Using the Medical Loss Ratio to Incentivize the Adoption of Innovative Medical Technology

ABSTRACT

A persistent problem in the US health care system relates to the strange position of technology. Patients demand the cutting-edge, and doctors strive to provide it, but new technology is the single greatest source of cost increases in a country where the cost of health care is already astronomical. Because of this cost, the rate of actual adoption of technology is relatively low. This Note’s solution is to rewrite the Medical Loss Ratio (MLR) rules to mitigate cost increases and introduce better technology to a health care system that demands it. The MLR allows insurers to keep only a small portion of the premiums they take in; the rest must be spent on health care, quality improvements, or else be rebated back to the customer. Creating an Elastic MLR and more lenient quality improvement definitions would allow insurance companies to keep more of their premiums in exchange for higher investment in quality improvements related to technology.

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The Patient Protection and Affordable Care Act (PPACA)\(^1\) is a pantagruelian\(^2\) overhaul of the health care industry. The PPACA consists of hundreds of reforms meant to improve the quality of health care across the board by improving access to health care, removing insurance industry abuses, and decreasing the cost of health insurance for most Americans.\(^3\) Among those reforms is the controversial provision requiring insurers either to meet a minimum Medical Loss Ratio (MLR) or to refund the difference to their subscribers.\(^4\) The purpose of the MLR is to restrict insurance companies’ profits in order to indirectly reduce premiums.\(^5\) Whether the MLR will accomplish its goal remains to be seen.\(^6\)

The MLR forces health insurance companies to report their annual premium intake and expenditures.\(^7\) Expenditures must meet a certain percentage of the premium level: 80 percent for small group insurers and 85 percent for large group insurers.\(^8\) If they do not, the remainder is refunded to plan subscribers on a pro rata basis.\(^9\) The MLR consists of various expenditures, which include more than just subscribers’ medical claims.\(^10\) The MLR includes quality improvement activities, expenditures intended to generally improve the quality of health care, in order to meet the other intention of the PPACA: increasing the quality of health care.\(^11\) However, these quality improvements have so far been underutilized, making up only 0.74 percent of the aggregate MLR of all insurance companies in 2011 and remaining below 1 percent in 2012.\(^12\) Despite this poor initial

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6. See id.
11. Id.; see THE WHITE HOUSE, supra note 3.
showing, the quality improvement provision has the potential to drastically increase investment in health care technology.\textsuperscript{13}

Any attempt to modify the MLR to encourage investment in technology will have to deal with a variety of factors that currently prevent investment in quality improvement activities. Investment in technology generally drives up costs.\textsuperscript{14} While the United States is a top innovator in medical technology,\textsuperscript{15} the actual adoption rate is low because of the associated increase in cost.\textsuperscript{16} Therefore, while opportunities for insurance companies to invest in technology exist, the incentive to keep costs low tends to prevent the introduction of technology.\textsuperscript{17} Additionally, the quality improvement definitions are too narrow and restrictive for any insurance company to feel comfortable taking on the risk.\textsuperscript{18} If an investment does not meet the definition, or if an investment does not demonstrate improved health outcomes,\textsuperscript{19} it will instead reduce the company’s profits.

Updating regulations and instituting a minor change in the MLR's definition may encourage investment in health care technology. Part I delineates the MLR requirements. Part II discusses the interference with the MLR’s main goal and other criticisms of the provision. Part III outlines a new Elastic Medical Loss Ratio (Elastic MLR) amendment and explains how it will increase health care innovation. And Part IV concludes that an Elastic MLR will spur the development of beneficial and innovative technology. The Elastic MLR would provide that, up to a certain cap, for every dollar spent on a quality improvement, a company’s minimum MLR decreases by a dollar. By implementing these regulatory changes, the modified law can increase the share of quality improvement activities in the MLR.

\textsuperscript{13} See id.
\textsuperscript{14} See id.
\textsuperscript{16} See infra Part II.A.
\textsuperscript{17} See infra Part II.B.
\textsuperscript{18} 45 C.F.R. § 158.150(b)(1)(ii) (2014).
I. The Medical Loss Ratio

A. Basic Provisions

The MLR is a measure of the percentage of aggregate health care premiums spent on health care claims and investments in quality improvements. To determine the MLR, the PPACA requires that insurance companies prepare a report each year detailing how they spent their premiums. An insurance company must explain both how much money it received and how much it paid out on claims. When salaries, fraud detection, and other costs join the equation, the room for profit becomes increasingly slim. Traditionally, insurance companies generate profit by simply charging heftier premiums, which, at least theoretically, reduces the level of access to health care for those who cannot afford insurance or do not receive any through employment. Conversely, the MLR attempts to increase access by creating incentives to reduce premiums.

The MLR rebate provision is meant to incentivize insurers to either lower premiums or increase the level of coverage in order to avoid non-compliance fines, which will ultimately lead to greater value per dollar for the policyholder. The PPACA sets the minimum MLR at 80 percent for small group insurers and 85 percent for large group insurers. Those insurers who do not meet this minimum must issue...

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20. See The White House, supra note 3. Only the non-claim portion of the premium money can go towards administrative costs or count as profit. Id. The full Medical Loss Ratio (MLR) calculation can be summarized as “(Medical Claims + Quality Improvement Expenditures) divided by (Earned Premiums - Taxes, Licensing and Regulatory Fees).” Suzan M. Kirchhoff, Cong. Research Serv., R42735, Medical Loss Ratio Requirements Under the Patient Protection and Affordable Care Act (ACA): Issues for Congress 5 (2014).


22. Id. Certain other expenses, such as state taxes and peculiarities, are also included among the reporting requirements. 45 C.F.R. § 158.160.

23. The White House, supra note 3.

24. See id. (characterizing this practice as abusive).

25. Id. The PPACA attempts to fix many questionable tactics of health insurance companies, such as the formerly and perplexingly legal practice of rescission, where an insurer could drop coverage as soon as a patient became sick. 42 U.S.C. § 300gg-12 (2012) (prohibiting rescissions except in instances of fraud or intentional misrepresentation).

26. See Kirchhoff, supra note 20, at 2. If profits are capped at a theoretical 20 percent, an insurer can either lower premiums so that claim expenses will meet the 80 percent minimum, or increase coverage so that policy holders will see better value for each dollar of premium money. See id. The tricky part is that health insurance is unlike other insurance in that every policyholder will eventually need to go to a doctor unless they die along the way, meaning that claims—so, costs—are guaranteed, but the extent of them is not. See Mason Felton Reid, Note, Health Care for Low-Income Classes in an Individual Mandate System: Lessons the United States Can Learn from Switzerland, 41 Ga. J. Int’l & Comp. L. 803, 828 (2013).

a rebate for the shortfall to policyholders on a pro rata basis.”

For example—assuming no investment in quality improvements—if a small insurer takes in $100,000 in premiums during a year, but only spends $60,000 on claims, $20,000 must return to the policyholders to make up the difference. The only other way to increase the MLR, besides paying additional claims, is to spend money on quality improvement activities, which can help an insurer bolster its MLR if its claims costs are lacking. A quality improvement activity is any expenditure by an issuer intended to improve the general quality of health care, subject to the many restrictions detailed in the next Section.

B. Quality Improvements: An Alternative Payout

A non-claim plan expenditure is a quality improvement activity only if it falls into one of five categories: (1) improving health outcomes, (2) preventing hospital readmissions, (3) improving patient safety, (4) increasing wellness and health activities, and (5) enhancing the use of health care data. If the activity fits into one of those categories, it must also meet four more requirements: improve health quality, measurably increase the likelihood of desired health outcomes, be directed towards enrollees, and be grounded in evidence-based medicine.

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29. 42 U.S.C. § 300gg-18; 45 C.F.R. § 158.150; see also Medical Loss Ratio Requirements Under the Patient Protection and Affordable Care Act, 77 Fed. Reg. 28,790, 28,794 (May 16, 2012) (to be codified at 45 C.F.R. pt. 158) (explaining, within the “Benefits” section, that informing consumers of MLR spending “will provide an incentive to issuers to spend as high a percentage of premium dollars on health care and quality improvement as possible, rather than just enough to avoid paying rebates”).
30. 45 C.F.R. § 158.150.
31. 45 C.F.R. § 158.150(b)(2); see also Medical Loss Ratio Requirements Under the Patient Protection and Affordable Care Act, 77 Fed. Reg. 28,790 (May 16, 2012) (to be codified at 45 C.F.R. pt. 158). The full text of the rule as codified follows:
   (i) Improve health outcomes including increasing the likelihood of desired outcomes compared to a baseline and reduce health disparities among specified populations.
   (ii) Prevent hospital readmissions through a comprehensive program for hospital discharge.
   (iii) Improve patient safety, reduce medical errors, and lower infection and mortality rates.
   (iv) Implement, promote, and increase wellness and health activities.
   (v) Enhance the use of health care data to improve quality, transparency, and outcomes and support meaningful use of health information technology.

45 C.F.R. § 158.150(b)(2). Each category also includes examples of activities that might fit. See, e.g., 45 C.F.R. § 158.150(b)(2)(ii)(A). The fifth category carries special definitions and requirements for improvement of health information technology. 45 C.F.R. § 158.151 (2010).
32. 45 C.F.R. § 158.150(b)(1). The full text of these requirements is as follows:
   (i) Improve health quality.
   (ii) Increase the likelihood of desired health outcomes in ways that are capable of being objectively measured and of producing verifiable results and achievements.
   (iii) Be directed toward individual enrollees or incurred for
The definition specifically excludes activities designed primarily to contain costs. Cost containment remains a thorny issue in the PPACA. The prevailing idea is that too much effort on the part of insurance companies to reduce or contain costs will lead to a decrease in the quality of health care. For instance, a doctor might encourage a patient to walk it off, rather than take an X-ray, in an effort to keep costs low. While the ever-rising cost of health care is always a concern, the fear of deleterious reductions in quality has prevented cost concerns from entering into a doctor’s evaluation. Instead, the traditional approach is to view insurance as a check-writing company. Absent fraud, an insurer was under an obligation to pay a claim if the doctor’s prescribed treatment fit the diagnosis, regardless of whether there were cheaper, adequate alternatives available. This professional paradigm is slowly incorporating economic considerations into its calculation.

Despite the exclusion of pure cost containment, insurance companies can take solace in the fact that activities that mainly

the benefit of specified segments of enrollees or provide health improvements to the population beyond those enrolled in coverage as long as no additional costs are incurred due to the non-enrollees. (iv) Be grounded in evidence-based medicine, widely accepted best clinical practice, or criteria issued by recognized professional medical associations, accreditation bodies, government agencies or other nationally recognized health care quality organizations.

Id. 45 CFR § 158.150(b)(1) (explaining that, if the activity is designed primarily to control or contain costs, then expenditures for it may not be included as a quality improvement activity).


See James F. Blumstein, Of Doctors and Hospitals: Setting the Analytical Framework for Managing and Regulating the Relationship, 4 IND. HEALTH L. REV. 211, 212 (2007). In any other business, retaining quality while reducing costs is a benefit, in health care, the moral component of providing life-saving services instills a fear of quality reduction at the outset of any cost reduction effort, without regard to such effort's success. See id.

See Pegram v. Herdrich, 530 U.S. 211 (2000), for an extreme but realistic example of a doctor incentivized to reduce in-office ultrasound procedures, ordering it done at a different facility eight days later for patient complaining of abdominal pain, leading to ruptured appendix and peritonitis.


See, e.g., Hughes v. Blue Cross of Northern California, 263 Cal.Rptr. 850 (Cal. Ct. App. 1989); see Blumstein, supra note 35.

See Blumstein, supra note 35, at 220.

See id. at 228–30.
improve quality, but include some incidental cost-controlling benefits, count as a quality improvement.\textsuperscript{41} However, insurance companies must demonstrate that their quality improvements have actually improved health outcomes.\textsuperscript{42} Fitting an initiative into this narrow category—and proving it—may create consternation for insurance companies. If a company cannot show that an expenditure used to introduce new equipment into practice has actually improved health outcomes, regardless of potential technological benefits, then the insurance company may have to swallow the cost. A new device that allows doctors to diagnose the common cold faster, for example, would be a type of beneficial technology that would not directly improve health outcomes. The nature of the technology diminishes its impact because the patient has the same cold and the same outcome, but the true benefits of increased speed are only visible when spread out over many instances of cold patients. This type of expenditure might not fit into the categories despite having a theoretical benefit, causing a reluctance to invest. Perhaps as a way to provide guidance on this quandary, the quality improvement definitions include examples to elucidate what might fall under the definition.\textsuperscript{43} As we will see below, however, the ambiguity in the examples provided does little to encourage investment in quality improvement.\textsuperscript{44}

\textbf{C. Purpose and Success of the MLR}

Like the whole PPACA, the intention of the MLR is to both decrease health care premiums and improve health care quality.\textsuperscript{45} Specifically, Congress intended to reduce the insurance companies’ administrative costs and pass the savings on to the consumer.\textsuperscript{46} Additionally, the MLR provisions provide more transparency to consumers about what insurance companies actually spend money on, as Congress found it important that a subscriber’s premium money actually go towards paying for health care services and improvements.\textsuperscript{47} The Department of Health and Human Services (HHS), which promulgates the rules surrounding much of the PPACA, agreed with Congress’s finding. In the interim final rule’s regulatory impact analysis, HHS concluded that the MLR would incentivize

\begin{footnotesize}
\begin{enumerate}
\item[41.] 45 C.F.R. § 158.150 (2014).
\item[42.]  See Cong. Budget Office, supra note 14, at 12.
\item[43.]  See 45 C.F.R. § 158.150.
\item[44.]  See infra Part II.B.
\item[46.]  See The White House, supra note 3.
\item[47.]  See Kirchhoff, supra note 20.
\end{enumerate}
\end{footnotesize}
insurance issuers to invest in quality improvement activity to meet the MLR threshold. These investments then theoretically lead to improvement in overall health quality.

Spending on quality improvements represented only a small percentage of the aggregate, making up only 0.74 percent of the MLR in 2011. Insurance companies gave a total of $1.3 billion in rebates back to consumers in 2012, which was on the high end of HHS’s estimates. For a multi-trillion dollar industry, however, this was just a drop in the bucket.

So far, it is unclear whether the MLR will actually lead to a cognizable decrease in premiums—it is still too early to tell. At the very least, the MLR will likely temper the rate of premium increases. In states that have minimum MLR regulations, premium rates decreased years after the regulation kicked in. Insurance companies continue to grapple with several adverse forces, which are preventing them from investing in quality improvement activities despite HHS’s regulations.

49. See id.
53. See Lowrey, supra note 5.
54. See id. (noting that while the rate of increase of health insurance premiums is going down, no one is quite sure why).
55. See Medical Loss Ratios: Evidence from the States, FAMILIES USA 3 (June 2008), http://research.policyarchive.org/8286.pdf (noting that New Jersey, with a medical loss ratio of 75 percent, returned $11.6 million between 1993 and 2006).
II. THE QUALITY IMPROVEMENT DEFINITION NEEDS A CHECKUP

Inspired by such a lofty goal as improving health quality, it is easy to assume that a blanket investment in health care technology is a good idea. But, tragically, adoption of new technology tends to drive up costs.\footnote{See sources cited supra note 14.} Thus, the health care industry is slow to adopt new technology,\footnote{See Andersen et al., supra note 16, at 822 (“Although the United States is an early adopter of new technology, once the technology has diffused, it appears to acquire technology at rates similar to those of other industrialized countries. . . . Also, the United States does not always provide the most sophisticated procedures.”).} despite the fact that the United States is the top innovator in the development of new technology.\footnote{See Boehm, supra note 15.} The quality improvement definition of the MLR has the potential to guide the introduction of technology in ways that mitigate the risk of runaway costs, but so far, insurance companies have shied away from the provisions.\footnote{See infra Part II.A.}

Part of the problem of underinvestment in quality improvement activities is the narrow definition of what counts as a quality improvement.\footnote{See supra Part II.A.} The definitions are restrictive and seemingly apply only to a small set of technology expenditures.\footnote{See id.; see also infra text accompanying notes 84–108.} While the stated purpose of the regulation claims to allow for any expenditure intended to improve health quality, it contains several limitations that weaken the potential impact.\footnote{See infra Part II.A.}

There is a perverse incentive inherent in investing in health care technology because insurance companies view technology as cost inducing.\footnote{See Andersen et al., supra note 16; NAT’L CTR. FOR HEALTH STAT., U.S. DEP’T OF HEALTH AND HUMAN SERV., PUB. NO. 2010-1232, HEALTH, UNITED STATES, 2009: WITH SPECIAL FEATURE ON MEDICAL TECHNOLOGY 59 (2010), available at http://www.cdc.gov/nchs/data/hus/hus09.pdf.} Despite the many benefits for hospitals in adopting technology, and the availability of new technology on the market, the uptake has been slow; meanwhile the costs have increased.\footnote{45 C.F.R. § 158.150(a) (2014).} Companies must also demonstrate that all investments in quality improvements have actually improved health outcomes,\footnote{45 C.F.R. § 158.150(b)(1)(ii). The MLR regulations demand that the quality improvement activity be based in “evidence-based medicine,” but do little to define what that entails. See 45 C.F.R. §§ 158.103, .150(b)(1). The above requirement states that each activity must be “capable of being objectively measured and of producing verifiable results and achievements.” 45 C.F.R. § 158.150(b)(1)(ii); see Health Insurance Issuers Implementing Medical Loss Ratio (MLR) Requirements Under the Patient Protection and Affordable Care Act, 75 Fed. Reg. 25,144 (May 7, 2010).} which can
be expensive to prove. Further, if deemed invalid, it is unclear whether the whole investment will then come out of the pool of non-MLR premium money that the company is allowed to keep.

A. The Perverse Incentive of Insurance Companies

The public views investment in medical technology as a good thing because people will live longer and be healthier, but insurance companies lack the same sentimentality because of the inherent incentive that discourages investment in technology. Medical technology ultimately prolongs life, which likely increases the number and expense of medical claims that an insurer will have to pay out. Additionally, new technology is expensive and often replaces treatments that are much cheaper. Compounding the expenses incurred by investment in a new technology is the broader pool of insured patients suddenly available when a previously untreatable disease becomes treatable.

Over the long term, what many might see as a life-changing innovation, insurers will see as just another increase in cost. For

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68. See Pieter H.M. van Baal et al., Lifetime Medical Costs of Obesity: Prevention No Cure for Increasing Health Expenditure, 5 PLOS MEDICINE 242, 245 (2008), available at http://www.plosmedicine.org/article/fetchObject.action?uri=/info%3Adoi%2F10.1371%2Fjournal.pmed.0050029&representation=PDF, for a study finding that because smokers and obese people die younger, healthy people ultimately have higher health care costs in the long run.

69. CONG. BUDGET OFFICE, supra note 14. Additionally, providing new services or expanding the reach of old services based on new technology creates expenditures where previously there were none. Id.

70. See id.

71. See GAO, EFFECT ON LONG-TERM FEDERAL BUDGET, supra note 34; CONG. BUDGET OFFICE, supra note 14, at 1; Daniel Callahan, Health Care Costs and Medical Technology,
example, if a person who would have died without a medical ventilator is instead saved because of its development, that person will continue to file claims that they would not have otherwise. He or she may also not necessarily have a good quality of life either—imagine the case of a person kept alive by a ventilator but in a coma, or needing expensive daily medication to keep the heart ticking. Therefore, despite the positive aspects, insurance companies have no monetary incentive to cover life-extending or life-saving technologies, create programs for their introduction into common use, or contribute to their research and development. Whatever benefit technology provides to the public, the bottom line for insurance companies is protecting long-term profit.

Regardless of the detrimental incentives, certain technologies can, in fact, reduce costs. It is hard to predict when technological innovation will actually have a positive effect, and when it will do little more than raise costs unnecessarily. On the other hand, a widget that reduces the amount of time a doctor has to spend away from patients—for example, freeing five extra minutes per hour previously spent reading patients’ charts—will have an upfront cost, but will increase the amount and quality of the doctor’s interactions with patients overall. These increased benefits do not outweigh the costs only if the widget involves an upkeep cost that dwarfs the prior value of the doctor’s time over the long term. As the next Section describes, the quality improvement definitions may not even cover the investment in the first place—cutting into the insurer’s profits no matter the benefit to patients by adding a new expense.


72. See van Baal et al., supra note 68.
73. See id.
74. See Andersen et al., supra note 16, at 829.
75. See infra notes 134–46 and accompanying text.
77. See CONG. BUDGET OFFICE, supra note 14, at 13.
78. See id.
79. See infra Part II.B.
B. Restrictive Quality Improvement Definitions

Congress created the quality improvement activities provisions to both increase health care quality and reduce costs; and the provisions’ definitions reflect these ultimate goals. As noted above, technology is a clear potential source of quality improvement, but it is tricky to predict where the introduction of technology will increase or reduce costs. Regardless, the definitions detailed in Part I.B may be too restrictive for companies to want to invest in quality improvement activities at all, let alone in technology initiatives. It is unclear what exactly would count as a quality improvement because the five categories of quality improvement are vague. While the National Association of Insurance Commissioners (NAIC) warned against making the rules so broad as to allow companies to pack any expense into the MLR, they also warned against being so narrow as to preclude any benefit. So Congress is walking a tightrope—it must determine how to define quality improvement activities in a way that allows insurers to make investments in quality with some risk, but in such a way that also prevents investments that are too risky and that curtail the MLR’s overarching goal of reducing premiums.

The first category of quality improvement, improving health outcomes, at first glance appears to encourage more involvement on the part of an insurer to influence care decisions. However, the examples described by the rule seem to be more informational in scope. The first two, effective case management and addressing ethnic, cultural, or racial disparities in effectiveness, are about the management of care on a broad level. The third and fourth examples are quality reporting and implementation of health information

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80. See 45 C.F.R. § 158.150.
81. See supra Part II.A.
82. See infra Part II.C.
83. See 45 C.F.R. § 158.150.
85. See id.
86. Category one includes increasing the likelihood of desired health outcomes by reducing health disparities among some specified populations. Specifically, it encourages direct interaction of the insurance company, the providers, and the enrollees to reach that goal. 45 C.F.R. § 158.150(b)(2)(i)(A) (2014) (providing as examples: effective case management, addressing disparities in effectiveness, quality reporting, health information technology, accreditation fees, and reporting codes).
87. See id.
88. See id.
technology to support the activities. The fifth is accreditation fees, and the sixth is to encourage the specific implementation of the ICD-10 reporting codes. These examples are very narrow, and an insurer might be hesitant to invest in a more hands-on technology implementation that will actually improve health outcomes. If an insurer invests in something not specifically related to these examples and reports it at the end of the year, the statute could lead to a difficult decision about whether the activity is similar enough to the information-based examples.

The second category, preventing hospital readmissions, suffers from similarly narrow language. These examples focus on communication between a doctor and a patient, instead of introducing innovative techniques to prevent readmission. Comprehensive discharge planning, for instance, involves informing the patient about the transition from hospital to home. The other two examples emphasize the same patient-centered focus—making sure the patient knows how to care for himself or herself and having more communication with a patient over the phone or through online checkups.

The third category addresses hospital-acquired illnesses, an all too common source of health care cost increases. For example,
sometimes a patient will stay at a hospital for a day due to a broken arm, but catch pneumonia from other sick patients’ pathogens.\textsuperscript{98} These illnesses may travel through the air, or simply on a doctor who forgot to wash his or her hands in between patients.\textsuperscript{99} In addition to hospital-acquired illness, the examples included in the regulations identify three other concerns—best practices to avoid harm, evidence-based medicine in addressing clinical errors, and prescription drug review to prevent adverse drug interactions.\textsuperscript{100} While these concerns are important for reducing costs (unknowingly prescribing a drug with adverse interactions can lead to lawsuits),\textsuperscript{101} the examples again focus on communication and review, rather than technological innovation, as a solution.\textsuperscript{102}

The fourth category, promoting wellness, addresses public education and patient coaching, including a specific reference to rewards, such as reductions in co-payment or other incentives.\textsuperscript{103} In other words, your insurer can pay you to quit smoking.\textsuperscript{104} Again, the emphasis is on communicating and educating patients, not on introducing technology into the process.\textsuperscript{105}

The final category, enhancing the use of health care data, is enshrined in its own section of regulations because it is an area of particular importance.\textsuperscript{106} Allowing easy access to information and evaluative abilities is certainly a benefit to the health care

\begin{thebibliography}{99}
\bibitem{99} See Klevens et. al., \textit{supra} note 97.
\bibitem{100} 45 C.F.R. § 158.150(b)(2)(iii).
\bibitem{102} See 45 C.F.R. § 158.150(b)(2)(iii).
\bibitem{103} Category four suggests lifestyle programs intended to influence people to generally live more healthily—focusing on public education, chronic illness management, and coaching patients to influence them to eat healthy, exercise, or quit smoking. 45 C.F.R. § 158.150(b)(2)(iv); \textit{see also} 42 U.S.C. § 300gg-4 (2012).
\bibitem{105} See 45 C.F.R. § 158.150(b)(2)(iv).
\bibitem{106} This category provides for some technological infrastructure—maintaining and sharing electronic records, tracking the spread of disease, analyzing drug interactions, and evaluating patient health outcomes. \textit{See} 45 C.F.R. §§ 158.150(b)(2)(v),151 (defining a “meaningful use” of health record technology).
\end{thebibliography}
ecosystem. This category encourages the use of electronic health records, as many health care providers still use ink and paper to store a patient’s health records. Because of the difficulty in relaying information kept on paper records, doctors in an unfamiliar hospital may, for example, learn too late that an emergency patient is allergic to penicillin. This mistake further drives up costs.

When the categories are so vague, it is unclear whether they would include a device that enforces hand washing for doctors, despite the benefit such a system would provide for the goal of improving health outcomes. A hospital might benefit if a new source of technology would prevent the spread of diseases between doctors and patients. Most hospitals require that doctors regularly disinfect their hands in between patients, but an overworked doctor could easily forget. A technology company could offer a solution by giving all doctors a device containing disinfectant that reminds doctors to wash their hands and wirelessly tracks the use of the disinfectant. Adopting this technology and implementing it in a hospital requires dedication and resources that a hospital might not readily have. However, it is not clear whether such a device would fit within the above categories as they currently stand. If the MLR is to


110. 45 C.F.R. § 158.150(b)(2) (stressing “improving health outcomes”).


112. Id.


114. Corrigan, supra note 111.


116. Though the categories’ titles seem helpful at first glance (“improving health outcomes” and “preventing readmission”), the focus of the examples is on education and dialogue. 45 C.F.R. § 158.150(b)(2)–(v) (2014); see NAT’L ASS’N OF INS. COMM’RS, supra note 84.
encourage investment in quality improvements, the definitions need a higher degree of certainty.

Insurance companies will want to maximize profit, especially as the PPACA has slimmed down their margins.\textsuperscript{117} In the absence of an MLR, cutting costs would have been an excellent way to increase profit.\textsuperscript{118} Cost cutting is not always a bad thing.\textsuperscript{119} Encouraging a doctor to prescribe a generic drug rather than a name brand, for example, produces about the same effect for a fraction of the cost, leading to the same “health outcome.”\textsuperscript{120} Unfortunately, the quality improvement definition demands that the activity not cut costs unless as a by-product of some other improvement.\textsuperscript{121} When the insurer is required to show over time that quality improvement activities worked, these incidental cost containments might lose their luster.\textsuperscript{122} Something that does not demonstrate improved health will probably come out of the company’s overhead or profits, which can be devastating for a small insurer with only a sliver within its 20 percent non-MLR premium money to spare.\textsuperscript{123}

The quality improvement provisions as detailed above reward investment in indirect health improvements, such as preventing hospital readmissions or improving health information technology.\textsuperscript{124} They attempt to do this mostly through encouraging communication and overall health management.\textsuperscript{125} Improving health information technology, the most overt technology-related goal of the PPACA, has had problems of its own—despite important protections under the American Recovery and Reinvestment Act (ARRA),\textsuperscript{126} use of health information technology has failed to expand to levels predicted back in

Additionally, the requirement to show that it actually improved health outcomes means that benefits spread over an array of dissimilar patients will be tougher to prove. See 45 C.F.R. § 158.150(b)(1)(ii).


118. \textit{Id.}; see also THE WHITE HOUSE, supra note 3.

119. See Blumstein, supra note 35.

120. See id.

121. 45 C.F.R. § 158.150(c)(1).

122. See 45 C.F.R. § 158.150(b)(1)(ii).

123. See Epstein, supra note 117.

124. 45 C.F.R. § 158.150(b)(2).

125. See id.

2005.  

It is also unclear whether encouraging a hospital to buy a more efficient and accurate MRI machine by subsidizing the cost of its use would count under these rules.  

This is because it would be hard to prove that the new MRI machine actually improved health outcomes.  

Reducing cost in this situation is desirable—since they are cheaper, doctors could order more MRIs for the same price as the old machine.  

But since the health outcome improvement would be hard to prove, it might instead be classified as cost containment and come out of the provider’s profits.  

Because this provision does not account for the perverse incentive, it becomes a barrier to the adoption of innovative technology in the hospital.

C. Economic Realities of Novel Health Care Technology

Technological change has been the single greatest contributor to rising health care costs in the United States over the past four decades.  

Between 1965 and 2005, health care costs increased at a rate more than double the national GDP, making health care spending almost 15 percent of the GDP in 2005.  

Approximately half of those costs can be attributed to increased availability and use of technology.  

As new methods of using technology become available, more doctors start using them and more insurance plans start covering them.  

Technology is adopted not only because of the need for new solutions to ailments, but also because American patients simply prefer the newest technology and doctors tend to want to provide these technologies to satisfy their patients.

127. See Richard Hillestad et al., Can Electronic Medical Record Systems Transform Health Care? Potential Health Benefits, Savings, and Costs, 24 HEALTH AFF. 1103 (2005); see also Arthur S. Kellerman & Spencer S. Jones, What It Will Take To Achieve The As-Yet-Unfulfilled Promises Of Health Information Technology?, 32 HEALTH AFF. 63 (2013) (describing the reasons why the RAND study’s predictions failed to pan out); Whitney, supra note 108.

128. 45 C.F.R. § 158.150(b)(1)–(2); see also CONG. BUDGET OFFICE, supra note 14, at 12.

129. 45 C.F.R. § 158.150(b)(2).

130. Id.

131. See van Baal et al., supra note 68.

132. See GAO, Effect on Long-Term Federal Budget, supra note 34; CONG. BUDGET OFFICE, supra note 14, at 1; Callahan, supra note 71, at 79–82. However, note that most estimations of the sources of rising health care costs tend to circumscribe identifiable sources and attribute all else to technology. See CONG. BUDGET OFFICE, supra note 14, at 1.

133. CONG. BUDGET OFFICE, supra note 14, at 3 (noting that per capita health care spending grew at 4.9 percent per year while the GDP grew at 2.1 percent).

134. See GAO, Effect on Long-Term Federal Budget, supra note 34, at 30 (citing Sheila Smith et al., Income, Insurance, and Technology: Why Does Health Spending Outpace Economic Growth, 28 HEALTH AFF. 1276 (2009)).

135. Id.

136. Herndon et al., supra note 67, at 1293–1302; see also David Orentlicher, Cost Containment and the Patient Protection and Affordable Care Act, 6 FIU L. REV. 67, 68–72 (2010)
system values the life-saving and cost-reducing ideals of better technology, but ironically leads to increased costs, with somewhat unpredictable benefits.\textsuperscript{137} For insurers, new technology expands the amount of services available, but does so by replacing equivalent lower-cost services and increasing the number of instances of utilization.\textsuperscript{138}

Despite this trend, there are few controls for how to mitigate the costs of new technology.\textsuperscript{139} The US government funds the Agency for Healthcare Research and Quality (AHRQ) within the Department of Health and Human Services.\textsuperscript{140} The agency’s goal is to achieve better quality health services through scientific research and by promoting improvements in practices.\textsuperscript{141} Unfortunately, this agency appears to be ineffective and underfunded.\textsuperscript{142} Alternatively, private organizations attempt to track health technology advancement, and many insurance plans use data and information to evaluate new technology when deciding whether to start covering certain claims.\textsuperscript{143} Though technology is traditionally seen as cost-increasing, it may be that the implementation, not the technology itself, creates cost, and more attention to the effects of technological change may help predict the chance that an innovation might increase or decrease costs.\textsuperscript{144}

Economic considerations, once a big no-no in the health profession, have begun to creep into a doctor’s diagnosis.\textsuperscript{145} Traditionally, the doctor is the professional whose diagnosis decisions were followed, with the insurance company acting simply as a wallet that pays for the medical judgment.\textsuperscript{146} Compounding this problem

\textsuperscript{137} Herndon et al., \textit{supra} note 67, at 1298.
\textsuperscript{138} \textit{Id.}; \textit{CONG. BUDGET OFFICE, supra} note 14, at 12.
\textsuperscript{139} Herndon et al., \textit{supra} note 67, at 1294.
\textsuperscript{140} 42 U.S.C. § 299 (2012).
\textsuperscript{141} \textit{Id.} (“[E]nhance the quality, appropriateness, and effectiveness of health services, and access to such services, through the establishment of a broad base of scientific research and through the promotion of improvements in clinical and health system practices . . . .”).
\textsuperscript{143} \textit{Id.}
\textsuperscript{145} See Blumstein, \textit{supra} note 35.
\textsuperscript{146} See \textit{id.} at 220.
was the fee-for-service model, which incentivizes a doctor to provide unnecessary care because insurance paid for it without a review of its necessity.\textsuperscript{147} As costs rose to almost unsustainable levels, insurance companies began to question the complete deference to a doctor’s diagnosis.\textsuperscript{148} Thus, many of the PPACA’s innovations focus on cost containment.\textsuperscript{149} The PPACA makes substantial cuts to Medicare and Medicaid reimbursement,\textsuperscript{150} and increases cost sharing for beneficiaries.\textsuperscript{151} Additionally, the PPACA sets up new Accountable Care Organizations (ACOs), which intend to provide more comprehensive health care with more relaxed cost cutting controls.\textsuperscript{152} Notably, the fear of cost containment is that the reduction of cost will lead to a corresponding reduction in health care quality.\textsuperscript{153} Thus, the PPACA injects the maintenance of certain quality metrics into many payment structures.\textsuperscript{154} This may prevent the overprovision of unnecessary services.\textsuperscript{155}

The trouble seems to be in reconciling doctors’ incentives to provide expensive services, with the insurance companies’ incentives to reduce claim payments from premium revenues.\textsuperscript{156} For a somewhat gruesome example, a podiatrist can charge a diabetes patient $150 for an office visit to prevent common foot problems, which will lead to lower costs and better health for the patient overall.\textsuperscript{157} Simply amputating the foot entirely can bring in a one-time payment of more than $30,000.\textsuperscript{158} So, the podiatrist may have a strange monetary incentive to wait and see patients whose illness has advanced to the point where it requires amputation. A practice that promotes the prevention of health problems will see a decrease in revenue because of the low income generated from office visits,\textsuperscript{159} but a practice that

\begin{itemize}
\item \textsuperscript{147} See id.
\item \textsuperscript{148} See, e.g., id. at 214–15.
\item \textsuperscript{149} See Orentlicher, supra note 136, at 77.
\item \textsuperscript{150} See id. at 77–79.
\item \textsuperscript{151} See id. at 79–80.
\item \textsuperscript{152} See id. at 83–84.
\item \textsuperscript{154} Orentlicher, supra note 136.
\item \textsuperscript{155} Id. at 82.
\item \textsuperscript{156} See Blumstein, supra note 35, at 228.
\item \textsuperscript{157} Urbina, supra note 153, at A1.
\item \textsuperscript{158} Id.
\item \textsuperscript{159} One of the most effective cost reducers, endemically promoted in the PPACA, is prevention. Preventive Services Covered by Private Health Plans Under the Affordable Care Act,
amputates will benefit from the higher fees.  There can be no doubt that a patient would rather retain his foot, but the cost structure of health care makes it more profitable to treat the symptoms and complications of a disease rather than prevent it in the first place or stop it in its tracks.

Another problem facing health care technology is introducing it into common and sensible uses. While patients demand new technology and doctors are eager to supply them, the rate of technological development in the health care field is lopsided compared to the rate of adoption. Thus, cutting-edge technology is generally available, but not very well tested or understood. Because the cost is driven up, the technology is then adopted even slower, leading hospitals to stagnate as they struggle to catch up with technological advances in the face of mounting costs. Since the United States is the leading developer of new medical technology, the supply side of the equation dwarfs the demand. Counterintuitively, the introduction of technology sometimes both increases costs and decreases quality.


But see Annemarie Bridy, Confounding Extremities: Surgery at the Medico-Ethical Limits of Self-Modification, 32 J.L. MED. & ETHICS 148, 148 (2004) (considering the ethics of "elective amputation" in cases of apotemnophilia, a psychological condition where the sufferer has an intense desire for the amputation of a limb).

See id.


See Gelijns & Rosenberg, supra note 164, at 8.

See id.

Id.; see also NAT’L CTR. FOR HEALTH STAT., U.S. DEPT OF HEALTH AND HUMAN SERV., supra note 64, at 78 (“Technologies applied to new populations and conditions generally come at a cost to individuals and to society as a whole.”).


See Gelijns & Rosenberg, supra note 164, at 8.

having abundant resources for medical technology, American hospitals
still score among the lowest in the world for health care quality.\textsuperscript{171}

Figuring out where to invest in technology is a tricky game; the
restrictive MLR regulations may be an attempt to prevent
cost-increasing technologies by promoting known cost-reducers.\textsuperscript{172} If
insurance companies must spend their premiums on health care
coverage, they may be disincentivized from reducing costs because
they are not allowed to allocate much of those savings towards their
bottom line—it is easy to justify paying for an unnecessarily expensive
procedure because the cheaper alternative would still remove the
premium via the rebate. The trick, then, is to incentivize insurers in
just the right way to overcome all the perverse incentives and
structural problems in the way of implementing novel health care
technology. The next Section suggests a method to create this
incentive—rewriting the definitions to promote the identification of
technology that is likely to reduce costs, with a goal towards slowly
improving health care and access to health care across the board.

III. THE ELASTIC MLR

To fix the problems that slow the introduction of life-saving
technology into hospitals and general practice around the country,
HHS should tweak the calculations of quality improvement in the
MLR to allow for programs that ease the transition. If the MLR were
not strictly 80 percent, but rather allowed insurance companies to
increase their profits by investing in quality improvement activities,
the participation rate would improve. The MLR is a significant
requirement that many insurers oppose because of the constraint on
profit it entails.\textsuperscript{173} With some tweaks, the MLR could instead become
a powerful tool of technological advancement. If even one percent of
the total premium revenue shifts towards real quality improvements,
hospitals would see an influx of $26 billion towards adopting the
cutting-edge technology they need, while suppressing increases in
cost.\textsuperscript{174}

To foster health care quality improvement activities, insurance
companies need both room to breathe in the regulatory definitions and

\textsuperscript{171} Tyler Cowen, Poor U.S. Scores in Health Care Don’t Measure Nobels and Innovation,
pagewanted=all.
\textsuperscript{172} 45 C.F.R. § 158.110 (2014).
\textsuperscript{173} See Epstein, supra note 117 (arguing the MLR is unconstitutional under the
Takings Clause because the government has not compensated the insurance companies for the
loss of their return on investment from a regulatory taking).
\textsuperscript{174} Geisel, supra note 52.
a reason to invest in the first place. As such, HHS should make the regulatory definitions less restrictive and more explicit in referencing adoption of technology in health care practice.\textsuperscript{175} To give the insurance companies incentive, the calculation of the MLR should not only include an insurer’s quality improvement activities, but additionally lower the insurer’s minimum MLR by the amount spent on the activities. Insurance companies would most likely be more willing to spend on quality improvement instead of giving a rebate, thus increasing investment in medical technology. Otherwise, participation in quality improvement activities will continue to stagnate,\textsuperscript{176} and insurers will have little incentive to actually lower premiums.

\textit{A. Rewriting Quality Improvement Activity Definitions}

The new quality improvement definitions should focus on investments in adoption of technology and improvements of facilities that make routine procedures less expensive to maintain.\textsuperscript{177} To use MLR money wisely, we must first analyze what the goals of this change would be. As mentioned, technology is rapidly developing, but often finds itself with no audience, or worse, an audience that ends up paying more because the new technology is more expensive to maintain than the technology it replaced.\textsuperscript{178} HHS can avoid this fate either through revision of the current definitions to include references to hard technology in the examples, or by adding a sixth category for technology with its own set of regulations, much like the current provisions for health information technology.\textsuperscript{179}

If HHS revised the quality improvement definitions, it could be more inclusive, with better controls to prevent the loss of quality through cost containment.\textsuperscript{180} The regulation for hospital readmissions focuses the application of quality improvement to activities based on better communication, such as comprehensive programs for patient-centered education and counseling, comprehensive discharge planning, and post-discharge reinforcement.\textsuperscript{181} While the examples are not exclusive, the thrust of them focuses less on hard technology and more on education.\textsuperscript{182}

\textsuperscript{175}. See supra Part II.B.
\textsuperscript{176}. See Hall & McCue, Spending in 2011, supra note 12, at 8.
\textsuperscript{177}. See Skinner, supra note 144.
\textsuperscript{178}. See supra notes 82–111 and accompanying text.
\textsuperscript{179}. See 45 C.F.R. § 158.151 (2014).
\textsuperscript{180}. See Blumstein, supra note 35, at 212.
\textsuperscript{181}. 45 C.F.R. § 158.150(b)(2)(ii)(A)–(C).
\textsuperscript{182}. See supra Part II.B.
The focus of the current rule is so narrow that, presumably, only a patient-focused program would comply, even though the goal of the quality improvement activity is actually to prevent hospital readmissions entirely. To return to the example of the hand-washing enforcement device, if HHS rewrote the definitions in the quality improvement provisions to allow investment in such programs, many health care providers could receive the benefit of a new technology without having to increase costs. Additionally, with that particular device, the benefits of having data from a wider area would pay off more than within a single hospital. An insurance carrier’s wide network of health care providers would be ripe for implementation of such a technology, but the quality improvement activity provision might not include it within its definitions. Further, proving the effectiveness after implementation could involve as much expense as the device itself.

In addition to rewriting the current definitions, HHS could add a category to the quality improvement definitions in order to encompass the direct subsidization of specific technological innovations. Returning to the example of an MRI machine, if a newer machine will be more efficient and cost-effective in the long run, but is more expensive up front than a hospital can fit within its budget, an insurance company should be able to invest quality improvement funds directly in order to reduce that up-front cost. This gives hospitals more flexibility in advancing technology and provides incentives for insurance companies to think about the long term. This new category could include allowing the use of premiums to train doctors in new technology and techniques designed to reduce costs.

Currently, the quality improvement activity definitions are highly patient-oriented. This restrictive definition makes it unclear whether training an X-ray technician in the use of a new machine would count, as it does not cleanly fall into any of the acceptable categories. Additionally, the common problem of proving actual health outcomes rears its ugly head. But keeping technicians

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183. 45 C.F.R. § 158.150(b)(2)(ii).
185. Corrigan, supra note 111.
186. See CONG. BUDGET OFFICE, supra note 14, at 12.
187. See id. at 18.
188. 45 C.F.R. § 158.150(b)(1)(ii) (describing the third requirement that the activity must be “directed toward individual enrollees or incurred for the benefit of specified segments of enrollees”).
189. See 45 C.F.R. § 158.150.
190. See 45 C.F.R. § 158.150(b)(1)(ii).
up-to-date with their training is clearly beneficial, as it would reduce errors, which is one of the disincentives of technology adoption.\textsuperscript{191}

\textbf{B. Proving the Efficacy of Technological Innovation}

While the previous Section dealt with the problem of fitting a quality improvement into the categories that define it, this Section proposes methods to stay within those categories. HHS should revise the requirement that quality improvement activities must actually improve health outcomes.\textsuperscript{192} While there is an interest in directing technology infrastructure investment towards things that work, it is the unfortunate nature of pushing the boundary that makes it almost impossible to know ahead of time whether a new technology will be successful.\textsuperscript{193} Moreover, spending money to find out if a process or technology works can be as expensive or even more expensive than adopting the technology in the first place.\textsuperscript{194} This could explain why quality improvement was such a low percentage of the overall MLR spending—insurers simply are not confident that an investment will pan out.\textsuperscript{195} With the bar for proving a successful quality improvement set so high, insurers may decide that reducing premiums is a more effective way of fulfilling their MLR requirements and forego implementing new technology.\textsuperscript{196}

This can have a detrimental effect on the already implemented quality improvement activities.\textsuperscript{197} Assuming the examples under each category are express policy initiatives, an insurer may still not want to invest in a beneficial wellness program if the efficacy will be hard to prove.\textsuperscript{198} Since proving efficacy can be so expensive, and failure carries the cost of losing profit, the cost-benefit analysis will even weigh against investing in a quality improvement that is expressly authorized in the statute.\textsuperscript{199}

To fix this, HHS should make the efficacy requirement more lenient, or abandon it entirely. For leniency, a better option might be to conduct an independent review of controversial or suspicious

\begin{itemize}
\item \textsuperscript{191} \textit{See} 45 C.F.R. § 158.50(b)(1)(iii); AM. MED. ASS’N, CONTINUING MEDICAL EDUCATION FOR LICENSURE REREGRISTRATION (2006); \textit{see also} NAT’L CTR. FOR HEALTH STAT., U.S. DEP’T OF HEALTH AND HUMAN SERV., \textit{supra} note 64, at 78 (noting that many state licensing boards have similar requirements of continuing medical education for this same purpose).
\item \textsuperscript{192} \textit{See} 45 C.F.R. § 158.150(b)(1)(ii); CONG. BUDGET OFFICE, \textit{supra} note 14, at 2.
\item \textsuperscript{193} \textit{See} CONG. BUDGET OFFICE, \textit{supra} note 14, at 2.
\item \textsuperscript{194} \textit{See id.}
\item \textsuperscript{195} \textit{See} Hall & McCue, \textit{Spending in 2011, supra} note 12, at 7.
\item \textsuperscript{196} \textit{See id.} at 2.
\item \textsuperscript{197} \textit{See} 45 C.F.R. § 158.150.
\item \textsuperscript{198} \textit{See id.}
\item \textsuperscript{199} \textit{See id.}
\end{itemize}
quality improvement activities. Funding a doctor's lounge might face scrutiny, but funding a costly chronic-illness-tracking smartphone application might not. Alternatively, HHS could accept investment proposals and pre-screen them with the lower burden of theoretical efficacy. A standing committee could approve a program if an issuer can show a reasonable expectation of effectiveness ahead of time. This way, insurers will have more certainty about whether they will retain their profit margin and will be more likely to make an investment. Hopefully, this will be sufficient to offset the perverse incentive, as insurance companies will attempt to reach the maximum investment to control their profits. Returning to the MRI example, an insurance company could propose to the committee a plan to purchase new MRI machines for certain hospitals in need—or subsidize the cost—and the committee could then decide to accept, modify, or reject the proposal. This would remove the efficacy requirement, boost a hospital’s ability to give MRIs, reduce the cost of MRIs for patients, and give insurers larger and more predictable profit margins. All in all, such a program is a win-win for the entire system.

C. The Elastic MLR Saves the Day

Rewriting the definitions, however, does not guarantee an increase in quality improvement activity because the same financial roadblocks remain in place. The biggest blockage in the way of spending money on quality improvement activities is simply that there is little incentive on the part of insurance companies to spend more. Large group issuers only get to keep 20 percent of their premium revenue, a smaller percentage of which will actually be profit. Whether the MLR goes to quality improvement or to payment of claims is immaterial—80 percent of revenue will not be coming back.

Accordingly, to attach a big carrot to the already present stick, Congress should introduce into the statute a mechanism by which some of that revenue could come back to the insurer, regulated under the same reporting requirements administered by HHS. The Elastic MLR, after allowing the issuer to report quality improvement activities as part of the calculation, would then allow the issuer to keep an additional percentage of profit equivalent to the amount spent

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200. See supra text accompanying notes 59–64.
201. See Blumstein, supra note 35, at 212.
204. See id.
on quality improvement activities. Because its goal is to improve care and reduce costs, Congress should cap this amount at a certain percentage, such as 2.5 percent or 5 percent.205 Thus, if a small group issuer spends 2.5 percent on quality improvement, the total MLR it has to meet is lowered from 80 to 77.5 percent. Subtracting the 2.5 percent spent on quality improvement, the amount of the MLR spent on claims would be 75 percent—still a vast majority of revenue, and still within the range originally recommended.206

With a flexible ratio allowing 2.5 percent to go to technological investment, insurance companies will receive more freedom in the choice of what to do with their profits.207 State MLR regulations in the past have set minimums as high as 85 percent.208 The PPACA will still realize its goal of reducing premiums for customers, as MLRs as low as 75 percent have had some success.209 The added benefit will be the encouragement to outfit hospitals with more advanced technology.210 Though the wrong technology might increase costs if chosen with poor oversight, the policy will benefit the customer with improved health outcomes in the long term.211

This massive financial incentive, combined with more flexible and clear definitions, will incentivize insurers to identify and implement better cost-reducing technology.212 This can reduce the fiscal barrier to adoption, as hospitals are ready and willing to bring in new technology.213 Although technology in the United States is highly valued and readily available, it faces some hurdles preventing common use.214 If HHS tweaks the quality improvement definitions to allow more overt reductions in technology costs—through the direct

205. See Geisel, supra note 53 (supporting the proposition that a single percentage represents billions of dollars).

206. See NAT'L ASS'N OF INS. COMM'RS, supra note 84; see also FAMILIES USA, supra note 55 (showing state MLR regulations ranging from anywhere between 60–82 percent). Additionally, some states applied for and received exceptions to change the amount of the MLR. See supra note 55.

207. With more control, companies will not be able to claim as easily that the government committed a regulatory taking, avoiding a second constitutional challenge. See Epstein, supra note 117. See generally Meghan S. Stubblebine, Note, The Federal Medical Loss Ratio: A Permissible Federal Regulation or an Encroachment on State Power?, 55 WM. & MARY L. REV. 341, 345 (2013) (analyzing the constitutionality of the MLR under the Commerce Clause).


209. See id.

210. See supra Part II.C.

211. See supra Part II.C.

212. See Blumstein, supra note 35, at 225.

213. See Andersen et al., supra note 16.

214. See Orentlicher, supra note 136, at 68–72.
subsidization of an MRI machine, for example—it will reduce or remove altogether the replacement cost of new technology.\textsuperscript{215} Injecting the hospital economy with more funds for adopting innovative technology will hopefully jumpstart the rate of adoption.\textsuperscript{216}

IV. CONCLUSION

Technology has been one of the main drivers of exploding health care costs over the past four decades, but it has widely been considered a positive advancement because of its potential to extend the length and quality of life. The Patient Protection and Affordable Care Act attempts to reduce costs through several cost containment provisions, but recognizes that it requires a massive cultural shift to get doctors more concerned about economic considerations in health care. Until that occurs, we have a desire for more technology, a willingness to use and develop it, but a pushback from insurance companies in paying for it.

Providing a source of funding to allow hospitals and medical providers to adopt more efficient life-saving technology is necessary to promote increases in the quality of care. This can be accomplished by upgrading the Medical Loss Ratio, a controversial provision that has frustrated insurance companies by cutting into profits, to lower premiums. Allowing the insurance companies to retain more of their profits by encouraging investment in technology of the right type at the right time can push our hospitals to advance the future of medicine, increase the use of technological development in the health care field, and ultimately provide better health care.

\textit{Thomas P. Hayden}\textsuperscript{*}

\textsuperscript{215} See Teplensky et al., \textit{supra} note 184; Ladapo et al., \textit{supra} note 184.

\textsuperscript{216} See \textit{CONG. BUDGET OFFICE}, \textit{supra} note 14, at 13.

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