The Schizophrenia of Physician Extender Utilization

Thomas R. McLean
Third Millenium Consultants

Follow this and additional works at: http://lawecommuns.luc.edu/annals
Part of the Health Law and Policy Commons

Recommended Citation
Available at: http://lawecommuns.luc.edu/annals/vol20/iss2/5

This Article is brought to you for free and open access by LAW eCommons. It has been accepted for inclusion in Annals of Health Law by an authorized administrator of LAW eCommons. For more information, please contact law-library@luc.edu.
The Schizophrenia of Physician Extender Utilization

Thomas R. McLean, MD, JD, FACS, ESQ*

I. INTRODUCTION

The Patient Centered Medical Home (PCMH) is coming. As an evolutionary form of retail medical clinics (RMC), which relies heavily on the use of physician extenders (PEs), the PCMH is “the most promising approach to delivering higher-quality, cost-effective primary care.” In theory, the greater involvement of PEs, (including nurse practitioners (NPs), physician assistants (PAs), and others) in the PCMH will result in

* CEO Third Millennium Consultants, LLC, Shawnee KS. tmclean@isp.com. The author wishes to thank LSU Law Professor Edward P. Richards for reviewing this paper and making suggestions that have improved the readability of this paper. This research was made possible, in part, by an in-kind donation by Westlaw.

1. The prestigious health care policy journal Health Affairs recently devoted an entire issue to PCMH. See generally 29 Health Aff. 785-1081 (2010).

2. Herein, a RMC is defined broadly to be health care clinic, regardless of its location, that is staffed by physician extenders and primarily serves a walk-in patient population. See infra note 3.

3. Herein, PE is construed broadly to include “any individual who provides a medical service in lieu of a physician.” See Thomas R. McLean, Crossing The Quality Chasm: Autonomous Physician Extenders Will Necessitate A Shift To Enterprise Liability Coverage For Health Care Delivery, 12 Health Matrix 239, 243 n. 19 (2002); cf. DeBakker v Hanger Prosthetics, 688 F. Supp. 2d 789, 792-93 (2010). Not everyone connected with health care delivery can be construed to be a PE. As the “scope of practice of a licensed orthotist...does not include the right to diagnose a medical problem or condition,” an orthotist cannot be a PE. Id.


5. Despite the broad definition for PE used in this article, most of the literature focuses on the two most common types of PEs: PAs and NPs. Therefore, out of necessity, most of PE examples used herein are based PAs and NPs.
"improved coordination and communication with patients." Accordingly, when PE-provided care is coupled with the electronic medical record (EMR), the PCMH is expected to make health care delivery more efficient and less costly. By employing PEs to monitor 125-150 outpatients per PE, Geisinger was able to reduce its projected costs by seven to eight percent because better-monitored patients consume fewer emergency room services. Importantly, although PE-provided care is believed by many to be of a similar quality to physician-provided care, Geisinger has been able to achieve economic success without negatively affecting patient care.

Yet, the PE technology behind the PCMH has still not been perfected. In February 2009, the Department of Veterans Affairs disclosed that more than 100 veterans with glaucoma lost their eyesight after they were mismanaged by improperly supervised optometrists (i.e., PEs for ophthalmologists). Indeed, it appears that PE iatrogenic harm is

6. What distinguishes one PE type from another is primarily their scope of practice and the degree to which society allows them autonomous practice. Tine Hansen-Turton et al., Convenient Care Clinics: The Future of Accessible Health Care, 10 Disease Mgmt. 61, 66 (2007) (observing that as a general rule most states grant NPs more autonomy than other PEs.). Other demographics that tend to differentiate PEs are gender and practice settings: most NPs are female and practice in office settings; while most PAs are male and work in hospital settings (especially the operating room). Am. Acad. Physician Assistants, Nat'l Physician Assistant Census Report 2 (2009), available at http://www.aapa.org/images/stories/Data_2009/National_Final_with_Graphics.pdf; see also Perri Morgan & Roderick S. Hooker, Choice of Specialties Among Physician Assistants in the United States, 29 Health Aff. 887, 889 (2010).

7. Patient Centered Primary Care Collaborative, NJ FQHC Medical Home Pilot (Feb. 12, 2010), http://www.pcpcc.net/content/nj-fqhc-medical-home-pilot. The expected cost-saving associated with PCMH are predicated on a number of technologies, including improvements in telecommunication, however, the focus of this article is limited to issues associated with the substitution of PEs for physicians. Id.


11. Technology has many definitions. For our purposes, we will define technology to be "a manner of accomplishing a task especially by using [specialized] methods or knowledge." The Merriam-Webster Dictionary: Based on Merriam-Webster's Collegiate Dictionary, Eleventh Edition 504 (2005). Accordingly, as PE extenders have specific training and are being deployed to accomplish the goal of facilitating health care delivery while reducing costs, PE extenders can be viewed as technology.

12. John Maa & Kristen Hedstrom, College Advocates for Ensuring Quality Eye Care...
increasing. For example, after a supervised PE misdiagnosed a patient with a pulmonary embolus as having “diffuse myalgia,” the patient died. In another case, a plaintiff received a $435,000 award from a fertility clinic after a NP injected her with two-day old sperm stored in an unlabeled syringe. In part, adverse outcomes like these occur because PEs, like physicians, are human and do foolish things from time to time. But in part, some PE iatrogenic injuries occur because PEs are not physicians. Accordingly, it is not surprising that when complex patients are treated by improperly supervised PEs, the stage is set for an epidemic of iatrogenic injury.

So, from both an economic and legal perspective, the adoption of a health care policy predicated on the use of PEs to leverage the efficiency of physicians and improve the coordination of patient care is schizophrenic. As used here, schizophrenia is not intended to be understood in its clinical context. Rather, schizophrenia is used in this article in its colloquial sense to mean “split-mind.” PE schizophrenia is manifested in the divergent views held on the PCHM with respect to its ability to provide upfront cost savings, while seemingly ignoring the potential for increased backend-
liability in the forms of medical malpractice claims.\textsuperscript{21} Indeed, Tim McGreeny has likened the health care reform embodied in the PCMH as a rearranging of the deck chairs on the Titanic.\textsuperscript{22}

The purpose of this article, therefore, is to examine the schizophrenia with respect to PE-delivered healthcare. Part II examines the economics behind the RMC and its progeny, the PCMH. If PEs do become fungible with primary care physicians (PCPs), it is unclear how RMCs/PCMHs will be more cost-efficient when PEs demand reimbursement similar to physicians, and the PCMH model provides few incentives for PEs to deliver less negligent care than their physician supervisors deliver. Part III examines how well traditional legal techniques (scope of practice limitations, standard of care, and medical malpractice) are currently being used to police the healthcare delivered by PEs. While these legal regulatory techniques mirror those applied to physicians, we will see that the law treats NPs and PAs differently. Finally, part IV explains why the new administrative control techniques for PE quality management, (and in particular the use of quality-metric defined report cards), are unlikely to become a health care panacea. This article concludes that the schizophrenia associated with PE-delivered healthcare makes sense only when it is delivered in a health care system that is covered by a no-fault type of professional liability insurance system.

II. PE ECONOMICS: RMCs AND PCMHs

\textbf{A. RMCs}

Health care delivery forever changed in 2000. In that year, the successor organization to Minute Clinic opened its first RMC.\textsuperscript{23} Over the ensuing decade, Minute Clinic expanded its RMC operation to more than five-hundred locations, primarily in CVS pharmacies and Target stores.\textsuperscript{24} Minute Clinic has been joined in this market by three-hundred and fifty Take Care clinics (a wholly owned subsidiary of Walgreens),\textsuperscript{25} more than one-hundred independently owned RMCs\textsuperscript{26} located in Wal-Mart stores,\textsuperscript{27}

\begin{thebibliography}{99}
\bibitem{21} McLean, \textit{supra} note 3, at 272. Medical malpractice claims against PCMHs may increase because, compared to physicians, PEs have less training and the PCMH health care delivery offers more opportunity for communication errors. \textit{Id.}
\bibitem{24} \textit{Id.}
\bibitem{26} \textit{At Selected Stores: Medical Clinics}, Walmart, http://i.walmart.com
\end{thebibliography}
and a few other smaller operations. Interestingly, while many other demographic details of RMCs have been published, neither the Rand Corporation, nor Deloitte has offered an estimate for RMC market size (either in number of stores or retail sales).

Still, RMC economics have been well described. While the specific numbers tend to vary with the publication, the upfront investment needed to start a RMC is in the ballpark of $150,000 to $200,000, which covers the cost to retrofit a CVS, Walgreens, or Wal-Mart facility. Next, $500,000 to $600,000 per year is needed to cover the clinic’s operating expenses. But here, under labor costs, is where RMCs catch a break. Rather than employing a family practice physician (who receive approximately $185,740 per year) like a traditional medical clinic would do, RMCs employ NPs (who receive approximately $89,000 per year) or less commonly PAs (who receive approximately $87,614 per year).
Accordingly, if a RMC charges $50-75 per visit, the clinic will operate in the black while seeing only two patients per hour.38 Yet, RMCs are many things to many patients. By treating a disproportionate number of patients with sinusitis and providing immunizations, RMCs provide care to a population of patients who are underserved by PCPs.39 Patients have readily embraced RMCs’ key marketing features: transparently low pricing (which simplifies bill analysis),40 immediate evaluation,41 and the need to spend only fifteen to thirty minutes in the clinic (which compares favorably to the hours patients spend waiting to see a PCP for the same condition).

Despite such favorable economics and patient benefits, market realities have been hard on RMCs. This is because the average RMC treats only 1.1 patients per hour, a figure well below the two patients per hour needed to break even.43 As a consequence, several RMCs have been shuttered, while overall market growth has slowed substantially.45 So, if RMCs have inadequate clinical material (i.e., patients) to cover their operational cost, how are so many RMCs able to stay in business?

The answer is a loss leader. A loss leader is any good or service that is


38. Dolan, supra note 37.


42. Schleiter, supra note 40, at 529 (citing Hansen-Turton, supra note 6, at 63).

43. Dolan, supra note 37. This statistic raises an interesting collateral issue: can PEs maintain their clinical competencies at such low clinical volumes? As PCMHs are likely to supplant RMCs, this issue may be moot. However, a detailed discussion of what is necessary for PEs to maintain their clinical competencies is beyond the scope of this article. See also infra, Part II, Section B.

44. Dolan, supra note 37.

45. Wang, supra note 37; see also Yee, supra note 32 (Minute Clinic has closed forty-four non-profitable locations in Walmart stores). However, Walmart may be in the process of shifting its strategic alliance away from Minute Clinic and towards larger health care providers. See Walmart Partners With Local Hospitals for In-Store Clinics, Awesome Capital (Sept 9, 2010), http://www.awesomecapital.com/1/post/2010/09/walmart-partners-with-local-hospitals-for-in-store-clinics.html.
sold at or below the seller’s price in the hope that such a sale will increase customer traffic thereby increasing the sales of other goods sold at full price.\textsuperscript{46} In RMCs, ninety percent of prescriptions written by PEs are filled by the clinic’s pharmacy, and fifty percent of patients who are evaluated by the PEs in RMCs purchase other unrelated goods from the clinic.\textsuperscript{47} Thus, unlike a traditional physician-operated primary care clinic where profits are generated by high volumes of patient traffic,\textsuperscript{48} RMCs generate their profits by using PE-provided services as a loss leader.

Still, RMCs’ loss leader strategy is not infallible. While some commentators remain optimistic about the future for RMCs,\textsuperscript{49} other commentators are becoming increasingly pessimistic. For instance, The Rand Corporation has observed that:

[T]here is comparatively little empirical evidence to support many of the assertions made by [RMC] supporters and their detractors, and considerable additional research is needed. The role that retail clinics play may change in the face of health insurance expansions under health care reform, the growing shortage of primary care physicians, and the increased use of health information technology.\textsuperscript{20}

Similarly, the majority of Deloitte’s report on RMCs discusses provider relations, workforce concerns, and other issues that have the potential to limit further RMC market expansion.\textsuperscript{51} But Deloitte tried to end its report on a positive note by observing “the growth and evolution of retail clinics reflect[s their] opportunities for disruptive innovation.”\textsuperscript{52} This is an interesting observation because disruptive innovation describes a process by which a product or service takes root initially in simple applications at the bottom of a market and then relentlessly moves ‘up market’ eventually displacing established competitors.\textsuperscript{53}

Deloitte may be on to something.\textsuperscript{54} The chief societal value of RMCs


\textsuperscript{47} Muroff, supra note 31, at 168-69.

\textsuperscript{48} See generally Murray, supra note 34. In a non-capitated/non-salaried environment, physicians are compensated for the number of services they provide. So, any physician who wants to maintain their income after their reimbursement per service has been cut (a common occurrence in the last decade) must either provide more services per patient or increase the number of patients they evaluate. Id.


\textsuperscript{50} Weinick, supra note 29, at 50-51.

\textsuperscript{51} Deloitte, supra note 28, at 10-11.

\textsuperscript{52} Id. at 12.


\textsuperscript{54} Viewing RMCs (and PCMHs) as the introduction of a disruptive innovation into the
may not be in their profitability, but rather in the ability of RMCs to be an evolutionary demonstration project. More specifically, RMCs have demonstrated the ability of PEs to provide patient care in a semi-autonomous fashion without apparently triggering excessive liability. For a PE, “semi-autonomous” practice occurs when the PE evaluates and treats a patient under the nominal supervisor of a physician who is not onsite.\textsuperscript{55} Kristen Schleiter has observed that the “success of retail medical clinics is dependent on mid-level practitioners providing care that is equal or superior to that of physicians when providing the same care for the same problems,”\textsuperscript{56} but the devil is in the details of what constitutes “equal or superior.” For now, let us focus on just one aspect of RMC-PE care: its freedom from litigation as an index of PE quality of care.

In contrast to PE-provided medical care in other venues,\textsuperscript{57} it appears as if patients do not file lawsuits against RMCs or their PE employees. A search of Westlaw (both state and federal case law and jury verdicts and settlements), Google (using several combinations of key words), and the local courthouse\textsuperscript{58} all failed to identify any published cases of alleged medical malpractice against either a RMC or a PE practicing in a RMC. Several reasonable explanations can be offered for this apparent lack of litigation, including: sampling error (the relatively small number of patients treated by RMCs may have allowed an alleged case of RMC negligence to be overlooked); publication bias (a case of RMC medical malpractice litigation may have resulted in such a small verdict or settlement that the case was deemed to be not news worthy); and good attorney work (Fortune

\begin{footnotesize}
\begin{itemize}
\item 55. Schleiter, \textit{supra} note 40, at 567. For a PE, “semi-autonomous” practice occurs when the PE evaluates and treats a patient under the nominal supervisor of a physician who is not (necessarily physically present) onsite. \textit{Id.} Direct PE supervision would occur if the physician was present onsite and reviews the PE’s treatment plan before the patient was discharged; while autonomous or independent PE practice occurs when a physician provides no oversight into the care rendered by a PE. \textit{See infra}, Part III, Section A.
\item 56. \textit{Id.} at 564. The term “mid-level practitioners” is a synonym for PEs.
\item 57. \textit{See}, e.g., McLean, \textit{supra} note 3, at 270-71.
\end{itemize}
\end{footnotesize}
500 companies like Wal-Mart, Walgreens, and CVS, hire attorneys who use confidentiality clauses to protect their corporate clients).

But perhaps the best explanation of the lack of apparent litigation against RMCs is their use of a no-tolerance policy. If a PE is found to have provided care that deviates from the RMC’s evaluation and treatment protocol, the PE is terminated. Such a policy makes sense. Deep-pocketed Fortune 500 companies cannot afford to be in the business of providing medical care to high-risk patients or medical care that is inherently high-risk. Remember the loss leader concept — RMCs are not so much in the business of alleviating human suffering as they are in the business of selling pharmaceuticals and other goods. Thus, RMCs screen potential patients to minimize their risk. Nor can Fortune 500 companies that operate RMCs afford to retain a PE who repeatedly fails to properly screen patients or prescribes the wrong treatment thereby exposing the entire operation to a medical malpractice lawsuit.

In short, as disruptive innovation, RMCs have demonstrated that PEs can provide care to select patients with minimal upfront costs, seemingly low-

59. Interview with Valarie Lawson, NP, (Oct. 25, 2010). Take Care will not necessarily admit to summarily firing one of its PE for failing to follow the corporation’s protocol. However, Take Care does expect PEs to comply strictly with the corporation’s screening and treatment protocols. Interview with Travis, Support Center Representative, Walgreens Take Care Clinic (Nov. 2, 2010); see also Top-Quality Care, Minute Clinic, http://www.minuteclinic.com/about/quality/ (last visited Apr. 25, 2011). “Top-quality health care depends on strict quality control. And, at the heart of MinuteClinic’s quality control is our Electronic Medical Records system. Guided by our proprietary software, our Electronic Medical Records system ensures that procedures are followed consistently. It guards against mistakes. And, it alerts practitioners when a condition should be referred elsewhere.” Id.

60. This statement assumes Walmart, Walgreens, and CVS are directly operating RMCs located on their premises. This, however, is not true. See supra, Part II, Section A. Accordingly, this simplifying statement is made to avoid a discussion of the vicarious liability these organization have for allowing RMCs to operate on their premise; a topic beyond the scope of this article. But see infra, Part III, Section C.

61. Unlike physicians who receive some liability protection in the form of caps on medical malpractice damages, institutional providers face full liability exposure. See generally McLean, supra note 3, at 277-83 (discussing hospital and Managed Care Organization liability).

62. Interview with April Scott, PA, (Nov. 1, 2010). According to Ms. Scott, RMCs often screen away patients who could have been treated by PE; if the corporation had allowed the PE to treat such patients or such conditions. Id. See also infra, Part III, Sections A - B.

63. Anyone who has ever donated blood understands the importance of screening. Prior to allowing an individual to donate blood, blood banks ask the donor detailed personal questions to screen out any donor with any risk for having a complication (or contaminating the blood supply). Donate Blood - What to Expect When Donating Blood, Red Cross, http://arcblood.redcross.org/donationprocess.htm (last visited Apr. 25, 2011). A single wrong answer to any of the screen questions will prevent a donor from donating, either temporarily or permanently. Id. But by screening out donors with any risk, those who are allowed do donate rarely if ever suffer a permanent injury from the act of donation. See id.
backend (liability) costs, and high patient satisfaction. Accordingly, RMCs have paved the way for PEs to become integral participants in the PCMH.

B. PCMHs

1. Overview

PCMHs are in the business of alleviating human suffering. The concept of a “medical home,” or a repository of all of a patient’s records, was first articulated by the American Academy of Pediatrics (AAP) in 1967. A quarter-century later, in 2002, the AAP “expanded the concept [of the PCMH] to refer to primary care that emphasizes timely access to medical services, enhanced communication between patients and their health care team, coordination and continuity of care, and an intensive focus on quality and safety.” In 2007, the AAP, along with three other primary care medical organizations that represented 300,000 PCPs, articulated seven principles that were designed to transform medical homes into PCMHs. In brief, these seven principles are: (1) a personal physician (to provide continuous and comprehensive care); (2) who receives appropriate reimbursement; (3) by leading a team of PEs; (4) who both facilitate access and (5) coordinate and integrate (6) quality care; (7) by considering the whole person’s needs. Collectively, these principles fundamentally alter the paradigm of primary care delivery by shifting away from an isolated physician, whose goal is to provide piecework services to patients, to that of a team whose goal is to advance the health of an entire panel of patients.

65. Id.
66. Id. The three other organizations are the American Academy of Family Physicians, the American College of Physicians, the American Osteopathic Association. Id. Collectively, these organizations represent seventy-five percent of the primary care workforce. Thomas Bodenheimer & Hoangmai H. Pham, Primary Care: Current Problems and Proposed Solutions, 29 Health Aff. 799, 799 (2010) (estimating the primary care workforce to be 300,000 physicians and 100,000 NPs).
67. Patient Centered Primary Care Collaborative, Joint Principles of the Patient Centered Medical Home (2007), http://www.pcpcc.net/content/joint-principles-patient-centered-medical-home; cf. Bodenheimer & Pham, supra note 66, at 799 (citing Barbara Starfield, Primary Care: Balancing Health Needs, Services, and Technology 30-31 (1998) (identifying the traditional principles for delivering primary care services to be: (1) first-contact care; (2) continuity of care; (3) comprehensive care of the individual; and (4) coordination of care). Accordingly, it appears that the concept of team delivery and the reimbursement schemes that are employed are the principles that differentiate traditional primary care from PCMH primary care. Id.
68. David Margolius & Thomas Bodenheimer, Transforming Primary Care: From Past
Beyond these principles, there is no agreed upon definition for the PCMH, or what services are to be provided by a PCMH. Not surprisingly, no two PCMHs are alike. Still, by following the clinical course of an idealized patient with congestive heart failure (CHF) through a PCMH, it is possible to see how these seven principles of the PCMH interact to create a new model for the primary care delivery. For this hypothetical, all that needs to be understood is that Mr. Sick has CHF, a heart condition involving decreased cardiac output and that can be monitored by tracking a patient’s weight; and that Dr. Watson is a PCP who works for a PCMH. Dr. Watson heads up a team of providers that includes a nurse and Mr. Holmes, who is a PE.

On his first visit to the PCMH, just like any primary care clinic, the nurse collects Mr. Sick’s insurance and contact information, takes his vital signs, and then places Mr. Sick into a room. Dr. Watson then takes Mr. Sick’s history, performs a physical examination, and orders appropriate laboratory
tests. The doctor’s diagnosis is that Mr. Sick has CHF, and he prescribes a diuretic (i.e., a water pill). So far, the care delivered by PCMH is identical to the care that Mr. Sick would have received at a traditional clinic.

Next, Dr. Watson explains to Mr. Sick that while he will be reviewing Mr. Sick’s progress from time-to-time, if all goes well they will not be seeing each other for another year. Dr. Watson explains to Mr. Sick that his progress on the water pill will be telemetrically monitored. That is, after he weighs himself each morning on a special scale, that scale will automatically send his daily weight to the PCMH. Watson informs Mr. Sick that Mr. Holmes will be primarily responsible for overseeing his daily progress, so, Mr. Sick should expect a telephone call from Mr. Holmes every-other-day for the next month. Of course, if Mr. Sick’s condition significantly deteriorates, Dr. Watson assures his patient that they will meet face-to-face to review his condition. Mr. Sick agrees and then heads off to a pharmacy to pick up his new prescription (which, like many patients, he will occasionally forget to take). For his part, Dr. Watson finishes seeing his scheduled patients, and then retires to his office where he reviews the medical records generated by Mr. Holmes during the previous day.

Each morning Mr. Sick dutifully weighs himself, and Mr. Holmes reviews Mr. Sick’s progress. Two days after being evaluated by the

---

74. Illustrating Principle #1: A personal physician for continuous and comprehensive care.

75. And perhaps if all goes well Dr. Watson will not even see Mr. Sick yearly. A primary care physicians should see patients for: first visits; when a diagnostic or treatment maneuver is must be performed by a physician; when a lengthy discussion is necessary; or when an emotional or trust issue makes a face-to-face interaction more appropriate than a email or telephone conversation. Casalino, supra note 68, at 786.


77. Under existing reimbursement schemes, which reward doctor-patient encounters, primary care clinics cannot afford the luxury of allowing PEs to perform billable services. Casalino, supra note 68, at 787. Accordingly, absent provider reimbursement reform PCMHs are unlikely to be a viable model for health care delivery. Id. at 788.

78. Illustrating Principle #3: A physician leading a team. Margolius & Bodenheimer, supra note 68, at 780. In the PCMH model, the “bread and butter of primary care, one-on-one, face-to-face visits is no longer the sole mode of caring for patients.” Id.

79. Illustrating Principle #6: Quality. Health care quality is often determined by performance measures based on evidence-based medical practices. See infra, Part III, Section B. It is becoming increasing possible to use the EMR to automatically monitor providers’ performance measurements; and thereby to determine whether a provider is providing quality patient care in real time. J.L. Goulet et al., Measuring Performance Directly Using the Veterans Health Administration Electronic Medical Record: A Comparison With External Peer Review, 45 Med. Care 73, 74 (2007).
PCMH, Mr. Sick's weight is up 0.5 kilograms (or about one pound). After consulting the PCMH's treatment protocol for CHF, Mr. Holmes calls Mr. Sick and directs him to double his daily dose of the diuretic. Mr. Holmes also informs Mr. Sick that his laboratory test for potassium is abnormally low. But rather than prescribing a dose of potassium over the telephone (because dosing of replacement potassium is complex), Mr. Holmes informs Mr. Sick that the Pharm D at the pharmacy will provide him with detailed instructions on how to take the potassium and its potential side effects.83

Because of Mr. Holmes diligence, Mr. Sick did not retain any more water and managed to maintain his potassium at an appropriate level, thereby allowing Mr. Sick to avoid expensive trips to an Emergency Room to have his excess water removed. Mr. Holmes' diligence also freed up Dr. Watson's time so that he could evaluate new PCMH clinic patients.85

This hypothetical demonstrates how PEs can be used to leverage a physician's time to improve access to care. On a larger scale, Geisinger Health Service leverages its 800 physicians' talents by employing more than a thousand PEs.86 The importance of such leverage to health care delivery can be observed in data from Canada. Rosser and his colleagues have demonstrated that a PCP can comfortably expand the size of her patient panel from 1,400 to 2,200 if the PCP is allowed to collaborate with a PE.87 Thus, assuming no network effects, PEs can potentially improve access to care by as much as fifty-seven percent.89 Given this favorable

80. A collaborative agreement or treatment protocol is a precondition for PEs to provide health care services. See infra, Part III, Section A.

81. Pharm Ds are another type of PE. Each time the patient is handed off from one member of the PCMH team to another member there is a potential for a communication error to arise. See generally McLean, supra note 3. In the PCMH literature, it is assumed without evidence that the use of EMRs will somehow reduce or mitigate handoff errors, (never mind that EMR care plagued with their own limitations). Cf. Hardeep Singh & Mark Graber, Reducing Diagnostic Error Through Medical Home-Based Primary Care Reform, 304 JAMA 463, 463 (2010) (stating “EHRs aid in the transmission of critical information but do not guarantee that clinicians will respond appropriately.”).

82. Illustrating Principle #4: Facilitating access to care.

83. Illustrating Principle #5: Coordinating and integrating care.

84. Illustrating Principle #6: Quality.

85. Illustrating Principle #3: Team approach. See also Margolius & Bodenheimer, supra note 68, at 780.

86. Dentzer, supra note 9, at 1205.

87. Rosser, supra note 70, at e7(2); cf. Susan Okie, Innovation in Primary Care-Staying One Step ahead of Burnout, 359 New Eng. J. Med. 2305, 2306 (Nov. 27, 2008) (in the United States a PCP’s patient panel is usually around 2000 patient per physician per year).

88. Network effect refers to how a good or service becomes more valuable when more individuals use the good or service. Network Effect Definition, Marketing Terms.com, http://www.marketingterms.com/dictionary/network_effect/ (last visited May 1, 2011).

89. See Rosser, supra, note 70, at e7(2).
leverage ratio and the fact that PEs work for a fraction of a physician’s salary, it becomes clear how Geisinger’s PCMH was able to reduce its operating cost by seven percent over three years.

Parenthetically, the lubricant that allows the PCMH’s team of providers to function as a well-oiled machine is the EMR. A fully integrated EMR – one that gathers physicians’ notes, laboratory studies, and radiographic images – significantly enhances the efficiency of physicians and PEs. As a general surgery resident (1981-87), I literally spent hours each day calling other physicians to coordinate patient care and making “rounds” in radiology and the various laboratory suites to gather information. Now, thanks to the integrated EMR, I can sit at my desk and gather this same information in minutes. (In addition, I cannot remember the last time someone complained about my handwriting.) In the PCMH, the fully integrated EMR will automatically gather consultants’ reports and telemedically generated outpatient data (like Mr. Sick’s daily weights or a diabetic’s glucose level). In doing so, the PCMH’s EMR significantly ramps up the efficiency of the PEs, thereby allowing PEs to monitor even more outpatients.

90. See Nurse Practitioner Salary, supra note 35; see also Physician Assistant – Medical, supra note 36.
91. See Arvantes, supra note 8.
92. See Kate Ackerman, Health IT Key to Patient-Centered Medical Homes, iHealthBeat (Oct. 29, 2010), http://www.ihealthbeat.org/features/2010/health-it-key-to-patient-centered-medical-homes.aspx; see also Casalino, supra note 68, at 789.
95. See Belletti, supra note 93, at 31; see also Ackerman, supra note 92. One of the major limitations to widespread adoption of the PCMH model is that few PCPs have access to EMRs. See Paul Grundy et al., The Multi-Stakeholder Movement for Primary Care Renewal and Reform, 29 Health Aff. 791, 793 (May 2010) (in 2009, less than half of PCPs had EMRs in their offices). To improve EMR penetration, the HITECH Act (part of the American Recovery and Reinvestment Act of 2009) created EMR adoption incentive for providers who made “meaningful use” of EMRs. See Ackerman, supra note 92.
2. Societal Benefits of the PCMH

Advocates of the PCMH like to point out that it improves outcomes and reduces costs.\(^9\) In actuality, improved outcomes and reduced costs are two sides of the same coin: improving outcomes alleviates the need to provide costly remedial care.\(^9\) While the data coming out of PCMH pilot projects is not universally favorable,\(^9\) the better-managed PCMHs have demonstrated that they can provide higher quality care than traditional primary care clinics,\(^9\) while improving their capacity to handle patients.\(^1\)

Another study found that after adopting the PCMH model to provide primary care services, seven major health care providers were able to decrease their patient hospitalization rate by five percent to forty percent, and reduce emergency room (ER) visits by zero percent to twenty-nine percent, thereby allowing these organizations to save from $71 per patient to $640 per patient.\(^1\)

Similarly, Group Health generated a return of $1.50 for every dollar it invested in its PCMH project, while it simultaneously improved both patient and physician satisfaction.\(^2\)

So, if these early favorable results for PCMH primary care delivery can

---

\(^9\) See Daniel Field, Elizabeth Leshen & Kavita Patel, Driving Quality and Cost Savings Through Adoption of Medical Homes, 29 Health Aff. 819, 823 (2010).


\(^9\) See Casalino, supra note 68, at 789; see also Kilo, supra note 69, at 776 (commentators in the trenches of system redesign are aware that there are limited data in favor of the PCMH and consequently the PCMH is at “risk of becoming the latest fad in a long history of unrealistic expectations and failed health reform efforts.”).

\(^9\) See Landon, supra note 73, at 828-29. What constitutes “quality” in health care is very difficult to define. See id. (observing that there are no widely accepted metrics of measuring the quality of PCMHs); see also Eric S. Holmboe, Gerald K. Arnold, Welfeng Weng & Rebecca Lipner, Current Yardsticks May Be Inadequate for Measuring Quality Improvement From the Medical Home, 29 Health Aff. 859, 859 (2010) (questioning the validity of structural performance measures to identify quality). However, most of us can agree that a treatment regimen that keeps patients out of emergency rooms and hospitals would represent an improvement in care quality even if precise quantization of that improvement is difficult.

\(^1\) Cf. Margolius & Bodenheimer, supra note 68, at 779-80 (observing that the limited size of “concierge” primary care panels allows for physicians to provide high-quality medical care, but the concierge model for primary care does not improve the nation’s access to care); Casalino, supra note 68, at 789 (lacking a team approach to hold down unit costs, few patients can afford concierge primary care services).

\(^2\) Robert J. Reid et al., The Group Health Medical Home at Year Two: Cost Saving, Higher Patient Satisfaction, and Less Burnout for Providers, 29 Health Aff. 835, 836-39 (2010) (describing how over a two-year period, patients rated care from the PCMH higher than traditionally-provided care while the rate of burnout among physicians was significantly less).
be replicated on a larger scale, the potential monetary benefits associated with the PCMH could be significant. This is because in the United States, one of the primary drivers for the consumption of ER services is a lack of access to primary care providers. For instance, for patients with diabetes, asthma, and other conditions, ER treatments are twice as frequent in the U.S. as they are in the European Union. As a result, the increased capacity of PCMHs to monitor and modulate outpatients goes a long way to avoiding expensive trips to the ER.

C. PEs and Economic Schizophrenia

On the other hand, there are downsides to the PCMH. In addition to the fact that the PCMH delivery of primary care service may not be superior to traditionally delivered primary care services, there is the issue of PE/PCMH schizophrenia to be considered. Before examining PE legal concerns, it is necessary to pause to consider two forms of economic schizophrenia related to PEs and PCMH.

The first form of schizophrenia is manifested by the American Medical Association (AMA). It is axiomatic that the liberalization of the PE scope of practice would threaten the livelihoods of the AMA’s members. So, it should come as no surprise that the AMA is on record as opposing the liberalization of scope of practice for PEs. In the case of the PCMH, the AMA is quick to find fault, claiming that:

- quality gains were modest, and the [pilot] project created no positive

---

103. Benjamin J. Chesluk & Eric S. Holmboe, How Teams Work - Or Don’t - In Primary Care: A Field Study on Internal Medicine Practices, 29 Health Aff. 874, 878 (2010) (implying, in the context of this thematic issue, that the editors of Health Affairs believe that the concept of a medical team must evolve if the PCMH is to succeed); Landon, supra note 73, at 829 (discussing the significant barriers to large scale adoption of the PCMH).

104. Bodenheimer & Pham, supra note 66, at 801. Many commentators imply that a shortage of PCPs is a key reason for a lack of access to primary care services in the United States. Id. at 800. To a degree this is a true statement. However, this assertion neglects the fact that to become a board-certified specialist in many fields (e.g., cardiology, gastroenterology, and pulmonologist) the doctor must be first certified in the primary care field of internal medicine. If health care reform should continue to reduce the number of specialists that are needed, the United States may actually have a surplus of primary care providers if these specialists elect to de-specialize and deliver primary care in order to continue working. See, e.g., Thomas R. McLean, In New York State, Do More Percutaneous Coronary Interventions Mean Fewer or More Complex Referrals to Cardiac Surgeons?, 6 Am. Heart Hosp. J. 30, 35 (2008) [hereinafter Percutaneous Coronary Interventions].

105. Grundy, supra note 95, at 791.

106. Recall that as used in this paper schizophrenia is being used colloquially in this article to refer to the brain’s capacity to hold seemingly contradictory ideas.

107. See infra, Part III, Section A.

movement on patients’ ratings of their own care, researchers found. The project also revealed that successful transformation to a patient-centered medical home “requires a great deal of effort, motivation and support.” . . . [Of the t]hirty-six family medicine practices were chosen to participate in the project, . . . five dropped out before the end of the two years. 109

On the other hand, the AMA’s credibility is on the line. If the AMA allows itself the luxury of being tied too-tightly to the traditional model of primary care delivery, than the AMA risks losing credibility because the traditional system has clearly failed to meet our health care needs. Consequently, the AMA has taken a split-minded view of the PCMH by indicating that it is willing to work “collaboratively with other organizations to bring substantive improvements to medical education across the continuum that will enhance both physician and health system performance.” 110 As both of the AMA’s statements concerning the PCMH were made in 2010, it remains to be seen how the AMA will resolves the inconsistencies between these statements.

The second form of schizophrenia concerns the call for equal pay. Regardless of training, if two employees provide exactly the same service, then they should each receive the same pay. 111 Unfortunately, while some isolated exceptions may exist, the general rule in this country is that PEs and physicians do not provide exactly the same service. 112 The Supreme Court of Tennessee has observed that the idea that “care rendered by the average physician is the same as the care rendered by the average physician extender is, at best, naïve.” 113 Moreover, if PEs and physicians provided identical quality of care, consider the societal implications. 114

112. Herein we will ignore the schizophrenia by which the federal reimbursement policies do not treat all physicians the same. Jay Parkinson, All Physicians Are Not Created Equal: How to Fix Medicine’s Two-Party System, Fast Company (Apr. 30, 2009), http://www.fastcompany.com/blog/jay-parkinson/hello-health/all-physicians-are-not-created-equal.
113. McLean, supra note 3, at 260 (quoted in Cox v. M.A. Primary and Urgent Care Clinic, 313 S.W.3d 240, 258 (2010)). Under certain limited conditions PEs do provide substantial similar care. When these conditions prevail, PEs should receive the same compensation as physicians. See infra, Part III, Section B.
[S]ociety would no longer have any incentive to provide health care education beyond the masters degree level; and second, there would be no incentive for individuals to invest in the additional years required to become a physician. Moreover, to conclude the quality of the work product of a physician extender is the same as a physician’s work product would be analogous to asserting that the quality of the work product of a paralegal is same as an attorney’s work product.\textsuperscript{115}

Yet, here is where the schizophrenia enters the discussion. When the Institute of Medicine (IOM), the Robert Wood Johnson Foundation (RWJF),\textsuperscript{116} and other commentators,\textsuperscript{117} have called for equal pay for PEs and physicians, it is likely that apples and oranges were being compared. This is because the IOM and RWJF want PEs, especially NPs, to evolve to become something very close to what we know today as PCPs. More specifically, the IOM and RWJF want the number of nurses with doctorate degrees to double by 2020;\textsuperscript{118} and for all NPs to receive post-graduate medical training (i.e., residency training) similar to physicians.\textsuperscript{119} The talisman of such additional post-graduate medical training for NPs that is certified by a specialty board would then place PEs on an intellectual par with board-certificated physicians.\textsuperscript{120} If the IOM and RWJF do succeed in ramping up the education requirements for PEs to the post-graduate level as

\textsuperscript{115}. McLean, supra note 3, at 261.

\textsuperscript{116}. IOM/RWJF, supra note 114, at S6-S7 (calling for nurses to become full partners with physicians and other health professionals in redesigning American healthcare).

\textsuperscript{117}. Carla Mills, Nurse Practitioners—Valuable But Undervalued, Nurse Practitioner World News (May 2010), http://www.npworldnews.com/columns/details/nurse-practioners-valuable-but-undervalued; Beck-Wilson v. Principi, 441 F.3d 353, 358 (6th Cir. 2005) (The Department of Veterans Affairs pay scale, for a time, appears to have provided NPs and PAs with different reimbursements for providing the same service).

\textsuperscript{118}. IOM/RWJF, supra note 114, at S11. Whether we have the capacity in our educational system to achieve this goal is questionable. See, e.g., McLean, supra note 3, at 260. Since the IOM first recommended increasing the number of NPs in our health care system in 1999 (see generally IOM, supra note 97) the increase in NPs has been a modest seventeen percent (see infra, Part III, Section C, Subsection 2).

\textsuperscript{119}. IOM/RWJF, supra note 114, at S4.

\textsuperscript{120}. Board Certification of Nurses Makes a Difference, Am. Nurse Credentialing Ctr., http://www.nursecredentialing.org (last visited Apr. 30, 2011) (showing board certification for NPs already exists); Family Nurse Practitioner Certification Eligibility Criteria, Am. Nurse Credentialing Ctr., http://www.nursecredentialing.org/Eligibility/FamilyNPEligibility.aspx (last visited Apr. 30, 2011) (explaining NP board certification currently only requires a licensed NP to pass an examination even if the NP has no formal post-graduate training).
a condition to enter the market, NPs will become fungible with PCPs.

One more piece of split-mindedness: if NPs become fungible with PCPs and demand equal pay, why won’t the NPs ask for PCP pay? After all, when low-income providers hear that they will receive the same wages as high-income providers for the same services, it is natural for the low-income providers to expect an increase in their compensation. But raising PE compensation above its current level will only drive up the cost of health care and make the PCMH less cost effective.121 So, in reality, if we as a society wish to control the cost of healthcare and provide equal pay to doctorate-level PEs with board certification and board-certified PCPs (a case of apples compared to apples), then we as a society are more likely to reduce PCPs compensation to the current compensation level for PEs.

III. TRADITIONAL LEGAL METHODS OF REGULATION

Forgetting about PE economic schizophrenia,122 how should society regulate PEs in their expanded roles as primary health care providers in the RMCs and the PCMHs? Using a traditional legal approach, this section examines three key PE regulatory mechanisms: the legislatively determined scope of practice, the judicially determined standard of care, and who pays when a PE deviates from the standard of care (i.e., PE medical malpractice liability).123

A. Scope of Practice

For both PEs and physicians, the privilege of practicing their professions requires a state license.124 Yet, state professional licenses are not an

121. The substitution of low-waged PEs for high-waged physicians is a key argument for why the PCMH helps to drive down America’s health care costs. See supra footnotes 86-91 and the related text.

122. Ignoring economic schizophrenia in health care market is reasonable because an expanded role for PEs is virtual certainty. Having studied the IOM for more than a decade, it is clear that what IOM recommends (see, e.g., IOM/RWJF, supra note 114) is almost always adopted by the federal government as its health care policy.

123. PE medical malpractice liability may involve issues of personal immunity when a claim is filed against federal government (see, e.g., Federal Tort Claims Act, 28 U.S.C. § 1346 (2011)) or state governmental agencies (e.g. Sermechif v. Gonzales, 660 S.W.2d 683, 687 (Mo. 1983); Letter from the Dep’t. of Health & Human Serv. to Health Ctr. Program Grantees (Aug. 22, 2007), http://bphc.hrsa.gov/policiesregulations/policies/pin200716.html). PEs employed by clinics that are supported by federal “330 grants” also receive personal immunity from medical malpractice liability under the Federal Torts Claim Act. However, a detailed discussion of PE immunity is beyond the scope of this article.

124. Dent v. West Virginia, 129 U.S. 114, 114 (1889); McLean, supra note 3, at 245. A detailed discussion of the theory and practice of medical licensure and scope of practice acts are beyond the scope of this article. Interested readers should consult McLean, supra note 3, and Edward P. Richards, The Police Power and the Regulation of Medical Practice: A Historical Review and Guide for Medical Licensing Board Regulation of Physicians in
unrestricted grant to practice one's profession. Rather, under state scope of practice laws, both PEs and physicians are restricted (and occasionally prohibited) from providing certain medical services. For example, as most individuals are aware, scope of practice laws limit physicians with respect to performing abortions, prescribing (narcotic) medications, and other less commonly discussed services.

For PEs, the pivotal scope of practice restrictions concern professional autonomy. Restrictions on PEs' autonomy to practice arise under both the physician licensure statutes and the PE licensure statutes. In addition to authorizing physicians to supervise PEs, physician medical licensure statutes generally place two key limitations on a PE's autonomy. First, proper physician supervision of a PE is conditioned on the existence of a written "collaborative" agreement. The collaborative agreement between a physician and PE defines what services a physician delegates to a PE and thereby acts as the operating agreement that governs the physician-PE relationship. Second, physician licensure statutes provide authorization for physicians to be disciplined in the event they fail to properly supervise their PE associates. Indeed, in some states, supervising physicians have an affirmative duty to report PEs who habitually fail to honor their

ERISA-Qualified Managed Care Organizations, 8 Annals Health L. 201 (1999).
125. Cox v. M.A. Primary & Urgent Care Clinic, 313 S.W.3d 240, 250 (Tenn. 2010).
126. McLean, supra note 3, at 247-48. An analogous situation occurs when a state issues a driver's license. The holder of driver's license does not receive an unrestricted grant to drive any motor vehicle. Rather the holder of a driver's license has her scope of driving practice limited (typically) to driving non-commercial vehicles.
129. Providing certain treatments is restricted unless statutory disclosures have been made to the patient. See, e.g., Mike Stokes, New York Passes Law Mandating Disclosure of Breast Reconstruction Options, Plastic Surgery News Extra (Aug. 19, 2010), http://psnextra.org/Articles/Breast-Recon-Law.html (reporting that beginning Jan. 1, 2011, surgeons in New York State must discuss reconstruction options with female patients prior to performing a mastectomy).
132. Howenstine, 155 S.W.3d at 751. This collaborative agreement may also constitute evidence that the physician and PE have an agency relationship. See infra, Section III.A.
133. See, e.g., Cal. Bus. & Prof. Code § 2069(c).
collaborative agreements.\textsuperscript{134}

PE professional licensing boards, on the other hand, define what level of supervision a PE must have, and what services a PE may provide. As these regulations are state and provider specific,\textsuperscript{135} and PE professional organizations have websites that provide detailed summaries of the fifty states' scope of practice regulation,\textsuperscript{136} a comprehensive discussion of PE scope of practice acts is beyond the scope of this article.

However, it is worth noting that PE scope of practice regulations have many items in common, for instance, the services a physician delegates to a PE may not exceed the scope of the physician's own practice.\textsuperscript{137} Additionally, while PEs must be supervised or collaborate with a physician,\textsuperscript{138} when the PE renders medical care to a patient, physical proximity between the physician and PE is not mandatory.\textsuperscript{139} Rather, a supervising physician needs only to be available (by telephone) for consultation during PE care giving. Finally, physician supervisors must occasionally review the PE documentation.\textsuperscript{140}

From a regulatory perspective, licensure and scope of practice laws influence PE practices in two ways. First, non-compliance with licensure and scope of practice statutes can expose both PEs and their physician supervisors to professional discipline,\textsuperscript{141} as well as medical malpractice liability.\textsuperscript{142} As licensure and scope of practice statutes limited PEs'...
autonomy and are state specific, these regulations have also established a "race to the bottom." That is, to gain maximum autonomy, PEs migrate from high to low restrictive scope of practices states. Not surprisingly, to stem such migration, health care reformers are encouraging the adoption of a national scope of practice statute for PEs.

B. Standard of Care

The judicially determined standard of care for PEs practicing in RMCs and PMCMs raises three issues: what is the standard care, how is the standard established, and whether a physician supervisor accrues vicarious liability for the negligent care provided by a subordinate PE.

1. What is the Standard of Care for PEs?

To prevail in a medical malpractice action against a PE, a plaintiff must demonstrate, by a preponderance of the evidence, that the care rendered by the PE "was not in accordance with the standards of practice among members of the same health care profession with similar training and experience situated in the same or similar communities at the time of the alleged act giving rise to the cause of action." Thus, the standard of care in PE medical malpractice action has two elements: one element concerns the locality of where the care is given, and the other element concerns how a similarly trained professional would handle the situation.

2. Locality Rule

The locality rule first appeared during debates over whether a national or local yardstick should be used to measure a PE's (or a physician's) clinical performance. Many medical practices are uniform across the country. For example, regardless of whether a hospital is located in a rural region or a major metropolitan area, the performance of a "time out" prior to the commencement of surgical procedure to verify the scope of the operation is a nearly universally accepted medical practice. Thus, for medical

143. Mary D. Naylor & Ellen T. Kurtzman, The Role of Nurse Practitioners in Reinventing Primary Care. 29 Health Aff. 893, 896 (2010).
144. Id. at 896-97. A call for a national licensure/scope of practice act defining PE services can be traced to the beginning of the patient safety movement. See, McLean, supra note 3, at 251 (citing Comm. on Quality of Health Care in Am., Inst. of Med., Crossing the Quality Chasm: A New Health Sistem for the 21st Century, 1 (2001)).
146. Uniformity of a medical practice is the concept behind evidence-based medicine (a topic beyond the scope of this article).
147. See generally John D. Birkmeyer, Strategies for Improving Surgical Quality —
practices that are uniform across the country, the use of a national yardstick (i.e., a national standard of care) to measure a PE’s clinical performance would be appropriate. Indeed, twenty-nine states and the District of Columbia have adopted a national standard of care to judge the clinical performance of their health care providers.\textsuperscript{148} In such national standard of care jurisdictions, an expert witness from anywhere in the country may testify at trial to set the standard of care, as long as the expert practices in the same field as the defendant.\textsuperscript{149}

Alternatively, a minority of jurisdictions have adopted a locality rule to assess the clinical performance of their health care providers and to protect their scarce “human capital” medical resources. Indeed:

[t]he character of the locality or neighborhood in which a physician [extender] practices has an important bearing on the requisite degree of skill and care that is required of him, in view of the difference in opportunities, experience, and conditions of practice between densely and sparsely populated communities. As the physician engages to bring to bear upon the case only such skill and care as are ordinarily practiced by others of the same profession in a like situation, some cases, particularly earlier ones, in adopting the so-called “[locality rule]” require that a physician [extender] be held only to that degree of diligence, learning, and skill possessed by physicians and surgeons of the particular locality where he practices.\textsuperscript{150}

Accordingly, in locality rule jurisdictions, expert witness testimony is limited. Expert witnesses may testify at trial only if one of two conditions exists: the witness practices in same community as the defendant provider, or the expert can demonstrate that they have “specialized knowledge”\textsuperscript{151} of what it is like to practice medicine in a community comparable to the one where the defendant practices.\textsuperscript{152} Expert witnesses lacking one of these


\textsuperscript{149} Cardenas v. Muangman, 998 A.2d 303, 306, 308 (D.C. 2010) (comprehensively reviewing the rules applicable to an expert witness testifying on the national standard of care, the court focuses on the expert foundation, and not where the expert’s home is located).

\textsuperscript{150} 61 Am. Jur. 2d Physicians, Surgeons, & Other Healers § 200 (2002).

\textsuperscript{151} This term will be expanded upon in a few paragraphs during the discussion of cross-over witnesses.

Annals of Health Law, Vol. 20 [2011], Iss. 2, Art. 5

228

qualifications will fatally injure their client’s ability to prevail at trial. 153

While these rules apply equally to plaintiffs and defendants, in actual operation, the locality rule has a disproportionately negative impact on plaintiffs. The reason is peer pressure. Physicians and PEs do not appreciate their communal colleagues who testify against them, whereas physicians and PEs laud their communal colleagues who testify on their behalf. Human nature, of course, dictates that economic consequences will follow a provider’s reputation. As no one wants to be shunned, communal providers tend not to testify against their brethren. Thus, the locality rule disproportionately impairs a plaintiff’s ability to secure PE expert testimony even more so than it does a plaintiff’s ability to secure physician expert witness testimony. The scarcity of PEs — compared with the 800,000 physicians in the United States, 154 there are only about a quarter as many PEs 155 — means that with the exception of major metropolitan areas, plaintiffs are unlikely to find PEs willing to testify on their behalf in locality rule jurisdictions.

3. The Expert Witness’ Experience

The second element for setting the standard of care, the expert witnesses’ training and experience, may compound the scarcity of potential PE expert witnesses in medical malpractice actions if the expert witness must be strictly from the same school of practice as the defendant. 156

Setting the standard of care in PE medical malpractice cases usually begins with the filing of an affidavit of merit. 157 This document, signed by the plaintiff’s expert witness, contains statements of the expert witness’ experience, the applicable standard of care, and how the defendant PE breached that standard. 158 In order to sign an affidavit of merit, the plaintiff’s expert must be someone who spends the majority of their professional time (during the past twelve months), practicing in the same

155. See supra, note 66.
156. The Expert’s Role In Establishing Medical Malpractice Case Standards, The ‘Lectric L. Lib., http://www.lectlaw.com/files/exp23.htm (“The school of practice distinctions also predated modern medical training and certification. At one time medical practitioners were divided into chiropractors, homeopaths, allopaths, osteopaths, and several other schools based on different philosophical and psychological beliefs. . . . The courts retain the traditional school of practice rule when they refuse to allow physician experts to question chiropractic care or chiropractors to testify in cases with physician defendants.”).
158. Id.
school as the defendant.\textsuperscript{159}

But what exactly is the PE standard of care? In a professional negligence action against a PE, the expert witness must testify to what a reasonable PE would have done under the same or similar circumstances.\textsuperscript{160} Implicit in this definition of the standard of care is the contemplation of a PE’s formal training and experience. As PEs are not as well trained as physicians, a corollary to PE standard of care is that this standard is not the same as physicians’ standard of care.\textsuperscript{161} This view is in accordance with the view applied to chiropractors\textsuperscript{162} and podiatrists,\textsuperscript{163} who are trained in a different school of practice than physicians and are judged by a standard of care that is different from the standard of care applied to physicians.

Thus, as a general rule, because only members of same school of practice can set the standard of care, only physicians can set the standard of care against a physician, and only PEs can set the standard of care against a PE.\textsuperscript{164} Yet, this general rule has an important exception. The courts do “not require that the expert practice the same profession or specialty as the defendant, ‘so long as the expert had a sufficient basis on which to establish familiarity with the defendant’s field of practice and the standard of care required in dealing with the medical care at issue.’”\textsuperscript{165}

Under this “cross-over” exception, an expert witness may testify against a provider from another school of practice if that expert provides a substantially similar or an overlapping service. That is, an expert can provide cross-over testimony when “the expert had obtained knowledge about the applicable standard of care through experience and training.”\textsuperscript{166} Accordingly, a gynecologist has been allowed to set the standard of care for

\textsuperscript{159} Id. at 798. See also Slaggart v. Mich. Cardiovascular Inst., No. 269776, 2006 WL 1867245, at *2 (Mich. Ct. App. July 6, 2006) (holding that an attorney should only accept an affidavit of merit when the attorney has a reasonable belief the signatory will qualify as an expert witness).


\textsuperscript{161} Cox v. M.A. Primary & Urgent Care Clinic, 313 S.W.3d 240, 257 (Tenn. 2010).


\textsuperscript{163} Foster v. Zavala, 214 S.W.3d 106, 114 (Tex. App. 2006) (holding that a cardiovascular surgeon does not practice in the same field as a podiatrist).

\textsuperscript{164} Because courts are “vested with great discretion in determining the competence of expert witnesses,” their decisions are rarely overturned on appeal. Heitman v. Christus Health Cent., 49 So.3d 609, 611 (La. Ct. App. 2010).


\textsuperscript{166} "Cross-Over" Expert Testimony in Medical Malpractice Actions, 30 Med. Liability Rep. 180, 180 (2008) (this article provides a summary of the state-to-state variations on cross-over witnesses) [hereinafter “Cross-Over”].
the insertion of a contraceptive device against a NP, and a cardiologist has been allowed to set the standard of care against a PA practicing in the field of cardiology.

For PEs, the concept of school of practice determined standard of care is being undermined in another important way. An argument is being circulated that the standard of care for PEs and physicians should be the same. Unfortunately, this argument has two detractors. First, this argument creates a slippery slope. Consider a situation where a physician is allowed to set the standard of care against a PE. Unless the testifying physician wrote, or has knowledge of, the collaborative agreement signed by the PE, the physician’s testimony may incorporate personal bias. For example, having observed PEs for number of years, a physician may assume that a PE’s training covers certain subject matter. This assumption may or may not be true. So, if a physician provides cross-over expert witness testimony against a PE, the physician may unconsciously testify to a higher PE standard of care than would be justified based on a PE’s actual training and experience.

Second, holding PEs and physicians to the same standard of care for providing substantially similar services assumes apples are being compared to apples. Again this assumption may or may not be true. In a situation where a single medical service is delivered to a patient without


168. In re Stacy K. Boone, P.A., 223 S.W.3d 398, 404 (Tex. App. 2006). Cf. Cross-Over, supra note 166, at 182 (citing Wolford v. Duncan, 760 N.W.2d 253 (Mich. Ct. App. 2008), which held a “physician’s assistant whose supervising physician specialized in internal medicine was qualified to render opinion regarding conduct of physician’s assistant whose supervising physician specialized in family practice”); see Wilson v. James, No. 07C-04-025, 2010 WL 1107301, at *2 (Del. Super. Ct. Feb. 25, 2010) (stating, “This is not a case in which the plaintiff’s proffered expert has articulated an opinion that merely conflicts with that offered by the defendant’s expert; Dr. Bauchner’s report and deposition fail to express any standard of care for a physician’s assistant, and further make clear that he would be unqualified to do so.”); see Cross-Over, supra note 166, at 186 (citing Cristescu v. McGowan, No. A06-2455, 2007 WL 4110901 (Minn. Ct. App. Nov. 20, 2007) which held a “malpractice claimant who worked as dentist in Rumania and as dental hygienist and dental assistant in United States was not qualified to execute affidavit of merit regarding standard of care governing dentist who performed restorative work.”).


170. The risk of such tainted testimony would need to be weighed against denying a worthy plaintiff their day in court.
compounding co-morbid conditions, this assumption is true.171 For example, consider a situation where a healthy ten-year-old child presents to an RMC with the new onset of symptoms consistent with that of a common cold. Regardless of whether the child is evaluated by a PE or a physician, the medical decision-making will be the same. Indeed, as the child has no co-morbid conditions and the only variable that requires analysis is the new symptoms, the medical calculus is entirely linear. In this situation one would expect a PE and physician to arrive at the same diagnosis and treatment plan. In this situation, where apples are being compared to apples, holding PEs and physicians to same standard of care is reasonable.

On the other hand, consider a situation where the medical calculus is non-linear. For example, consider the situation where an elderly patient, with multiple co-morbid medical conditions, presents to a PCMH for the treatment of her glaucoma.172 Prior to treating the patient’s glaucoma, clinical judgment must be exercised to determine which subtype of glaucoma the patient has and how all of the patient’s co-morbid conditions may be impacted by any proposed treatment (because glaucoma medications can have systemic side-effects).173 With more years of formal post-graduate training in medical decision-making, physicians are in a better position than PEs to evaluate a glaucoma patient’s risks-to-benefit ratio when selecting a treatment regimen.174 Conversely, it is not surprising that, when PEs have been allowed to manage complex patients with glaucoma, the PEs’ lack of clinical acumen translated into a significant number of patients’ glaucoma progressing to complete blindness.175

In short, as either the number of co-morbid medical conditions increases or the number of subtypes of a specific condition has any clinical comparison of PEs and physicians, with respect to standard of care given, will increasingly resemble a comparison of apples and oranges. Consequently, as a patient’s health care needs become increasingly complex, it becomes increasingly inappropriate to hold a PE to a physician’s standard of care.

Now, let’s consider a related issue: Can a NP provide cross-over testimony against a PA? For example, assume that a NP mismanages a patient with multiple medical conditions and the patient subsequently dies. The patient’s survivors bring a wrongful death action against the NP based on affidavits of merits signed by a physician and PA. Assume further that

---

171. See McLean, supra note 3, at 261 n.119.
172. See Maa & Hedstrom, supra note 12.
174. See McLean, supra note 3.
175. Whether the physician provided negligent supervision is a separate issue that will be addressed in more detail shortly; see infra, Part III, Section C.
the trial court invoked the locality rule to find the plaintiff's physician incompetent to serve as an expert witness for providing cross-over witness testimony. Under these conditions, can or should a PA be allowed to provide cross-over testimony against a NP?

According to the Land court,176 the first legal opinion to address the issue of whether NP and PA schools of practice can provide cross-over expert witness testimony, the answer is “no.” In Land, which affirmed the trial court ruling that the plaintiff's physician expert witness was incompetent to testify under the state’s locality rule,177 the court considered the appropriateness of allowing a PA to set the standard of care against a NP. In part, the Tennessee appellate court’s decision to affirming the trial court’s decision to disqualify the PA expert witness was also based on locality rule considerations.178 Yet, the court went on to add a quote from the trial court judge who stated, “I do not see how he could address the issue of breach of the standard of care if he really doesn’t know what the parameters are within which nurse practitioners work. He’s not familiar with the medications that were given.”179

Land did not elaborate on this comment. Implicit in court’s comment, however, is that PAs and NPs come from different schools of practice. While it is true that the formal education of PAs, NPs, and other PEs are similar,180 the content and rigors of the specific forms of PE training are different and attract different types of individuals.181 Thus, PAs and NPs may manage substantially similar situations differently. Such differences in experience and training may explain why the Land plaintiff’s PA expert witness was not familiar with the medications selected by the defendant NP to manage the decedent’s hypertension.182

Yet, if Land is adopted widely, its school of practice specificity requirements for PE expert witness testimony may further limit the plaintiffs’ ability to set the standard of care. This reason is that Land bars PEs from being cross-over witnesses against one another. Just as chiropractors and podiatrist are barred from providing cross-over testimony against physicians because these providers come from different schools of

177. Id. at *6.
178. Id. (observing that the PA expert witness had “not demonstrated any knowledge of what a Tennessee nurse practitioner should be doing under these circumstances”) (emphasis added).
179. Id.
180. McLean, supra note 3.
181. See infra, Part III, Section C.
practice, 183 Land's holding means that in all but the most straightforward cases, only PAs can establish the standard of care against PAs because only a PA would have sufficient understanding of the PA school of practice to provide such testimony. (This rule would be similarly applied NPs.) Moreover, if formal training for PAs and NPs continues to diverge (as has been recommended by the IOM and RWJF184) then courts will find it easier to limit PE expert testimony to members of the same school of practice. 185

Before leaving this section on standard of care, a comment on causation is appropriate. In many medical malpractice actions involving physicians, the plaintiff's expert witness does double duty by setting the standard of care and testifying to causation. Thus far, however, modern courts have been unwilling to allow PEs to testify as to medical causation.186 The key reason that the courts have found PEs incompetent to testify on causation is the superior medical knowledge of physicians.187 These courts reason that PEs, who provide only limited protocol-based medical services, are not required to be knowledgeable about medical causation.188

Thus, in PE medical malpractice actions where the plaintiff has either a complex medical condition or treatment (i.e., where the standard of care for a physician and PE are not likely to be identical), plaintiffs should be prepared to hire a PE from the same school of practice to set the standard of care and a physician to testify on causation. This means that, all other things being equal, PE medical malpractice cases are likely to be more


184. See supra notes 116-120 and related text.

185. A decade in the future, when PA and NP training becomes ever more specialized, the use of physician cross-over witnesses to set the standard of care against PEs many no longer be appropriate.


187. See supra note 186.

188. E.g., see Land v. Barnes, No. M2008-00191-COA-R3-CV, 2008 WL 4254155 at *6 (Tenn. Ct. App. July 15, 2008). A nurse practitioner "is prohibited from making a medical diagnosis and, therefore, he or she lacks the expertise to testify as to causation. Since a physician's assistant may only render diagnostic or therapeutic services under the 'supervision, control and responsibility of a licensed physician,' there is considerable doubt that a physician's assistant would be competent to testify as to causation." Id. (Citations omitted).
expensive than physician medical malpractice because plaintiffs in PE medical malpractice cases will need to hire a second expert witness.

C. PE Malpractice

1. Agency and Vicarious Liability

Next, we need to consider whether the physician who supervises a PE can be held vicariously liable. Vicarious liability, of which respondeat superior is but one form, turns on the establishment of an agency relationship. An agency, in turn:

is defined as the fiduciary relationship which results from manifestation of consent by one person to another that the other shall act on his behalf and subject to his control, and consent by the other so to act . . . Thus, the three elements required to show the existence of an agency relationship include: (1) a manifestation by the principal that the agent will act for him; (2) acceptance by the agent of the undertaking; and (3) an understanding between the parties that the principal will be in control of the undertaking . . . The existence of an agency relationship is a question of fact.

Recently, the PA-physician agency relationship was comprehensively reviewed by the Supreme Court of Tennessee. In Cox v M.A. Primary and Urgent Care Clinic, a case of first impression, a plaintiff filed a medical malpractice lawsuit against a clinic and the physician supervising a PA for the PA’s allegedly negligent health care delivery. Interestingly, the plaintiff in Cox did not name the PA as a defendant. Accordingly, the dispositive issue under review by the court was whether an agency relationship existed between the PA and the physician such that the physician could be held vicariously liable for the acts of the PA.

189. Vicarious liability (based on agency) is to be contrasted with liability based on negligent hiring and supervising PEs (See Moreno v Quinrana, 324 S.W.3d 124 (Tex. App. 2010)). A detailed discussion of the negligent hiring and supervising PEs is beyond the scope of this article.

190. A comprehensive review of agency law is beyond the scope of this article.


193. Cox v. M.A. Primary and Urgent Care Clinic, 313 S.W.3d 240 (Tenn. 2010).

194. Id. at 251.

195. Id. A very interesting aspect of this case that was not address by the court is the fact that PA owned the clinic and employed the physician who then nominally supervised the PE. Id. In the legal profession, the analogous relationship would be for a paralegal to own the law practice and employ the attorney. The business relationship in Cox demonstrates just
The court began its analysis by observing that a PA-physician relationship falls into one of three basic patterns. First, a significant number of states have adopted statutes specifying that a physician assistant is an agent of his or her supervising physician. A few states have legislation specifically providing that a supervising physician is liable for the acts or omissions of his or her physician assistant. Numerous other states have legislation similar to Tennessee’s, which refers more generally to the supervising physician’s “responsibility” for his or her physician assistant.196

Viewed this way, PAs in the first group are explicit statutory agents of their physician masters,197 while PAs in the second group are implicit statutory agents of their physician masters.198

A priori, however, it is not readily apparent whether the court’s third group for PA-physician relationships, which is predicated on a physician being “responsible” for the PA’s conduct, is an agency relationship. In the next paragraph of the court’s opinion, however, which concerns a physician’s responsibility, Cox goes on to explain that as a general matter, a physician assistant stands in an agency relationship with his or her supervising physician when the physician assistant is providing authorized medical services within the scope of the parties’ joint protocol.199 The Tennessee Supreme Court then closed the responsibility loop for this third group by explicitly stating, “the physician assistant occupies the role of agent and the supervising doctor occupies the role of principal.”200

In short, while the Cox review of the statutory language describing PA-
physician relationships is dividable based on verbiage, the Cox analysis indicates that all such relationships are agency relationships.\textsuperscript{201} The universality of this agency relationship between PAs and physicians is true regardless of degree of autonomy that the states’ scope of practice acts grants the PAs. Accordingly, when a PA is acting within the scope of their collaborative agreements, physician supervisors will be vicariously liable for the negligent acts of their PA subordinates.

In contrast, courts have been less willing to find that NP-physician relationships are categorically agency relationships. For NPs a claim for vicarious liability against a supervising physician cannot be based on the relevant nurse practitioner statutes and regulations alone.\textsuperscript{202}

Rather the courts prefer to contemplate physicians’ vicarious liability for the conduct of NPs according to the factor-type analysis for respondeat superior liability. For example, when a Virginia court contemplated whether a master-servant relationship exists between a physician and NP, the factors the court considered were the nature of the NP’s: “(1) selection and engagement; (2) payment of compensation; (3) [the physician’s] power of dismissal; and (4) [the physician’s] power of control.”\textsuperscript{203} Of these factors, only the physician’s power to control over the NP is “is determinative.”\textsuperscript{204}

The reason the courts apply a different legal calculus to determine whether physicians are vicariously liable for PAs and NPs can be traced to the history of these disciplines. PAs were first introduced into the medical profession to assist cardiac surgeons in the operating room.\textsuperscript{205} Surgeons were also the first to develop PA training programs.\textsuperscript{206} This historic supervisory nexus between PAs and physicians accounts for the reason why PAs do not have an independent state governing board, and why in all fifty states PAs report to the state boards of medicine.\textsuperscript{207} Thus, it is not surprising that the courts have found an automatic agency relationship exists between PAs and their physician supervisors.

\textsuperscript{201} An agency analysis of a PA-physician relationship can be avoided if the PA is employed by the physician. See Marchisotti v Williams, No. 13106/02, 2006 WL 1152576, at *6 (N.Y. Sup. Ct. Mar. 24, 2006) (an employment agreement establishes agency).


\textsuperscript{203} Id. citing Naccash v. Burger, 290 S.E.2d 825, 832 (Va. 1982).

\textsuperscript{204} Id.


\textsuperscript{206} See supra note 205.

\textsuperscript{207} Telephone Interview with Stephanie Radix, State Regulatory Affairs, Am. Acad. of Physician Assistants (Nov. 12, 2010).
Nurses, in contrast, can trace their professional history to a time long before Florence Nightingale.\(^{208}\) As such, the nursing profession developed independently of the medical profession and accordingly developed its own regulatory scheme. Today, in all fifty states, the District of Columbia, and four United States’ territories, nurses have their own independent boards for professional oversight.\(^{209}\) This professional autonomy from physician oversight, which the nursing profession has enjoyed throughout its long history, undermines any presumption that a master-slave relationship exists between physicians and nurses. Hence, without more, the normally occurring physician-NP relationship lacks the level of control necessary to establish an agency relationship.

Yet, despite these judicially perceived differences in PA and NP professional liability, a decade after the IOM called for more health care to be delivered by multi-collaborative teams, both PAs and NPs find themselves increasingly being named as defendants in medical malpractice actions.\(^{210}\) This, of course, was predictable.\(^{211}\)

2. Insurance

Indeed, during the last decade, while medical malpractice claims against physicians (for negligent patient care) have fallen,\(^{212}\) data from the National Practitioner Data Bank indicate that medical malpractice claims and judgments against both NPs\(^{213}\) and PAs\(^{214}\) have increased, as have claims


\(^{210}\) The increasing incidence of PEs being named as defendants in medical malpractice actions is out-of-proportion to their increasing presences in the marketplace. See infra, Part III, Section C, Subsection 2.

\(^{211}\) McLean, supra note 3. A priori the number of adverse medical errors associated with team-delivered health care is likely to be higher than traditionally delivered healthcare because the PEs who substitute for physicians are less educated; and the obligatory handoffs between team members increase the number of communication errors. Id.; cf. John D. Birkmeyer, Strategies for Improving Surgical Quality — Checklists and Beyond 363 New Eng. J. Med. 1963, 1964 (2010); citing Eefje N. de Vries et al., Effect of a Comprehensive Surgical Safety System on Patient Outcomes, 363 New Eng. J. Med. 1928 (2010) (suggesting, without explanation, that team-delivered healthcare may have fewer communication errors).


against physicians when they act as supervisors to PEs. Yet, like standard of care and physician-PE agency relationships, medical malpractice claims against NPs and PAs are distinguishable with respect to quality of data that is available, demographics, and the type of coverage offered by insurers. Primarily due to two studies published by CNA (in 2004 and 2009), our knowledge of NP medical malpractice claims demographics is superior to that for PAs. CNA’s data for these two studies is summarized in the Table I below. CNA’s data demonstrates that during a recent five-year period, while the NP profession’s size increased by 17%, the number of claims against NPs increased by 140%; a figure that parallels the 141% increase in indemnity payouts to settle these claims. Given that most NPs practice in an office setting, it is not surprising that CNA’s data shows that the most common medical malpractice claim made against NP was for negligent diagnosis.

Table I: CNA’s Demographics for NP medical malpractice claims.

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2008</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of NP practicing in America</td>
<td>115,000</td>
<td>135,000</td>
<td>17%</td>
</tr>
<tr>
<td>Number of NP covered under by CNA polices</td>
<td>22,311</td>
<td>25,000</td>
<td>12%</td>
</tr>
</tbody>
</table>

214. Jeffery G. Nicholson, *A Study of Malpractice and Safety Comparing PAs to Physicians and APNs*, Physician Assistant Expert Network, LLC, http://www.hgexperts.com/article.asp?id=5878 (last visited Apr. 30, 2011) (“rate of malpractice incidence increased for PAs ... over the study period”). This study, which at times appears to be self-contradictory, appears not to have been published in a peer-reviewed journal because the article suffers from a number of scientific limitations, including: a lack of systematic methodology and the presentation of conclusions without the inclusion of supporting data.


217. See generally CNA, supra note 35.


219. See generally CNA, supra note 35.

220. CNA’s 2009 data did not contain a figure for the number of practicing NP. Accordingly, this figure was taken from AAPN data. See *About AANP*, Am. Acad. of Nurse Practitioners, http://www.aanp.org/ AANPCMS2/AboutAANP (last visited Apr. 30, 2011).
### 2011 | Schizophrenia of Physician Extender Utilization

| Number of claims filed again CNA insured NPs | 841 | 1799 | 140% |
| Allegations of misdiagnosis or treatment plan | 81.6% | 85% | 4% |
| Office practice was the location of the alleged NP malpractice | 75% | 84.3% | 12% |
| Total Indemnity Paid out | $16.5 M | $39.7 M | 141% |
| Average Indemnity Paid out per claim | $153,775 | $189,300 | 23% |

CNA followed up on these studies with a survey of its insured. CNA provided professional liability coverage to NPs with occurrence policies. While a detailed discussion of the actuarial considerations underlining insurance underwriting is beyond the scope of this article, a few general comments about occurrence policies are in order. Under an occurrence policy, with its stable premium rates that do not automatically increase each year, provides coverage that responds to a malpractice incident arising out of professional services and/or care rendered during the policy period regardless of when the actual claim is reported. Should an Occurrence policy be cancelled, the purchase of "tail" coverage to extend the reporting period for claims is not required.

221. CNA, supra note 35, at 30. The accuracy of this survey should be questioned because the response rate to this survey was only four percent. Id.

222. Id. at 32.

223. Id. at 36.

224. Id. at 38.

225. Id.


227. Pittsburg Property & Casualty, Inc., Malpractice Insurance Frequently Asked...
Although prior acts are not covered under occurrence policies, these policies tend to be expensive because, in essence, the insured prepay their tail coverage.228

Comparable data for medical malpractice claims against PAs are hard to come by. Using the best sources, however, an attempt was made to collect data similar to the data collected by CNA for NPs.229 These compiled results are summarized below in Table II.230 The data indicate that although our health care system employs about half as many PAs as NPs, the growth rate for medical malpractice claims filed against these two disciplines are similar. Interestingly, Rapp found that when compared with physician medical malpractice claims, PAs' medical malpractice claims had a greater percentage of claims (forty-two percent) result in an indemnity payment.231

Table II: Compiled Demographics for NP medical malpractice claims.

<table>
<thead>
<tr>
<th>Number of PAs practicing in America232</th>
<th>Approximately 2004</th>
<th>Approximately 2008</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>67,000</td>
<td>77,000</td>
<td>17%</td>
</tr>
</tbody>
</table>


229. Both the data on NP malpractice from CNA (see supra notes 35 and 218), and the data on PA malpractice from Physicians Insurance Association of America (PIAA) (Rapp, *supra* note 215), can be criticized because these studies introduce sampling error. CNA's and PIAA's data is only representative of the providers covered by these insurers. Conversely, the data presented by CNA and PIAA may not be representative of the data for all NPs and PAs.

230. Data included here for PA claims was selected because based on the sample size of the claims' data in the original source. However, smaller samples sized data, which does not lend easily to comparisons, is also available. See *State of Connecticut: Connecticut Medical Malpractice Annual Report* (May 2010), http://www.ct.gov/cid/lib/cid/MedicalMalpractice2010Report.pdf (last visited Apr. 30, 2011). Of the 1376 medical malpractice claims filed during a recent five year period (2005-9) in the State of Connecticut, 19 (1.15%) were against NPs and RNs, 5 (0.31%) were against PAs, and 30 (1.87%) were filed against PCPs. *Id.* at Report 8, Part 1. The average indemnity of paid claims was approximately the same for the two groups: $513,487 was paid out on behalf of NPs/RNs; and $530,560 was paid on behalf of PAs. *Id.* By comparison $529,542 was paid out on behalf of PCPs. *Id.*


232. Interview with Josh Uhmar, AAPA Administrator (Oct. 28, 2010) cited the figure used for "2008" data as the number of PAs practicing in the US in September 2010. By comparison, the 2004 figure for the number of PAs practicing in America is from the APAA's webpage for 2007. *Am. Acad. Physician Assistants, Physician Assistant Practice in Long Term Care Facilities* (2007), http://www.aapa.org/advocacy-and-practice-
2011] Schizophrenia of Physician Extender Utilization 241

<table>
<thead>
<tr>
<th>Allegations of misdiagnosis or treatment(^{233})</th>
<th>N/A</th>
<th>Most common</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average indemnity paid out per claim(^{234})</td>
<td>N/A</td>
<td>$174,871</td>
<td>N/A</td>
</tr>
</tbody>
</table>

In contrast to NPs, insurers offer PAs professional liability coverage under claims-made policies\(^{235}\). Such policies require:

coverage to be in effect on the date care rendered and continuous and still in effect on the date a resulting claim is made. Should a Claims-made policy be cancelled, tail coverage must be purchased to provide coverage for claims which may have occurred while the policy was in effect but not made until after the cancellation date.\(^{236}\)

Claims-made coverage, which includes retroactive coverage for prior events that are reported during the coverage period, has premiums that are less expensive than occurrence coverage. However, the methodology used to calculate premiums for claims-made policies is complex.\(^{237}\)

3. PEs and Legal Schizophrenia

In short, like PE economics, the PE legal concerns demonstrate elements of schizophrenia. To illustrate such schizophrenia, consider the following hypothetical, which assumes that the scope of practice for NPs and PAs in a given state is identical. Now imagine two identical patients with identical


233. Rapp, supra note 215, at 33. Rapp's data came from PIAA's closed claims documents; whereas CNA's data included both closed and open claims.

234. Id. Although the data for this study was collected over a twenty-year period, the author did not adjust his average indemnity payment calculation for constant dollars. Id. Cf. Nicholson, supra note 214 (average indemnity payment to settle PA litigation was $173,128 in constant dollars).

235. A detailed discussion of the merits of occurrence versus claims-made policies is beyond the scope of this article.


237. PIAM, supra note 228. "Claims made coverage involves a step process with premium increases over the first five years of coverage in increments proportional to the claims reporting for that experience. The initial premium and subsequent years' premium are substantially lower than an occurrence policy. By the fourth or fifth year the claims made premium reaches a mature level and premium adjustments are based on annual rate changes only." Id.
medical conditions come to the same PCMH for treatment. One of these patients is seen by a NP, and the other patient is seen by a PA. Imagine further that both the NP and the PA make the same diagnostic error and produce identical injuries in the two patients. Seeking compensation, both patients file identically worded lawsuits in the same courthouse against the treating NP and PA.

The question is: does the law treat these two plaintiffs identically? Maybe not. As suggested by Cox, the differences in schools of practice for NPs and PAs mean that a jury’s perception of the culpability for a diagnostic error may not be the same for a NP and a PA. The plaintiff treated by the PA may have a more difficult time establishing the standard of care because there are fewer PAs per capita than NPs. Additionally, because the premium for medical malpractice coverage for NPs is greater than the premium for PAs, more NPs may be practicing without coverage. If so, the patients who are treated by NPs may be less likely to obtain compensation in the event of injury.

In short, under our existing laws, two identical patients with identical iatrogenic injuries may receive different levels of compensation depending on whether their provider was a NP or a PA. This is concerning, and may provide some explanation for why RMCs prefer to hire NPs, rather than PAs. Second, a schizophrenic disconnect exists in the idea that the use of tort law will encourage PEs to provide safe, i.e., non-negligent, healthcare. It is well recognized that medical malpractice actions are a poor methodology to get physicians to internalize the costs associated with safe medical practices.

There is nothing intrinsic to the operation of a RMC or a PCMH that modifies the application of tort law so as to encourage PEs to practice safely any more than tort law encourages PCPs to practice safely. Therefore, even if the IOM/RWJF’s recommendations for PE training are adopted and enacted so that PE-delivered care becomes fungible with PCP-delivered care, why should we anticipate that PCMH-delivered healthcare

238. While I am unaware of any state licensure laws that mandate NPs or PAs to purchase medical malpractices coverage (as many state laws do for physicians), it is likely that whoever has hired a NP or PA will have purchased insurance to cover their own vicarious liability. Thus it is likely that a patient who sustains an iatrogenic injury at the hands of PE will be able to recover some compensation after a showing of PE negligence.


241. IOM/RWJF, supra note 114. Technically, the IOM/RWJF’s recommendations only apply to NPs. However, if PAs and other PEs do not ramp up their entry level education requirements, these providers will be crowded out of the market as nurses secure more leadership positions.
will be any safer than traditionally-delivered healthcare? This is not a moot question. As humans, both PEs and PCPs make mistakes and respond to economic stimuli. So, if we place future PEs in the same role as current PCPs and provide them with same economic incentives, why should we hold a schizophrenic expectation that these future PEs will produce a better (or even the same) clinical outcomes than are currently being provided by PCPs?242

IV. MARKET REGULATION OF PES

Fast-forward to 2020, the year of good vision. The Accountable Care Organization (ACO), developed under the Patient Protection and Affordable Care Act (PPACA),243 is now the fundamental business organization for the delivery of healthcare.244 ACOs, whose public face will often be the PCMH,245 will measure:

quality and cost at the hospital staff level [thereby helping to] pinpoint examples of overuse of services that would not otherwise be identified. Bringing these instances to light can help hospital leaders initiate activities that lead to improved quality and lowered costs, such as investing in care management, reducing acute care capacity, and forgoing unnecessary specialist recruitment.246

242. Einstein “famously” observed that a definition of insanity is doing the same thing over again but expecting a different outcome. You know, Einstein said the definition of insanity is doing the same thing over and over and expecting different results, Newsweek (Apr. 13, 2010), http://newsweek.tumblr.com/post/518155653/you-know-einstein-said-the-definition-of-insanity. If all the coming PCMHs do is to substitute doctor-level post-graduate trained PEs for our current PCPs we will have changed nothing and should not expect our health care system to be better.


244. A detailed discussion of ACOs is beyond the scope of this article. See generally Accountable Care Organizations: A model for sustainable innovation, Deloitte (2010), http://www.deloitte.com/assets/Dcom-United%20States/Local%20Assets/Documents/US_CHS_AccountableCareOrganizations_041910.pdf.


246. Elliott S. Fisher et al., Creating Accountable Care Organizations: The Extended Hospital Medical Staff, The Commonwealth Fund (Feb. 22, 2007), http://www.commonwealthfund.org/Content/Publications/In-the-Literature/2007/Feb/Creating-Accountable-Care-Organizations—The-Extended-Hospital-
In other words, health care reformers envision administrative controls to be the way to regulated the market and reduce medical errors. There is no question that the elimination of unnecessary medical treatments\textsuperscript{247} will avoid some medical errors. After all, when medical services are not provided, iatrogenic injury is impossible. But \textit{a priori}, there is nothing about an ACO— as we now know understand the concept— or quality monitoring or even administrative controls \textit{per se} that will reduce the incidence of \textit{provider-errors per patient-treated}.\textsuperscript{248} Therefore, whether ACOs' heightened medical monitoring of provider care will translate into an actual improvement in quality, i.e., a reduction in the number of provider-errors per patient-treated, is debatable.\textsuperscript{249}

So, forgetting about quality, how will ACOs' use of administrative controls to hold PEs accountable? Theoretically, under the PPACA, individual PEs (and physicians) will not be held accountable because ACOs are to focus on provider organizations, not providers.\textsuperscript{250} To the extent that any ACO performance measures are publicly reported, the reported figures are to be limited to those quality metrics that represent the organization.\textsuperscript{251}

Yet, it would be naïve to think that ACOs will not use adverse provider-specific performance data against PEs. In 2006, the IOM recommended that providers who habitually fail to meet their prescribed performance measure targets be “removed” from the market.\textsuperscript{252} In that same year, federal government took its first steps to launching a provider-specific report card for physicians;\textsuperscript{253} a report card that would be completely

\textsuperscript{247} What medical treatments are unnecessary, of course depend on whether you are the patient or the payor. However, there are certain conditions for which there is little scientific basis; and even less science underlying treatment. Patricia Callahan & Trine Tsouderos, \textit{A Dubious Diagnosis}, Chi. Trib., Dec. 8, 2010, available at http://www.chicagotribune.com/health/ct-met-chronic-lyme-disease-20101207,0,5671843.story?page=2(discussing the lack of scientific foundation for chronic Lyme disease and how those who treat this condition profit).


\textsuperscript{249} A more detailed discussion of this topic is beyond the scope of this article.


\textsuperscript{251} Porter, supra note 250, at 2478.

\textsuperscript{252} See Institute of Medicine: Rewarding Provider Performance: Aligning Incentives in Medicare, 2006.

analogues to government's web-based provider-specific report card for hospitals.254 In the last four years, evidence has accumulated that report cards do reduce the supply of providers255 and to a reduced volume of services prescribed.256 As health care reformers want to hold PEs accountable,257 it is likely that PEs — like hospitals and physicians — will ultimately be subject to quality monitoring and publicly reviewable report cards.258

Although report cards improve market transparency and create reputational incentives for “low-quality providers” to exit the market, the societal gains are debatable.259 Interestingly, twenty-first century health care reformers continue to believe that the improved market transparency produced by provider-specific report cards is a universal good. The theory behind this assumption may seem solid, but in practice, report cards for PEs (or for PCPs for that matter) are unlikely to be a universal good in the long run. Joshua Cooper Ramo has observed that the constant watching and monitoring of individuals predictably increases the level of mistrust and

---


257. IOM/RWJF, supra note 114, at 221.

258. See generally Victoria Stagg Elliott, Accountable Care Organizations: How Your Practice Can Profit, Am. Med. News, Sept. 27, 2010, available at http://www.ama-assn.org/amednews/2010/09/20/bisa0920.htm; Naylor & Kurtzman, supra note 143, at 897; cf. IOM/RWJF, supra note 114, at 14 (while the IOM and RWJF want to hold PEs more accountable, the details of accountability are sparse. This 600-page tome on the future of nursing mentions “accountability” less than a dozen times; and then only in a cursory context).

259. Daniel R. Levinson, Medical Mistakes Plague Medicare Patients, USA Today (Nov. 16, 2010), http://www.usatoday.com/news/opinion/forum/2010-11-16-levinson16_ST_N.htm#. “A decade after an Institute of Medicine study placed preventable medical errors among the leading causes of death in the United States, our latest study found that a disturbing number of hospitalized patients still endure harmful consequences from medical care, 44% percent of them preventable.” Id.
fear.\textsuperscript{260} To illustrate, consider a situation where everyone is required to live in glass houses. The glass houses would greatly facilitate the monitoring of your neighbors' activities. Now, suppose you observe your neighbor cleaning his gun: are you more or less likely to feel secure now that you know your neighbor's personable habits?\textsuperscript{261} For physicians, there is already evidence that enhanced transparency negatively impacts their life-styles.\textsuperscript{262} We should expect that report cards will similarly negatively impact PEs' life-styles.

In addition to the negative aspects of improved transparency, PE-specific report cards have two other potential detractors.\textsuperscript{263} Report cards are an artificial measurement of quality. This is because many things cannot be measured directly,\textsuperscript{264} and what is measured gets done\textsuperscript{265} regardless of whether it is meaningful.\textsuperscript{266} Worse, artificial quality measurements create a false sense of security with respect to determining whether a situation is getting better. For example, former Secretary of Defense Robert McNamara famously used a high "body count" metric as a quality index of for the U.S. Army, even while the United States was losing the Vietnam War.\textsuperscript{267} Similarly, PEs (and physicians) may have a great report card while not necessarily providing quality care.\textsuperscript{268}

Indeed, the perverse incentives created by artificial quality metrics can have a deleterious effect on our health care system. For example, consider the potential negative impact of the monitoring of surgical site infections


\textsuperscript{261} See Ramo, supra note 260, at 27.

\textsuperscript{262} Jha & Epstein, supra note 255, at 851; Percutaneous Coronary Interventions, supra note 104, at 35.

\textsuperscript{263} For this paper it is assumed that the quality metrics used will be derived from error-free analysis. This assumption may not be true. See, e.g., Ramo, supra note 260, at 173-78 (illustrating that metrics selected on historic data can be misleading because they do not anticipate future changes that have not occurred in the past and therefore, measurements taken from a system that is not at steady-state can be misleading because not all externalities will be controlled).

\textsuperscript{264} For example, love or trust.


\textsuperscript{266} See Ramo, supra note 260, at 163-64.


(SSIs). Routinely monitored performance measurements for SSIs include intraoperative data (e.g., proper antibiotic administration) and postoperative data (e.g., proper glucose control and avoidance of hypoxemia and hypothermia). What is not used as quality metrics for SSIs are preoperative — or patient specific factors — like the presence of diabetes, smoking history, use of steroids, homelessness, and obesity.

Now consider a surgeon who is evaluating a patient for an elective surgery. The SSI data on the provider-specific report cards create reputational incentives for the surgeon to avoid being associated with SSIs. So, any surgeon who wished to avoid being a “bad doc” has an incentive to not offer surgery to homeless overweight diabetic patients who smoke. By not operating on patients with risk factors for SSIs, the surgeon may be able to avoid being associated with an excessive number of SSIs. Viewed in this light, the artificial quality metric of report cards look more like a scheme to ration healthcare than as a legitimate tool to improve the quality of patient care.

As PEs increasingly provide more patient care in PCMHs, and if PEs are held accountable by quality metric report cards, then there is no reason to believe that PEs will behave differently than surgeons subjected to the same administrative tool to improve market transparency.

Provider-specific quality metrics monitoring has one final unsavory aspect. The cost of monitoring PEs (or PCPs) for compliance with their collaborative agreements and performance measures creates a deadweight cost on our health care system. A deadweight cost arises when the direct impact of an economic event is lessened by its indirect effects. For example, if a government raises taxes to pay down its debt, a deadweight loss can arise from the negative impact that higher taxes have on business productivity (which then would impact that government’s tax revenue stream). In healthcare, the deadweight loss that has arguably received the

269. Percutaneous Coronary Interventions, supra note 104, at 32-35.
270. For example, a patient who develops pneumonia after surgery is at increased risk of developing an SSI.
271. I have no problem with rationing healthcare in this matter, so long as such rationing is transparent; i.e., we publically announce to diabetics, smokers, patients on steroids, the homeless, and the obese that they are less likely to receive surgical intervention.
272. Unlike the RMCs, which use screening guidelines to steer high-risk patients away, PCHMs will not have the luxury of steering high-risk patients. Conceptually, while PEs employed by PCMH could refer complex and high-risk patients to their physician overseers, the use of similar quality metrics for PCPs and PEs will mean that reputational incentives will create disincentives for physicians to use their discretion not to treat such patients. See supra, Part II, Section A.
274. Id.
most attention in the literature is pharmaceutical patents. Yet, it is not hard to imagine that provider monitoring will create a substantial deadweight cost. We assume that by monitoring health care quality, a reduction in medical errors and adverse outcomes will be achieved, thereby producing an automatic reduction in health care costs. Certainly much of the patient safety literature, with its emphasis on cost reduction, supports this point of view. After all, it is to be expected that by doing some provider-specific monitoring, there should be some quality improvement because the reduction of certain types of medical errors, i.e., the harvesting of the “low-hanging fruit,” would result in fewer adverse outcomes. In addition, the ramping up of provider-specific monitoring system provides us with the additional advantage of employing many individuals who saw their jobs move overseas during the past fifteen years.

Yet, like most things in life, the relationship between quality monitoring and improved quality is non-linear. Rather, any investment in quality

---


276. Robert P. Smith, *The Cost of Quality: Is “An Ounce of Prevention” Really Worth “A Pound of Cure”?*, Am. Inst. of Architects (2009), http://info.aia.org/nwsltr_pm.cfm?pagename=pm_a_20050722_quality. “Philip B. Crosby’s landmark book, *Quality Is Free*, captured the imagination of many people interested in the relationship between quality and operating efficiency. Fundamentally, Crosby argues that the costs resulting from poor quality greatly exceed the costs required to produce a high-quality product or service in the first place.” *Id.* The assumption that quality is free runs through many of the IOM’s publications, including *To Err is Human* (supra note 97) and *Crossing the Quality Chasm* (supra note 144).


279. Perhaps because there are so many administrative positions charged with monitor health care quality (e.g., quality control managers, patient safety officers, and outcomes data managers) it is hard to get a handle on how many of these individuals are now employed in the health care sector. But, if you are a direct patient care provider working in a hospital, there is no question that the number of health care quality administrators employed in the health care sector has skyrocketed in the past decade.

monitoring can only be expected to provide a positive return up to a point, after which any return on an investment in quality monitoring becomes negative. So, despite the initial favorable results from quality monitoring, a reasonable question is whether the United States has reached the point of maximal benefit of provider-specific quality monitoring?

The answer to this question depends on your point of view. To administrators and health care reformers, whose jobs depend on identifying low-quality providers, the answer would be “no,” because providers continue to be non-compliant with “evidence-based medical practices.”

For front line providers, on the other hand, who must increasingly answer to quality control care managers in addition to patients, and who are subject to reputational incentives, the answer would be an unequivocal “yes.”

Regardless of your position in this debate, expanding the provider-specific quality monitoring to PEs is likely to move us beyond the tipping point of maximal quality benefits per dollar spent on monitoring. As our health care labor force is expanded by an influx of both PEs and physicians, all of these providers will be subject to labor-intensive medical record quality monitoring, a process that is not necessarily made less labor-intensive by the use of an EMR. Consequently, as the provider labor pool increases, so will the pool of health care quality managers—especially if the RMC’s zero tolerance for PE protocol violations.

281. See Smith, supra note 276.
282. See Surgical Care Infection Prevention Update, Medscape (Nov. 29, 2010), http://www.medscape.org/viewarticle/557689. For example, in 2007 because of surgeons’ low compliance rate with evidence-based perioperative antibiotics use, the government felt compelled to introduce pay-for-performance bonuses to modify surgeons’ behavior. Id.
283. To front line providers, medical monitoring administrators are considered to be the “quality control Gestapo.” See Albert Speer, Infiltration (1981), (a theme of Speer’s book is that Gestapo’s political activities acted as deadweight loss that impaired the productivity of German war machine in World War II).
287. See Michael F. Furukawa, T. S. Raghu & Benjamin B. M. Shao, Electronic Medical Records, Nurse Staffing, and Nurse-Sensitive Patient Outcomes: Evidence from California Hospitals, 1998-2007, 45 Health Serv. Research 941, 954 (2010) (stating that the time required for nurses to enter quality metrics was not cost-efficient); Sandra Verelst et al., Validation of Hospital Administrative Dataset for Adverse Event Screening, 19 Quality & Safety in Health Care, 1 (Apr. 27, 2010), at http://qualitysafety.bmj.com/content/19/5/1.36.full.pdf?sid=a3056c9f-7da4-48cf-bbcb-a38d8db2890fa (electronic screening of medical records for administrative quality data is not accurate).
288. See supra Part II, Section A.
becomes the norm as every chart will require review.289 Under such circumstances, when we have more individuals monitoring provider quality than there are total providers (physicians plus PEs), it seems likely that quality monitoring will have a substantial deadweight cost.

V. CONCLUSION

At what point will a phalanx of managers whose job it is to monitor the quality metrics of PEs (and physicians) fail to be cost effective? I do not know. This overview of market regulatory mechanisms for PEs indicates, however, that administrative controls when used in isolation are unlikely to reduce the provider-errors per patient-treated, and hence are unlikely to be cost-effective in the long run. This is not to say that legal controls are necessarily better. Experiences with physicians suggest that enforcement of licensure and scope of practice laws are far from optimal.290 As we are actively encouraging PEs to enter the market, it seems unlikely that we will enforce licensure and scope of practice laws against PEs (even to the degree that these laws are enforced against physicians). Nor is our medical malpractice system effective in creating appropriate deterrence mechanisms for providers291 or creating appropriate compensation.292

After a decade of health care reform, it is unclear whether increased utilization of PEs alone is the solution. I still think the long run solution for controlling PEs, while maintaining the same level of quality of care, will require the adoption of a no-fault or enterprise liability system.293 Will we ever have a no-fault or enterprise liability system? Again, I do not know. What I do know is that a no-fault or enterprise liability system is a more rational system for managing providers who have less than formal postgraduate training certified by a board of examiners who are authorized to provide care in a team setting.294 The reason is simple: a system of no-fault or enterprise liability aligns the interests of physicians, PEs, and ACOs in such way that they all have a vested interest in providing high quality patient care.

289. Presently, absent a triggering event, most physicians’ charts are not reviewed; and non-RMC PE charts are rarely reviewed.
292. Richards & McLean, supra note 239, at 75-77.
293. See generally McLean, supra note 3, at 276-95.
294. See id.
Indeed, the IOM is in agreement on this point. The IOM first called for the United States to adopt either no-fault or enterprise liability professional insurance coverage in 1999, and recently affirmed the desirability of no-fault liability coverage for certain clinical situations. In addition, if one reviews the IOM’s recommendations during the last decade and then compares these recommendations with the subsequent health care policies that are adopted by the United States, a clear pattern has emerged: what the IOM recommends is what gets adopted by the government as health care policy. As the IOM has recommended a fundamental change in professional liability coverage in favor of no-fault or enterprise liability, it seems likely that tort reform that will be in place by 2020 for PE negligence will be a system of no-fault or enterprise system.

295. IOM, supra note 97, at 111.