reflection of its capabilities.

These valid critiques of worsening health disparities under all existing payment models show that such models are not a silver bullet for the health system and that they do not address other crucial issues in medicine, like equity. However, this is not to say that payment models cannot address social disadvantages and disparities. Value-based payments more ethically align payment-related incentives and spur more innovation. To this end, innovation must take place with consideration for distributive justice. The Rawlsian difference principle, or the notion that any systemic approach must maximize the improvement of the least advantaged groups, is essential when discussing payment models.[35] As it currently stands, value-based payments may incentivize procedural justice or a more just and equitable process once patients are in the

healthcare system. Yet, none of them ensure a just distribution of care to those of low socioeconomic status. Future models must work towards incentivizing principles of distributive justice. While there have been many attempts to modify payments, those who design payment models clearly tend not to leverage financial benefits to help patients of low socioeconomic status. By leaving those least well-off in society out of the consideration, payment model designers contribute to systemic disparities, regardless of intent. All future designers of payment models must do more to improve incentive designs to work for these patients, not against them.

VII. How Should We Ethically View Incentive Design?

The public and those in charge of medical policy must realize the importance of market forces beyond efficiency. Payment incentives should align with patient well-being, autonomy, access to care for underserved populations, and market efficiency. While some of these factors will be more pertinent than others depending on which health system is under discussion, we need ethical principles for patients *on a system level* that prioritize the patient's interaction with the health system outside of purely clinical scenarios.

CONCLUSION

Payment models remain a powerful tool for any health system that pays providers or organizations. The simple act of payment creates both direct and indirect financial incentives. These incentives create market forces that affect how patients experience their care, directly impacting autonomy, beneficence, non-maleficence, and justice. As it currently stands, the predominant payment model of fee-for-service does not align with patient care ethics. While follow-up models to fee-for-service, such as capitation, aimed to simply control costs, neither explicitly intended to give patients marketplace agency or improve patient care ethics. The overall alignment of capitation and patient care ethics remained relatively neutral. Newer innovations such as value-based payments have a much stronger stated purpose of aligning payment with positive outcomes and lower costs, where outcomes have patient-defined criteria and costs are more accurate. Value-based payments create a comparatively more aligned model than fee-for-service or capitation. Yet no payment model fully addresses the tenet of justice, and the Rawlsian difference principle must be employed here to ensure that those of lowest socioeconomic status or the most disadvantaged are not worse off than before the implementation of a new payment model. As a system, healthcare should strive for the best possible outcomes for all patients, necessitating an integrated approach to social factors.

---

[1] Porter M. What is Value in Healthcare? *N Engl J Med*. 2010;363(26):2477-2482.

[2] Kontopantelis E, Reeves D, Valderas JM, Campbell S, Doran T. Recorded quality of primary care for patients with diabetes in England before and after the introduction of a financial incentive scheme: A longitudinal observational study. *BMJ Qual Saf*. 2013;22(1):53-64. doi:10.1136/bmjqs-2012-001033

[3] Linzer M, Bitton A, Tu SP, Plews-Ogan M, Horowitz KR, Schwartz MD. The End of the 15–20 Minute Primary Care Visit. *J Gen Intern Med*. 2015;30(11):1584-1586. doi:10.1007/s11606-015-3341-3

[4] Gupta R, Gupta S. The effect of explicit financial incentives on physician behavior. *Arch Intern Med*. 2002;162(5):612-613. doi:10.1001/archinte.162.5.612; Rosenthal M. How will paying for performance affect patient care? *AMA Ethics*. 2006;8(3):162-165.

[5] Wang Y, Ding Y, Park E, Hunte G. Do Financial Incentives Change Length-of-stay Performance in Emergency Departments? A Retrospective Study of the Pay-for-performance Program in Metro Vancouver. *Acad Emerg Med*. 2019;26(8):856-866. doi:10.1111/ACEM.13635

[6] Beauchamp T, Childress J. *Principles of Biomedical Ethics*. 8th ed. Oxford University Press; 2019.

[7] Groenewoud AS, Westert GP, Kremer JAM. Value based competition in health care's ethical drawbacks and the need for a values-driven approach. *BMC Health Serv Res*. 2019;19(1):1-6. doi:10.1186/s12913-019-4081-6

[8] Katz S, Melmed G. How relative value units undervalue the cognitive physician visit: A focus on inflammatory bowel disease. *Gastroenterol Hepatol (N Y)*. 2016;12(4):240-244.; Cattel D, Eijkenaar F. Value-Based Provider Payment Initiatives Combining Global Payments With Explicit Quality Incentives: A Systematic Review. *Medical Care Research and Review*. 2020;77(6):511-537. doi:10.1177/1077558719856775

[9] Tummalapalli SL, Estrella MM, Jannat-Khah DP, Keyhani S, Ibrahim S. Capitated versus fee-for-service reimbursement and quality of care for chronic disease: a US cross-sectional analysis. *BMC Health Serv Res*. 2022;22(1):1-12. doi:10.1186/s12913-021-07313-3; Emanuel EJ, Mostashari F, Navathe AS. Designing a Successful Primary Care Physician Capitation Model. *JAMA - Journal of the American Medical Association*. 2021;325(20):2043-2044. doi:10.1001/jama.2021.5133

[10] Porter M. 2477-2482.

[11] Kofman M. HSAs: A Great Tax Shelter for Wealthy, Healthy People but Little Help to the Uninsured, Underinsured, And People with Medical Needs. *AMA Ethics*. 2005;7(7):522-524.; Eskew PM, Klink K. Direct primary care: Practice distribution and cost across the nation. *Journal of the American Board of Family Medicine*. 2015;28(6):793-801. doi:10.3122/jabfm.2015.06.140337

[12] Cattel D, Eijkenaar F. 511-537

[13] Linzer M, Bitton A, Tu SP, Plews-Ogan M, Horowitz KR, Schwartz MD. 1584-1586.

[14] Lurie N. The role of market forces in US health care. *New England Journal of Medicine*. 2020;383(15):1401-1404.

[15] Reid RO, Tom AK, Ross RM, Duffy EL, Damberg CL. Physician Compensation Arrangements and Financial Performance Incentives in US Health Systems. *JAMA Health Forum*. 2022;3(1):e214634. doi:10.1001/jamahealthforum.2021.4634

[16] WHO. *Health System Financing Country Profile*. 2013.

[17] Tummalapalli SL, Estrella MM, Jannat-Khah DP, Keyhani S, Ibrahim S. 1-12.

[18] Hudson D, Sacks T, Irani K, Asher A. The price of the ticket: Health costs of upward mobility among African Americans. *Int J Environ Res Public Health*. 2020;17(4):1-18. doi:10.3390/ijerph17041179

[19] *Ibid.*

[20] Tummalapalli SL, Estrella MM, Jannat-Khah DP, Keyhani S, Ibrahim S. 1-12.; Emanuel EJ, Mostashari F, Navathe AS. 2043-2044; Brosig-Koch J, Hennig-Schmidt H, Kairies N, Wiesen D. How to improve patient care? An analysis of capitation, fee-for-service, and mixed payment schemes for physicians. *RUHR Economic Papers*. Published online 2013:1-36. doi:10.1080/00185860009596559

[21] Emanuel EJ, Mostashari F, Navathe AS. 2043-2044; Brosig-Koch J, Hennig-Schmidt H, Kairies N, Wiesen D. 1-36.

[22] *Ibid.*

[23] Emanuel EJ, Mostashari F, Navathe AS. 2043-2044.; Reid RO, Tom AK, Ross RM, Duffy EL, Damberg CL. e214634.

[24] Porter M. 2477-2482.; Teisberg E, Wallace S, O'Hara S. Defining and Implementing Value-Based Health Care: A Strategic Framework. *Academic Medicine*. 2020;95(5):682-685. doi:10.1097/ACM.0000000000003122

[25] Kaplan RS, Anderson SR. Time-Driven Activity-Based Costing Robert S. Kaplan and Steven R. Anderson November 2003. *Harv Bus Rev*. 2003;82(November):131-138.; Akhavan S, Ward L, Bozic KJ. Time-driven Activity-based Costing More Accurately Reflects Costs in Arthroplasty Surgery. *Clin Orthop Relat Res*. 2016;474(1):8-15. doi:10.1007/s11999-015-4214-0

[26] Shah T, Press VG, Huisingh-Scheetz M, White SR. COPD Readmissions: Addressing COPD in the Era of Value-based Health Care. *Chest*. 2016;150(4):916-926. doi:10.1016/j.chest.2016.05.002

[27] Lynn J, McKethan A, Jha AK. Value-based payments require valuing what matters to patients. *JAMA - Journal of the American Medical Association*. 2015;314(14):1445-1446. doi:10.1001/jama.2015.8909

[28] Groeneveld IF, Goossens PH, van Meijeren-Pont W. Value-Based Stroke Rehabilitation: Feasibility and Results of Patient-Reported Outcome Measures in the First Year After Stroke. *Journal of Stroke and Cerebrovascular Diseases*. 2019;28(2):499-512. doi:10.1016/j.jstrokecerebrovasdis.2018.10.033; Bernstein DN, Mayo K, Baumhauer JF, Dasilva C, Fear K, Houck JR. Do Patient Sociodemographic Factors Impact the PROMIS Scores Meeting the Patient-Acceptable Symptom State at the Initial Point of Care in Orthopaedic Foot and Ankle Patients? *Clin Orthop Relat Res*. 2019;477(11):2555-2565. doi:10.1097/CORR.0000000000000866

[29] Groeneveld IF, Goossens PH, van Meijeren-Pont W, et al. 499-512.

[30] Bernstein DN, Mayo K, Baumhauer JF, Dasilva C, Fear K, Houck JR. 2555-2565

[31] Tran L. Social Risk Adjustment in Health Care Performance Measures. *JAMA Netw Open*. 2020;3(6). doi: doi:10.1001/jamanetworkopen.2020.8020

[32] Webster NJ. *Medicare and Racial Disparities in Health: Fee-for-Service versus Managed Care.* Vol 28. Elsevier; 2010. doi:10.1108/S0275-4959(2010)0000028005

[33] Roberts ET, Zaslavsky AM, Mcwilliams JM. The value-based payment modifier: Program outcomes and implications for disparities. *Ann Intern Med*. 2018;168(4):255-265. doi:10.7326/M17-1740

[34] Bazzoli GJ, Thompson MP, Waters TM. Medicare Payment Penalties and Safety Net Hospital Profitability: Minimal Impact on These Vulnerable Hospitals. *Health Serv Res*. 2018;53(5):3495-3506. doi:10.1111/1475-6773.12833

[35] Ekmekci PE, Arda B. Enhancing John Rawls's Theory of Justice to Cover Health and Social Determinants of Health. *Acta Bioeth*. 2015;21(2):227-236. doi:10.4067/S1726-569X2015000200009