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A TRANSDISCIPLINARY APPROACH TO HEALTH POLICY RESEARCH AND EVALUATION

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Abstract

An integrated perspective consists of macro- and micro-level approaches to health policy research and evaluation is presented. Analytical strategies are suggested for policy analysis, targeting on health disparities at individual and population levels. This systems approach enables investigators to view how scientific public policy analysis can be implemented to assess policy impacts. In this special issue, five papers are introduced.

Keywords

Transdisciplinary approach; health reform and policy; ecological complex; public policy informatics and monitoring; policy impact analysis

1. Introduction

Restructuring of health services to reduce operating expenses while maintaining and improving equity, quality and efficiency has been in process over the past decades. A prevailing approach is reducing labor costs by downsizing, reengineering and restructuring, and substituting less costly personnel where possible. These efforts have not been coupled with an evaluation of how restructuring and its cost reductions have impacted on patient satisfaction/outcome and program efficiency.

The logic of policy research should include the following steps:

- A description of the logical steps to formulate health policy research.
- An analysis of the impacts of restructuring of health services in response to national and state health legislative acts.
- A plan that will assist in monitoring of the service sectors' performance on reduction and elimination of health disparities and improvement of quality of care.

Rationale

The problem with implementation of population-based health services is that many, sometimes conflicting, elements are involved. "There are many groups in the political process who think that they know what wisdom is" (Munger, 2000). As a result, the ultimate goal of policy creation can be forgotten. Policy is oftentimes created without considering the

extent of its impact; who it will affect and how it will affect them. Health policy analysts posit that more carefully designed studies will aid policy designers in learning how much efficiency can be achieved without endangering the quality of services and in determining the efficacy of community or organizational interventions. There are often issues that arise in all policy debates. The following are examples of the most commonly arising elements, noted in Muger's *Analyzing Policy* (2000):

1. *Efficiency Debates* – debates conflict between markets and experts over allocation of productive resources, with interference from the political forces in society.
2. *Equity Debates*- debates conflict between markets and politics over the distribution of wealth, with experts shaping the debate through theories of justice.
3. *Institutional Reform* – debates conflicts between experts and politics over how to decide political questions, with market forces interfering.

In order to address these issues, an analyst should first create a plan guided by the logic model. Through the creation of a policy analysis plan, the research team can lay out its goals, both short term and long term, and determine which elements of each health policy will produce a better service outcome that will, in turn, achieve more efficiency and effectiveness in terms of quality and accessibility.

Health Policy Research Questions

Pertinent research questions could be involved with the trade-off relationship between efficiency and quality of care and between liberty (free choice) and health security in the population studied. More specifically, for example, the study of health reform impacts in population health can include the following questions:

- Which theoretical concepts can be utilized as a guiding framework to analyze the impacts of restructuring of health services in response to a specific health policy, such as the Patient Protection and Affordable Care Act?
- How can operating expenses be reduced while maintaining and improving equity, quality, and efficiency of health services in communities?
- Will efficiency and quality of service be negatively impacted by market competition that results in the downsizing, reengineering, restructuring, and substitution of less costly personnel?
- Does health policy implementation at the state and local levels directly or indirectly influence health disparities?

2. POET Theoretical Framework

Before undertaking the task of health policy impacts analysis, one must first have an understanding of how varying health organizations function, and the environment(s) and culture in which they exist. The field of Organization Science is the ideal perspective which can aid in identifying common themes for the purpose of problem solving, and maximizing efficiency and productivity within health organizations. This field's focus is "the examination of how individuals construct organizational structures, processes, and practices

and how these, in turn, shape social relations and create institutions that ultimately influence people” (International Encyclopedia of Organization Studies).

Within the field of organization science exists a theory that known as Institutional Theory. This theory focuses on institutions as social structures. According to Scott and Davis (2007), Institutional Theory “considers the processes by which structures, including schemas, rules, norms, and routines, become established as authoritative guidelines for social behavior. It enquires into how these elements are created, diffused, adopted, and adapted over space and time; and how they fall into decline and disuse.” This theory also attacks the issues of policy implementation from a different direction to that of political scientists. It is concerned with questions not about how public policy develops, but about how organizations work, including what happens within organizations with responsibilities for the implementation of public policy. Understanding how and why an institution acts is key to being able to make any changes to the structure of the organization as any changes to structure or composition may also affect its ability to implement policies and render services.

Policymakers also need to keep in mind that their organizations do not exist and act within a vacuum. They are constantly being affected, changed by, and reacting to externalities, the most significant of which is the community. An understanding of that community is therefore key to understanding how the organization works. The perspective known as Community Science studies the dynamics of communities; what shapes them, how they act and interact, and how they relate to other social entities, in this case organizations. Having a thorough understanding of the community can aid in understanding which changes can or should be made to create greater efficiency within an organization because in the end, the community may have the final word in deciding whether or not an organization is truly effective and efficient. If an organization does not aid the public or meet its needs, the level of the organization’s efficiency becomes a moot issue.

Information technology plays an important role to shape the change in health delivery systems. Most notable changes are the establishment of Regional Health Information Collaboratives and Health Information Exchange Centers initiated and supported by the U.S. Centers for Medicare and Medicaid Services (CMS). A series questions can be raised in regard to what the best practices in health information technology (HIT) applications are, how privacy of patient records or information can be ensured, and what infrastructural components are needed to optimize quality and efficiency in health practices so that health disparities can be reduced or eliminated.

Ecological Complex as Macro-Framework

Otis Duncan’s notions of the “ecological complex” and the POET model (Figure 1) are central to a social systems analysis of health policy impacts on the population level. For Duncan (1961, 1964), human ecosystems consist of four key components or properties that are closely interrelated: population (P), organisation (O), environment (E), and technology (T). The POET model, like many attempts at modeling in the socio-environmental sciences, has been criticized as oversimplified; however, the POET systems model, as a conceptual framework has stimulated a considerable amount of research and proved useful for the emergence of environmental sociology (Humphrey, Lewis and Buttel 2002; Dunlap et al.

2002). Mostly, it suggests that the adaptation of human populations due to environmental changes occurs in many ways. Changes in many other components, technologies, or organizations may take place. In turn, transformations in any of the other respective components (P, O, and T) have co-evolutionary effects on the natural environment.

Population refers to the number people within the system. Numbers can go up, go down, mortality and fertility rates can change, people can migrate, move to different areas, the age structure can change over time, etc. For example, in industrialized nations, where fertility rates and death rates are low, populations are older, there are less children (which puts a strain on public programs like Social Security). **Organization** would include some of the organizational structures of a society—here in the U.S., the government and political systems would be important, large corporations, industries and business patterns, communities, culture, families, churches/mosques/temples/synagogues, mass media, etc. Moreover, the economic organisation of a society is important in terms of outcomes. **Environment** refers to a given geographic area of a system. **Technology** refers to the tools available within a given system or adoption of technology (Breen et al., 2010). Think of technology as tools that are used to achieve some end.

The POET model of social change, developed by Duncan (1964), will guide the conceptual framework of policy analysis in which health policies have been sorted into four categories of causal factors that influence the change in health disparities at the geographical level (Figure 2).

This macro-policy framework divides health policy problems into the population-specific, organization-specific, environmental health-specific, and information technology-specific health policy problems. For example, health policy, practice, and accountability can be summarized in Table 1. This policy matrix signifies that a health policy is formed in response to specific problem(s). The accountability of public policy has to be tractable from gathering scientific information pertaining to its achievements for attending goals measureable in four areas such as equity, efficiency, quality, and institutional integrity (Munger, 2006). Thus, health policy researchers are able to examine how specific equity, efficiency, quality, and institutional-relevant policies and their practice have yielded desirable outcomes such as reduction and elimination of health disparities at personal and societal/community levels.

Initially, we should examine the social ecology of health and disease under this macro-policy framework. Within a given **environment** or region, **organizations** at the county-level nested within a state or a set of states, such as the department of public health, can impact **population** disparities by leveraging **technological** innovations. A multilevel approach to analysis can be designed. The macro level could be applied in the investigation of newly formed Accountable Care Organizations (ACOs) and their impact on health disparities. ACOs may impact a population's health within a given environment through the technological innovation of decreasing costs while maintaining quality within the healthcare sector. Additional micro-level investigations could entail the utilization of the POET systems framework to study and conduct impact evaluations on targeted disease states, such as obesity, diabetes II, and congestive heart failure as examples. Health organizational

culture is yet another key aspect of our study that enables us to “untie or unloosing the Gordian knot” in health care.

Health policy research offers some unique challenges in terms its geography, populations, technology or lack of technology, and organizational infrastructure. The POET systems framework is a highly effective conceptualization upon which to ground guided-theory developments for health policy research. Each POET component could be assessed for its integrity and accomplishments at the aggregate level (county and state) of analysis. An example of the components of this model and possible macro- policy determinants are:

- Population-based health care policy (P): Access to care or equity policy
- Organization-based health care policy (O): ACO at the state & local levels; efficiency policy
- Environmental health policy (E): Geography, environmental hazard, and risk assessment
- Health information technology policy (T): Utilization and implementation of HIT and HIE; information sharing and security policy.

3. Policy Analysis

A. Stakeholder Analysis

The first policy recommendation addresses how to best find a connection between an organization and the community. The ultimate goal is to ensure that the choices organizations are making will benefit stakeholders (i.e. the public) as they are the ones that will be most affected by the implemented policies. According to Bardach (2012) “policy decisions failing to consider efficiency very often fail to take account of the welfare of the little guy all. The little guy may be little, but in a proper efficiency analysis, he at least shows up to be counted.... analysis imposes a moral check on political visionaries.” This is where the idea of stakeholder analysis fits in. “A stakeholder analysis is a method of identifying the interests and influence of the various groups affected, modifying the project to meet the groups’ needs (if possible or desirable), and planning strategies of how to engage or placate the various groups” (Morse and Struyk, 2006). The basic steps of stakeholder analysis include:

- a. Identification of key stakeholders.
- b. Assessment of stakeholder interests and potential impact of project on these interests.
- c. Assessment of stakeholder influence and importance.
- d. Outline a stakeholder participation strategy.

B. Technical Efficiency Analysis

In order to maximize profits, an organization must produce the maximum output given the level of inputs currently available (and ideally less inputs). As such, a Technical Efficiency Analysis will be particularly beneficial in the restructuring of the public sector and

maximization of services. Technical efficiency is “the requirement that the production process does not waste inputs, and uses the best available techniques.” (Munger, 2000) In the case of the creation and execution of public services, policy creators need to be able to determine their level of current technical efficiency before making any restructuring changes that will alter the level of available inputs or outputs as these changes may actually result in a decrease of less efficiency and effectiveness. It is important to keep in mind that “technical efficiency is just one component of overall economic efficiency” (Herrero and Pascoe, 2002).

The best methodology for measuring technical efficiency is through Data Envelopment Analysis (also referred to as DEA). This tool helps to identify which combination of inputs and outputs will result in efficiency increase in terms of service output and quality of performance. One of the advantages of using DEA is that it employs multiple inputs and outputs in search for an optimal solution of production efficiency. This makes it particularly suitable for analyzing the efficiency of health care organizations as they often use multiple inputs to produce many outputs. Furthermore, DEA has the ability to identify the most efficient elements within an organization’s structure/context, as well as indicate input and output “targets” that would make an inefficient element more efficient. It can also identify more efficient organizations in order for decision-makers to take the elements that create ideal efficiency and incorporate them into their own organizations. This approach has been expanded to include DEA application in the construction of quality efficiency measures so that comparable organizational units (e.g., rural health clinics, rural community health centers, safety-net hospitals, or nursing homes) can be assessed their performance (Wan et al., 2010; Marathe et al., 2007).

C. Cost-Benefit Analysis

A second methodology that could be utilized to determine the best way to restructure the public sector’s programs and policies without sacrificing effectiveness and efficiency is through a Cost-Benefit Analysis. Also referred to as CBA, Cost-Benefit Analysis is the most commonly used form of decision analysis. “Cost-Benefit Analysis is the process of evaluating policy alternatives by comparing the advantages and disadvantages, based on the appropriate discounts for risk and rate of time preference.” (Munger, 2000) When used correctly, CBA has the ability to accomplish the following:

- a. Measurement of the costs and benefits of a public activity in dollars;
- b. Capturing of risks of failure and chances of success through probability discounting.
- c. Measurement of the future values of an asset, and the present value of a future cost or benefit using time discounting.

In relation to the problem at hand, a Cost-Benefit Analysis could be applied in the following manner: The goal is to optimize the public services sector through restructuring; the only alternative is maintain the status quo, not make any changes to the structure (inputs, outputs, service delivery) and determine which option is more effective; create a list of indirect and direct benefits, not only to the organization but to the public as well and determine which

benefits outweigh each cost and vice versa; since public services are generally long-term in scope, it would be useful to determine future costs/benefits as well. The final step would be to decide which option to follow, which elements are most effective/efficient? Which ones need to be eliminated? And how will these changes lead a restructuring plan that optimizes efficiency in the end?

D. Program Monitoring and Evaluation

After the development and implementation of a particular health program, the program should be monitored and a thorough evaluation of the program in practice should take place. The findings from program monitoring are used to improve the program's operations, allocate resources, and inform policy and decision-making. Some examples of program monitoring measures or metrics include:

- *Program implementation*- Focuses on basic inputs/outputs; i.e. – number of staff, patients, resource utilization, and performance indicators.
- *The quality of services delivered* – data are collected to provide feedback on quality of services.
- *The equity or access-to-care* – The population's health insurance coverage or access to primary care.
- *Financial management*-- tracking how resources were used.
- *Patient and provider satisfaction* – track satisfaction levels through surveys or interviews.
- *Patient care outcomes* – morbidity, disability and mortality (Zhang et al., 2008).

MacRae and Wilde (1985), take the evaluation process one step further, suggesting types of evaluation that occur that are actually built into social processes:

a. Market Accountability

The public decides whether they like the products/services provided by the organization. Organizations that do not pass this test do not survive for long. This is the greatest test of an organization's performance. It can be subjective, dependent upon individual opinions and perspectives.

b. Political Accountability

The public decides whether or not they like an organization's particular activity or policy. The public can oppose the policy and call for a change (referendum). Subjective in that the reasons for the disapproval don't matter, if a majority of the public disapproves, the policy is dead.

c. Expert Analysis

Experts are of particular value to program/policy analysis because they are able to provide an objective perspective, grounded in facts and statistical analysis that will allow them to decide whether or not that program/policy is effective.

In summary, several options that will aid in evaluation of the health policy impact on both public and private service sector with the purpose of maximizing the quality, effectiveness and efficiency of service delivery. Some of these options include a stakeholder analysis, a technical efficiency evaluation through Data Envelopment Analysis, and a cost-benefit analysis. All of these options will help us understand what elements they need to be strengthened or changed in order to create greater efficiency and effectiveness of health service targeting the medically indigent and impoverished population, often found in the rural, elderly, African American, and Veterans. There are, however, other factors that should be kept in mind before any new health policies or programs are implemented. A great part of these aforementioned options involve an evaluation. It is crucial to remember, however, that the delivery of public and personal health services is not always a matter of money. Instead, it may be about increasing the quality of life by providing better services, creating opportunity within the community or promoting human development and growth. These factors should therefore be considered in the restructuring of health services, as any changes to service delivery systems (even if proven cost-effective) could have a detrimental effect on the public. Under this perspective, objective and scientific studies should be executed to provide solid evidence to ensure the optimization of personal and population health outcomes. It is the interplay among POET components of health policy that may influence the goal attainment for reducing and eliminating health disparities.

4. Transdisciplinary Approach to Health Policy Impact

Followed the macro-policy research approach, we should target specific health disorders prevalent in specific populations, using geographic information system (GIS) profiling analysis to identify geographical areas or communities for designing and implementing intervention studies. This micro-level approach to health policy research should be guided by the Knowledge-Attitude-Practice (KAP) and Outcome model (KAP-O framework) to develop planned change strategies and interventions (Jaccard et al., 1996). Thus, the integration between the POET and KAP-O frameworks constitutes the transdisciplinary collaborative research platform for health policy analysis (Figure 3a–4c).

5. Methodological Considerations

Policy research methods

Policy analysis is grounded in social science research methods. Recent developments in predictive modeling or decision support systems enable scientists to perform complex multivariate statistical analysis (Wan, 2002). Health policy researchers could advance the knowledge of health policy impacts (performance at the institutional level and outcomes at the individual level) if mixed methods are used.

Analytic Design

Experimental research design is highly desirable but often not feasible in public policy research. Because of the lack of randomization in practice, it is imperative to employ statistical methods such as risk adjustment methodology and propensity score matching and analytical approach to handle confounding effects of many extraneous variables. If the research is geographically focused, we should use multilevel analytic design to tease out the

influences of varying levels of predictor variables associated with the person-community/county-state levels. If it is possible a balanced sample design can be used in which an equal number of subjects will be selected from each targeted county or community for investigation.

Measurements

A variety of measurement instruments will be designed and used. Each measurement instrument or scale will subject to rigorous psychometric analysis and to be determined its reliability and validity. When latent variables are used, we should perform confirmatory factor analysis (Wan, 2002). When the data are appropriately collected, structural equation modeling can be performed to determine the nature and magnitude of the effects of policy interventions on health disparities with multilevel analysis.

Health Policy Informatics

The field of public policy informatics is relatively new (Wan, 2005). A series of papers in seven special issues on public affairs informatics research were published by the *International Journal of Public Policy*. Wan (2005–2011) highlight the analytical and methodological strategies for performing theoretically sound and empirically valid analyses for health and public policy through the following steps:

1. identification of the policy problem
2. selection of a theoretically informed framework
3. specification of the cause and effect relationship among the study variables
4. quantification and measurement
5. model formulation and hypothesis development
6. validation
7. replication
8. policy simulation with decision support software

The quantitative analysis supplemented by qualitative research enables health disparities researchers to maximize the analytical rigor in research design and analysis. The ultimate research goal is to develop policy analytics (tools) and informatics (evidence-based knowledge on what works or does not work) that can describe, explain, and predict the best practice in disparities research (Wan, 2010).

6. Concluding Remarks

The Institute of Medicine (IOM) of the National Academies of Science in the United States has published the likely conclusion that between 44,000 and 98,000 American's die due to preventable mistakes in healthcare each year (Institute of Medicine, 2001). The IOM has doggedly hounded the nation's health care delivery system because it "...has fallen far short in its ability to translate knowledge into practice and to apply new technology safely and appropriately (Institute of Medicine, 2001). On March 23, 2010, President Obama signed the

Patient Safety and Affordable Care Act. This Act signifies the need for developing patient-centered care strategies. The foundational principles of patient-centric care management rely on the improvement of interpersonal continuity of care and patient-provider communication. The IOM has made continuity of care a primary goal of its comprehensive call for transforming the quality of care in the United States. In 2006, the American College of Physicians (ACP) established continuity of care as a central theme for restructuring or reengineering healthcare. Recent research of life-limited patients receiving patient-centered care management showed a notable 38% reduction of hospital utilizations and a 26% reduction of overall costs with high patient satisfaction (Sweeney, Halpert, & Waranoff, 2007). Thus, it is imperative to establish scientific evidence in support of the need for expanding the Personal Health Record (PHR) as part of the patient-centric care management technology (Noblin et al., 2012). A unique feature of current quality improvement efforts in the United States is that the patient outcomes are to be benchmarked to evaluate the health policy impacts at the patient, community and state levels.

In this special issue on Global Public Affairs Research, we have selected five high-quality articles.

Kacak et al. (2014) examined hospital performance after healthcare reform in Turkey, using Data Envelopment Analysis of 245 general hospitals. Two models with old and new output variables were compared in sensitivity analysis. Then, a model which included quality scores was evaluated to test any evidence about efficiency and quality trade-offs. Quality variable added model have had no significant effect on existing models. The efficient hospitals in both models stayed efficient, however, quality scores had no effect on efficient hospitals, but some of the inefficient hospitals have increased their scores and became efficient.

Lee et al. (2014) studied the effects of urban forests on medical care use for respiratory disorder in Korea, using structural equation modeling. A hypothesized inverse relationship between the extent of urban forest and medical care use for respiratory disease was investigated, controlling for the effects of degree of air pollution, population, and availability of health care providers. The results showed that urban areas with larger forests had a beneficial effect on medical care use. This confirmation of the study hypothesis offers a concrete recommendation for increasing urban city forests to mediate harmful effects of the external environment and improve health status of residents.

Masri et al. (2014) performed a cross-sectional study to assess how health disparities are associated with poor healthcare outcomes, such as mortality rates. Mortality amenable to health care (MAHC) is defined as deaths before the age of 75 from selected causes that should not occur in the presence of timely and effective medical care (Nolte & McKee, 2004). This study describes the differences in age-adjusted standardized mortality rates (ASMRs) from all cause MAHC and ASMRs for Diabetes Mellitus and Ischemic Heart Disease separately, by parish, in Louisiana. Implications for improving healthcare systems were drawn from this empirical study.

Lou and Ci (2014) identify and discuss key historical and contextual factors that affect long-term care (LTC) policy development in China, including the one-child policy and its impacts on the aging population, cultural values toward family care and filial expectations towards children, and the unbalanced development of health and social care. Two LTC models were introduced to show cultural and contextual relevance of LTC services for the frail elderly in China. Finally, a needs assessment approach is suggested in order to implement practical programs for the elderly.

Lastly, Wan et al. (2014) conduct an empirical study on accountable care organization (ACO) model supported by Medicare. ACOs modalities are varying in size, type, and financing structure. Little is known about how specific infrastructural mechanisms influence hospital managers' pro-ACO orientation. This study explores how pro-ACO orientation, as a latent construct, is captured from the perceptions of hospital managers; and identify infrastructural mechanisms leading to the formation of pro-ACO orientation. Urban hospitals are more likely than rural hospitals to be engaged in ACO development. The health provider network size is one of the strongest indicators in predicting pro-ACO orientation.

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Biography

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Figure 1.
POET model in ecological research

Figure 2.
POET health policy framework to guide disparities research: macro-perspective

3a. Macro-Policy Determinants on Health Disparities

3b. Micro-Personal Determinants on Health Disparities

3c. Integration of Macro-Policy and Micro-Personal Determinants of Health Disparities: a transdisciplinary approach (see online version for colors)

Figure 3.

Integration and Synergism of A Transdisciplinary Health Policy Research on Health Disparities and Outcomes Research

3a. Macro-Policy Determinants on Health Disparities

3b. Micro-Personal Determinants on Health Disparities

3c. Integration of Macro-Policy and Micro-Personal Determinants of Health Disparities: a transdisciplinary approach (see online version for colors)

Table 1
Health Policy Informatics by Health POET Policies and Criteria for Assessment

Problem Area	Equity Policy	Efficiency Policy	Quality Policy	Institutional Reform Policy
Population Health	Title I. Quality, Affordable Health Care for All Americans	Title III. Improving the Quality and Efficiency of Health Care	Title III. Improving the Quality and Efficiency of Health Care	Title II. The Role of Public Programs
	Title II. The Role of Public Programs	Title IV. Prevention of Chronic Disease and Improving Public Health	Title IV. Prevention of Chronic Disease and Improving Public Health	Title III. Improving the Quality and Efficiency of Health Care
	Title III. Improving the Quality and Efficiency of Health Care	Title VI. Transparency and Program Integrity	Title VII. Improving Access to Innovative Medical Therapies	Title IV. Prevention of Chronic Disease and Improving Public Health
	Title IV. Prevention of Chronic Disease and Improving Public Health	Title VII. Improving Access to Innovative Medical Therapies		Title VI. Transparency and Program Integrity
	Title V. Health Care Workforce	Title VIII. Community Living Assistance Services and Supports Act (CLASS Act)		Title VII. Improving Access to Innovative Medical Therapies
Health Organization	Title VII. Improving Access to Innovative Medical Therapies			
	Title VIII. Community Living Assistance Services and Supports Act (CLASS Act)			
	Title X. Reauthorization of the Indian Health Care Improvement Act			
	Title I. Quality, Affordable Health Care for All Americans	Title II. The Role of Public Programs	Title III. Improving the Quality and Efficiency of Health Care	Title I. Quality, Affordable Health Care for All Americans
	Title III. Improving the Quality and Efficiency of Health Care	Title III. Improving the Quality and Efficiency of Health Care		Title III. Improving the Quality and Efficiency of Health Care
Health Environment	Title IV. Prevention of Chronic Disease and Improving Public Health	Title VI. Transparency and Program Integrity		Title VI. Transparency and Program Integrity
		Title VI. Transparency and Program Integrity	Title IV. Prevention of Chronic Disease and Improving Public Health	Title IV. Prevention of Chronic Disease and Improving Public Health
	Title V. Health Care Workforce			
Health Information Technology	Title IX. Revenue Provisions	Title VI. Transparency and Program Integrity	Title VI. Transparency and Program Integrity	Title VI. Transparency and Program Integrity

Notes: This table, constructed from the description of different titles of the Patient Protection and Affordable Care Act (PPACA), includes:

1. www.healthcare.gov/law/full/index.html;
2. Title I. Quality, Affordable Health Care for All Americans;

3. Title II. The Role of Public Programs;
4. Title III. Improving the Quality and Efficiency of Health Care;
5. Title IV. Prevention of Chronic Disease and Improving Public Health;
6. Title V. Health Care Workforce;
7. Title VI. Transparency and Program Integrity;
8. Title VII. Improving Access to Innovative Medical Therapies;
9. Title VIII. Community Living Assistance Services and Supports Act (CLASS Act);
10. Title IX. Revenue Provisions; and
11. Title X. Reauthorization of the Indian Health Care Improvement Act.