REVIEW
Patient Protection and Affordable Care Act of 2010: a primer for NeuroInterventionalists

Laxmaiah Manchikanti,1,2 Joshua A Hirsch3

ABSTRACT
The Patient Protection and Affordable Care Act (the ACA, for short) became law on 23 March 2010. It represents the most significant transformation of the American healthcare system since Medicare and Medicaid. Essentials of ACA include: (1) a mandate for individuals and businesses requiring as a matter of law that nearly every American has an approved level of health insurance or pay a penalty; (2) a system of federal subsidies to completely or partially pay for the now required health insurance for ~34 million Americans who are currently uninsured—subsidized through Medicaid and Exchanges; (3) extensive new requirements on the health insurance industry and (4) changes in the practice of medicine. The Act is divided into 10 titles. It contains provisions that went into effect starting on 21 June 2010 with many of the provisions going into effect in 2014 and later. The ACA goes well beyond insurance and payment reform. Practicing physicians will potentially be impacted by the Independent Payment Advisory Board and the Patient Centered Outcomes Research Institute.

INTRODUCTION
On 23 March 2010, President Obama signed into law the most sweeping healthcare system reform legislation since Medicare was enacted in 1965. The debate has been both heated and divisive. There is a substantial literature that has emerged both in support of and in opposition to the Patient Protection and Affordable Care Act of 2010 (the ACA, for short).1–3

Supporters of the law maintain that the passage of comprehensive healthcare reform legislation presents tremendous opportunities to improve the way that America’s healthcare system works. They believe that the reforms to expand coverage hold the potential to help millions of Americans. The opponents of the healthcare reform claim that ACA will transfer one-sixth of the US economy into the hands of politicians and agency bureaucrats.

Manchikanti et al3 recently published an article on the impact that the ACA will have on interventional pain management. There were elements of that review that would serve as useful background for NeuroInterventional specialists. For that reason, this brief communication was undertaken.

ACA implementation
The Act is divided into 10 titles. It contains provisions that went into effect starting on 21 June 2010, with the majority of the provisions going into effect in 2014 and later (table 1).4

ESSENTIALS OF ACA
Essentials of ACA have been described in multiple publications, many of them partisan and opinion based. We endeavor to present the facts while limiting our commentary.

There are charges for those who fail to buy health insurance and a penalty on employers above a certain size who do not cover their employees. The Internal Revenue Service is the agency charged with enforcement. Those penalties on individuals, after a brief start-up period, are $695 annually for each individual (limited to three times that amount for any family) or 2.5% of income, whichever is greater. An individual without the required insurance and with an income of $20 000 pays a tax of $695; at $50 000 the tax is $1250; at $100 000 it is $2500.2

The ACA establishes a system of subsidies for the purchase of health insurance that are based primarily on income and family size.

The first subsidy is an expansion of the existing Medicaid program to include every American whose income is under ‘133% or 138% of poverty’. In practical terms, in 2014, when Medicaid expansion takes place, individuals with incomes less than ~$15 800 or families of four with incomes less than ~$32 300 will become eligible for comprehensive, affordable health insurance.

Under ACA, there will be a new national uniform income qualification—having an income below the ‘133% or 138% of poverty’ level—and there is no longer any requirement to spend other assets or to belong to a covered category. This expansion of Medicaid eligibility is expected to provide health insurance to ~18 million additional Americans by 2019.2

The second of these subsidies is an extensive cost-sharing arrangement for health insurance purchased through new ‘Exchanges’. The Exchanges are designed to be state-run administrations that will organize and approve health insurance plans being sold by the insurance industry and present those plans accurately and in place as a form of ‘one-stop shopping’.2 The health insurance offered through these Exchanges is primarily available to those without employer-provided health insurance. These subsidies are available to Americans whose income is up to ‘400% of poverty’ ($95 700 for a family of four in 2014). At ‘133% or 138% of poverty’, an individual is responsible for the cost of health insurance up to a level of 2% of

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Table 1  Implementation schedule of ACA

<table>
<thead>
<tr>
<th>Issue</th>
<th>What legislation would do</th>
<th>Effective date</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>Business tax credits</td>
<td>2010 tax year, with the credit increasing up to 50% in 2014</td>
</tr>
<tr>
<td></td>
<td>Temporary reinsurance program</td>
<td>90 days after enactment</td>
</tr>
<tr>
<td></td>
<td>Temporary high-risk insurance pool</td>
<td>90 days after enactment</td>
</tr>
<tr>
<td>2011</td>
<td>Pre-existing conditions</td>
<td>6 months after enactment</td>
</tr>
<tr>
<td></td>
<td>Adult dependent children</td>
<td>6 months after enactment</td>
</tr>
<tr>
<td></td>
<td>Insurance coverage limits</td>
<td>6 months after enactment</td>
</tr>
<tr>
<td></td>
<td>Medicare drug rebates</td>
<td>Immediately</td>
</tr>
<tr>
<td></td>
<td>Tanning salon tax</td>
<td>Immediately</td>
</tr>
<tr>
<td></td>
<td>Preventive services</td>
<td>6 months after enactment</td>
</tr>
<tr>
<td>2012–2013</td>
<td>Annual fee on drug-makers</td>
<td>1 January 2012</td>
</tr>
<tr>
<td></td>
<td>Contribution limits on healthcare savings accounts</td>
<td>1 January 2013</td>
</tr>
<tr>
<td></td>
<td>Itemized deductions for unreimbursed medical expenses</td>
<td>1 January 2013</td>
</tr>
<tr>
<td></td>
<td>Medicare taxes</td>
<td>1 January 2013</td>
</tr>
<tr>
<td>2014</td>
<td>Individual mandate</td>
<td>1 January 2014</td>
</tr>
<tr>
<td></td>
<td>Employer requirements</td>
<td>1 January 2014</td>
</tr>
<tr>
<td></td>
<td>Medicaid expansion</td>
<td>1 January 2014</td>
</tr>
<tr>
<td></td>
<td>Federal subsidies</td>
<td>1 January 2014</td>
</tr>
<tr>
<td></td>
<td>Annual fee on insurance companies</td>
<td>1 January 2014</td>
</tr>
<tr>
<td>2015–2016</td>
<td>Individual mandate</td>
<td>1 January 2015</td>
</tr>
<tr>
<td></td>
<td>Annual fee on insurance companies</td>
<td>1 January 2015</td>
</tr>
</tbody>
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Continued
Table 1 Continued

<table>
<thead>
<tr>
<th>Issue</th>
<th>What legislation would do</th>
<th>Effective date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual mandate</td>
<td>Penalties for not carrying insurance would increase to $695 for each family member up to $2005 per family or 2.5% of taxable household income, whichever is greater.</td>
<td>1 January 2016 (adjusted for inflation after 2016)</td>
</tr>
<tr>
<td>2017–2018</td>
<td><strong>Annual fee on drug-makers</strong> The annual fee on pharmaceutical manufacturers would increase to $3.5 billion in 2017 and $4.2 billion in 2018.</td>
<td>1 January 2017</td>
</tr>
<tr>
<td></td>
<td><strong>Annual fee on insurance companies</strong> The annual fee on health insurance companies would increase to $13.9 billion in 2017 and $14.3 billion in 2018.</td>
<td>1 January 2017</td>
</tr>
<tr>
<td></td>
<td><strong>Excise tax on high-cost insurance plans</strong> A 40% excise tax would be imposed on healthcare plans that cost more than $10,200 for individual coverage and $27,500 for family coverage.</td>
<td>1 January 2018</td>
</tr>
</tbody>
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IMPACT ON HEALTHCARE SPENDING

According to Congressional Budget Office (CBO) estimates, the number uninsured will be reduced by 52 million from the current level of 50 million. Despite this seemingly impressive number it will leave 25 million residents without health insurance in 2019 after the Act is fully implemented. It is also estimated that private insurance enrollment will rise steeply as a projected 15.8 million obtain coverage through health insurance Exchange plans in 2014.

Provisions to expand coverage under the ACA will not affect large numbers of Americans until 2014. In the interim, it is likely that employer-sponsored insurance will continue to decline because premiums will almost certainly grow faster than wages and salaries, and the number of uninsured people is likely to increase.

After 2014, self-employed Americans and most workers in small firms will be allowed to purchase coverage through insurance Exchanges. The Medicaid expansion will add comprehensive coverage at little or no cost for the lowest-income adults with help to solidify the safety net and prevent the erosion of coverage among adults in future economic downturns.

In dealing with those who are privately insured, there is substantial debate on the impact of the ACA on premiums. While the administration officials have said that there will be reduction in premiums of $2500 for each individual, others have estimated that these premiums will increase significantly. However, the Office of the Actuary at the Centers for Medicare and Medicaid Services (CMS) in their report released in April 2010 projected that ACA would increase the number of Americans with health insurance coverage but would also increase projected spending by ~1% over a period of 10 years.

Per the authors of the law, the ACA includes a series of Medicare reforms that will generate billions of dollars in savings for Medicare and strengthen the care Medicare beneficiaries receive. In addition, the Medicare Hospital Insurance Trust Fund is increased by 12 years, more than doubling the time before the exhaustion of the trust fund. CMS also noted that, historically, Medicare has often led the entire healthcare system in the adoption of quality and payment innovation. Consequently, they claim that the ACA ensures that Medicare will continue to serve as a leader in driving the widespread adoption of innovative quality and payment strategies.

Based on their claims of the savings, the law’s authors have projected Medicare’s fiscal outlook, both with and without passage of ACA. According to their calculations, by 2019 Medicare spending will grow by 6.8%, reaching $258 billion; with reform, spending will grow 5.3%, reaching $254 billion (figure 1).

Further, Foster, Chief Actuary of CMS, in his analysis accompanying the Annual Report of the Medicare Board of Trustees, noted that Medicare per assumptions of the ACA, predicts that payment rates for doctors and hospitals serving seniors will be cut by 30% over the next 5 years. While the ACA, as amended, makes important changes to the Medicare program.
and substantially improves its financial outlook, there is a strong likelihood that certain of these changes will not be viable in the long range. He further reported that, specifically, the annual price updates for most categories of non-physician health services will be adjusted downward each year by the growth in economy-wide productivity. The best available evidence indicates that most healthcare providers cannot improve their productivity to this degree—or even approach such a level—as a result of the labor-intensive nature of these services.

Medicare Advantage Plans will have a significant impact on the Medicare budget and seniors. Medicare payments to plans are estimated to total $116 billion in 2010, accounting for 22% of total Medicare spending. The ACA reduces the federal payments to Medicare Advantage Plans over time, bringing them closer to the average costs of care under the fee-for-service Medicare program. The law also provides new quality bonus payments to plans, beginning 2012, and beginning in 2014, will require plans to maintain a medical loss ratio of at least 85%, restricting the share of premiums that Medicare Advantage firms can use for administrative expenses and profits.

Estimates from the CBO suggest that Medicaid will add 16 million enrollees, 50% of the expected 32 million, to Medicaid. The expanded coverage will be free to the states at least through 2016 and to uninsured persons whose income qualifies them for it. That having been said, it is well known that eligibility for health insurance does not always translate into actual enrollment—as evidenced by the millions of uninsured adults who are already eligible for Medicaid under current law.

There are multiple other regulations impacting Medicare and Medicaid in the healthcare law. One such is the 15-member Independent Payment Advisory Board (IPAB) whose task is to make recommendations to reduce the per capita growth rate in Medicare spending. Another law having an affect is the Independent Payment Advisory Board (IPAB) whose task is to reduce the per capita growth rate in Medicare spending. The IPAB is based on the philosophy that there is a need for a board of impartial experts to oversee the healthcare system. The legislation established specific target growth rates for Medicare and charges the IPAB with ensuring that Medicare expenditures stay within these limits. The IPAB must also make recommendations to Congress as to how to control healthcare costs. The IPAB will have 15 members appointed by the President for a 6-year term, supplemented by three of them for a 1-year term. The IPAB members are supposed to be nationally recognized experts in health finance, payment, economics, actuarial science, or health facility and health plan management, and to represent providers, consumers and payers. The ACA appropriated $15 million for the IPAB for 2012 and increases its funding at the rate of inflation for subsequent years. The purpose of the IPAB is to reduce the per capita growth rate in Medicare spending indefinitely. It should be noted that in most years Medicare’s per capita growth has been below or equal to growth in the private sector. There is no congressional authority over this board. The CBO concluded in its analysis of the ACA that the IPAB would reduce Medicare spending by $28 billion over the period 2010–2019, with significant savings continuing beyond 2019.

Many questions remain about how the IPAB will work. The relationships between the IPAB and other boards and commissions, such as the MedPAC and the Centers for Medicare and Medicaid Innovation created by the ACA, has not been

**Figure 1** Projected Medicare fiscal outlook.

system presently, it has been utilized for savings and deficit reduction measures in affordable healthcare law cost estimations and savings. Beyond methodological challenges, there are issues with the use of the SGR system in these calculations, that is, a system that most observers agree needs to be reformed.

**ADMINISTRATIVE SPENDING AND REGULATIONS**

Regulatory reform is a part of the ACA. To put the size of the existing regulatory regime into perspective, Conover20 estimated that the net cost of health services regulation was $169.1 billion annually in 2004.

In October 2009, a Thomson Reuters report stated that the healthcare system wastes between $505 billion and $850 billion every year, an estimated one-third of the nation’s healthcare bill.21 This report indicates that healthcare waste can be attacked and healthcare costs can be reduced without adversely affecting the quality of access of care. This report shows that elimination of paper-based medical record systems will save 6% of the spending.

**IMPACT ON PRACTICE OF MEDICINE**

The ACA will make health insurance available to an additional 34 million Americans. However, while insurance may be provided, the coverage for many procedures may be either diminished or eliminated. There are well over 100 sections of the law dealing with various aspects of the Medicare programs including some reduction in payments for physician services.

The Congressional Research Service in its 21 April 2010 report22 observed that the law makes several changes to the Medicaid program that have the potential to affect physicians and how they practice. The report also adds that while some of the provisions have clear and direct consequences, for instance, altering physician reimbursement right away, others have the potential to influence how physicians might practice in the future by changing the incentives to encourage improvements in the organization and delivery of care.

**Independent Payment Advisory Board**

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determined. Its success also will depend on Congress’s reactions to its recommendations. A 3/5 senate vote will be needed to override payment cuts, but Congress could increase Medicare funding through independent legislation. Proposals for years before 2020 may not target inpatient or outpatient acute hospitals, long-term care hospitals, inpatient rehabilitation hospitals, psychiatric hospitals and possibly hospice care prior to 2020. However, the board is not prohibited from cutting payments for physicians, though its powers may be limited if a permanent fix for the SGR formula is passed. Table 3 illustrates a 3-year time horizon for IPAB proposals.1 23

PATIENT CENTERED OUTCOMES RESEARCH INSTITUTE

The Patient Centered Outcomes Research Institute (PCORI) focuses on comparative effectiveness research and provides impressions about the effectiveness of various modalities. It cannot be used for denial of coverage. PCORI is similar to the National Institute for Health and Clinical Excellence in the UK.24 25 Interestingly, the role of the National Institute for Health and Clinical Excellence in the National Health Service, which is highly proscriptive, has been questioned and the National Health Service is attempting to empower practicing physicians.26–28

COST CONTROLS

Controlling the cost of healthcare is a major motivator for supporters of the ACA. They state that the projections suggest that with reform, total healthcare expenditure as a percentage of the gross domestic product will be 0.5% lower in 2050 than it would otherwise have been. Indeed, the commonwealth fund projected that expenditure for the whole healthcare system will be reduced by nearly $600 billion in the first decade.29

Table 3  Three-year sequence of events

<table>
<thead>
<tr>
<th>Determination year</th>
<th>Proposal year</th>
<th>Implementation year</th>
</tr>
</thead>
<tbody>
<tr>
<td>By 30 April</td>
<td>By 15 January</td>
<td>By 1 January</td>
</tr>
<tr>
<td>Chief Actuary of CMS makes projections and determination</td>
<td>Proposal submitted by IPAB to Congress and the President</td>
<td>On 1 October Recommendations relating to fiscal year payment rate changes take effect</td>
</tr>
<tr>
<td>By 1 September</td>
<td>By 25 January</td>
<td>On 1 January</td>
</tr>
<tr>
<td>Draft proposal sent by IPAB to MedPAC for consultation. Draft proposal sent by IPAB to Secretary for review and comment</td>
<td>Secretary submits own proposal to Congress and the President, with a copy to MedPAC, if IPAB was required to submit a proposal but failed to do so</td>
<td>Recommendations relating to Medicare Part C and D payments take effect. Recommendations relating to calendar year payment rate changes take effect</td>
</tr>
</tbody>
</table>

The CBO, in its scoring of the ACA, considered that one of the significant ways of paying for expanding health insurance coverage was the use of premiums from the new Community Living Assistance Services and Support (CLASS) Act Entitlement. In this proposal, the legislation begins collecting premiums for this insurance in 2015, but does not begin paying out benefits until 2020, which is outside of the CBO 10-year time horizon.1–3 The CBO scoring of the legislation takes those first 5 years of premiums and drives them to pay for its expansion and coverage. The diversion represents $70 billion of the offsets to the costs of the legislation. It also assumes that when it becomes necessary to begin paying benefits in 2020, there will be other premiums from other Americans to cover the cost. The second issue is related to the credit of $198 billion savings from reducing Medicare provider rates in future years. This is widely opposed by the physician community and has never been realized in the past.1–3 30 31

Health insurance premiums

Several health insurers stated that they are seeking rate increases as a direct result of the law or unrelated to ACA.32–34 The rate increases also apply mostly to employees of small businesses of fewer than 50 people and to people who buy plans as individuals. It has been estimated that some customers could experience rate increases of >20%.35 However, the administration stated that insurers had already planned to raise rates and were using the Bill as an excuse. In addition, some insurance companies also announced that in response to the law, they would end the issuance of new child-only policies.

The DHHS informed that health insurers that raise premiums by ≥10% will face new regulatory scrutiny. Under the guidelines, which are preliminary, insurers would have to post detailed justifications online when the proposed double-digit rate hikes are introduced. The rules also define more clearly how regulators should ascertain whether a rate increase is reasonable. The issue of enrollment of persons with pre-existing conditions is one of the most important achievements of ACA. However, the data show that only 8000 have enrolled in a health plan for pre-existing conditions as of 1 November 2010. Almost 6 million Americans are potentially eligible for the program, which runs through 2013. The $5 billion in federal funding designated by the law may not be enough to cover all eligible individuals and the CBO projects that enrollment will average 200,000 a year between 2011 and 2013.

State opt-outs

Beginning 2017, opt-out provision in the health reform law allows states to request federal waivers to be exempted from certain requirements in the law. As an example, states could opt out of the law’s requirements for mandatory coverage, health insurance Exchanges and penalties for employers that do not provide coverage.7 However, states must first revise a coverage program that is at least as comprehensive and affordable as the health reform law, as judged by Secretaries of DHHS as well as the Treasury.

Medical loss ratios

The DHHS issued final regulations on 22 November 2010 on what health insurers must do to meet the medical-loss ratio requirement as part of the new health system reform law. Starting in January 2011, if health plans do not spend enough of their premium dollars on medical care and quality improvement, they must provide a rebate to customers in 2012. Further, insurers will need to report publically how they spend premium dollars...
beginning next year. The regulations also specify that insurance companies in the individual and small group markets need to spend at least 80% of the premium dollars they collect on medical care and quality improvement activities whereas those in the large group market must spend at least 85%. DHHS believes that these new rules based on ACA are an important step to hold insurance companies accountable and increase value for consumers. DHHS officials believe that the regulations will help rein in a substantial portion of insurance company spending on services unrelated to medical care, such as executive salaries, underwriting, marketing, advertising and other administrative costs. It is believed that these overhead costs contribute little or nothing to the care of patients and the health of consumers.

CONCLUSION
The ACA is historic and produces legislative changes to healthcare greater than any that many US-based doctors have experienced in their lifetime. NeuroInterventionalists, as well as other providers, should be familiar with this legislation as it will likely have impact on their practice.

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None.

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