

# POLICY ANALYSIS TOOLKIT

A guide for researchers on being policy-relevant



Center for Health  
Economics and Policy

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## Overview: Traditional Research vs. Policy Analysis

### Traditional Research

- Pure science
- Uses explicit steps and procedures
- Addresses broad questions
- Focuses on complexity
- Seeks the “truth”
- Timeliness and responsiveness to policymakers is not a goal

### Policy Analysis

- Practical analysis (e.g. measuring cost-effectiveness)
- Flexible, situational, and uses natural experiments
- Can address local problems
- Focuses on decision-making and implementation of policies and programs
- Timely and responsive
- Science blended with craft

In order to move from traditional research to policy-relevant analysis, the researcher must customize the research techniques that are used. Answering the following questions can assist with the customization.

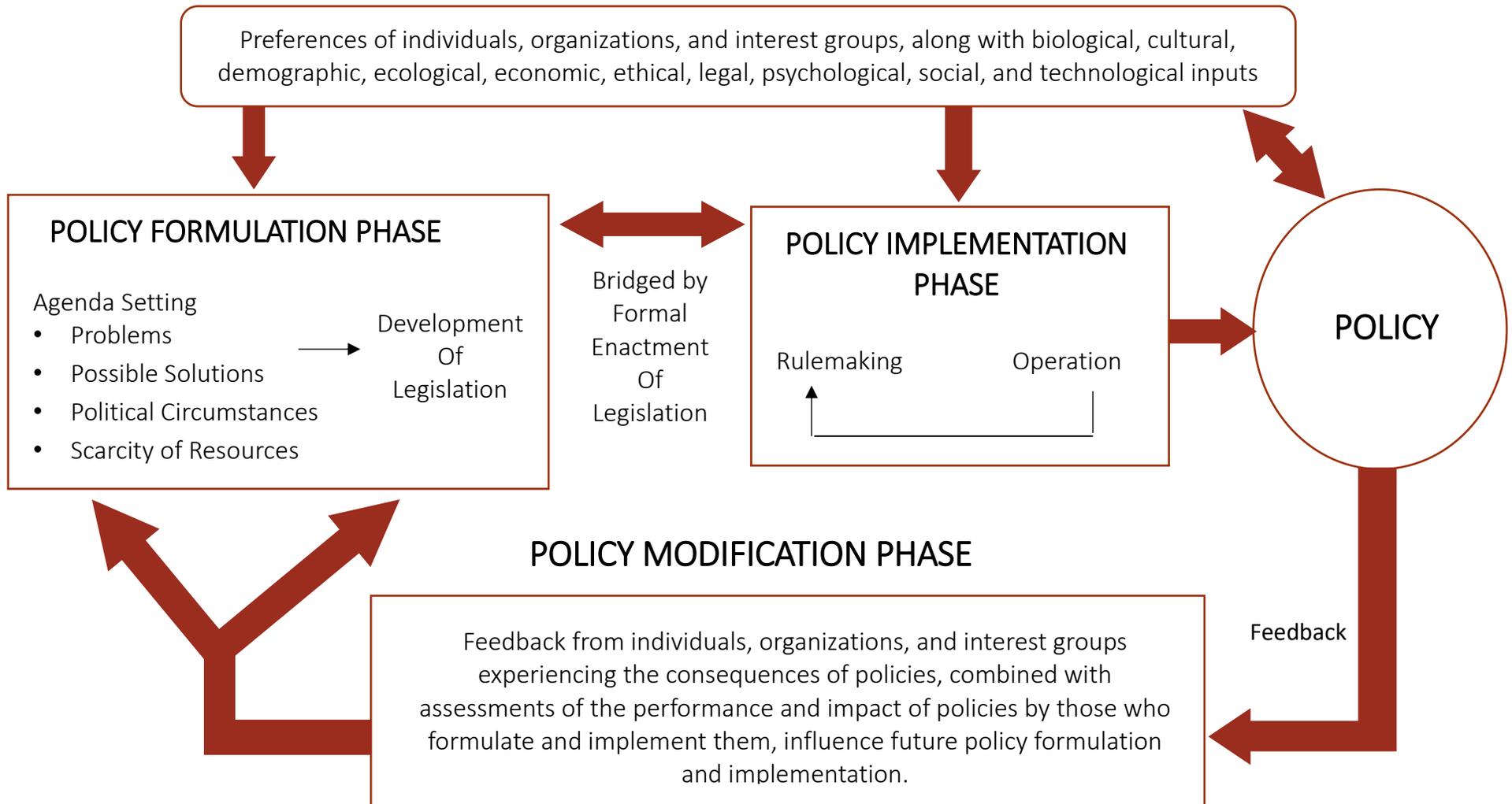
- Who is the audience and what do they need to know?
- Who are the policymaker’s constituents and what do they care about?
- Does the research need to be timely (quick turnaround)?
- What are the decision criteria? (might be based on the type of entity making the decision – e.g. committee, legislature, government agency)
- Is the environment complex?
- Are there data available?

## Targeting Analysis by Policymaking Phase

The researcher also needs to consider the point in the policy process that he/she is hoping to influence and use the appropriate analysis methods. Below are the three main phases, their primary objectives, and analysis methods.

1. **Policy Formulation:** Gathering evidence to bring about a new policy
  - a. *Analysis methods include:* descriptive (e.g. literature review, case studies, inferential), analytic (e.g. stakeholder mapping, cross-sectional surveys), experimental, quasi-experimental, systems science (e.g. microsimulation, system dynamics)
  - b. Evidence must be tailored to the policymaker
  - c. Political reality requires that evidence factor in costs and/or population-level predictions
  
2. **Policy Implementation:** Focuses on policy details and measuring successes
  - a. *Analysis methods include:* before-and-after comparisons (e.g. difference-in-difference analysis), with-and-without comparisons, actual versus planned performance, cost and cost-effectiveness analysis
  - b. The researcher must understand the perspective of the rulemaker (see page 8)
  - c. Seeks to measure whether the policy was implemented as planned and if the implementation has achieved the desired effect
  
3. **Policy Modification:** Proposing policy revisions or reformulations. It also can include changes in agenda setting<sup>1</sup>
  - a. *Analysis methods include:* either policy formulation methods for changes in agenda setting or policy implementation methods for changes in legislation<sup>1</sup>
  - b. Evaluating whether the policy is having the desired effect, whether the problem was correctly identified, if important aspects were overlooked, and if recommendations were properly implemented.
  - c. Leverage feedback from stakeholders and individuals impacted by the policy

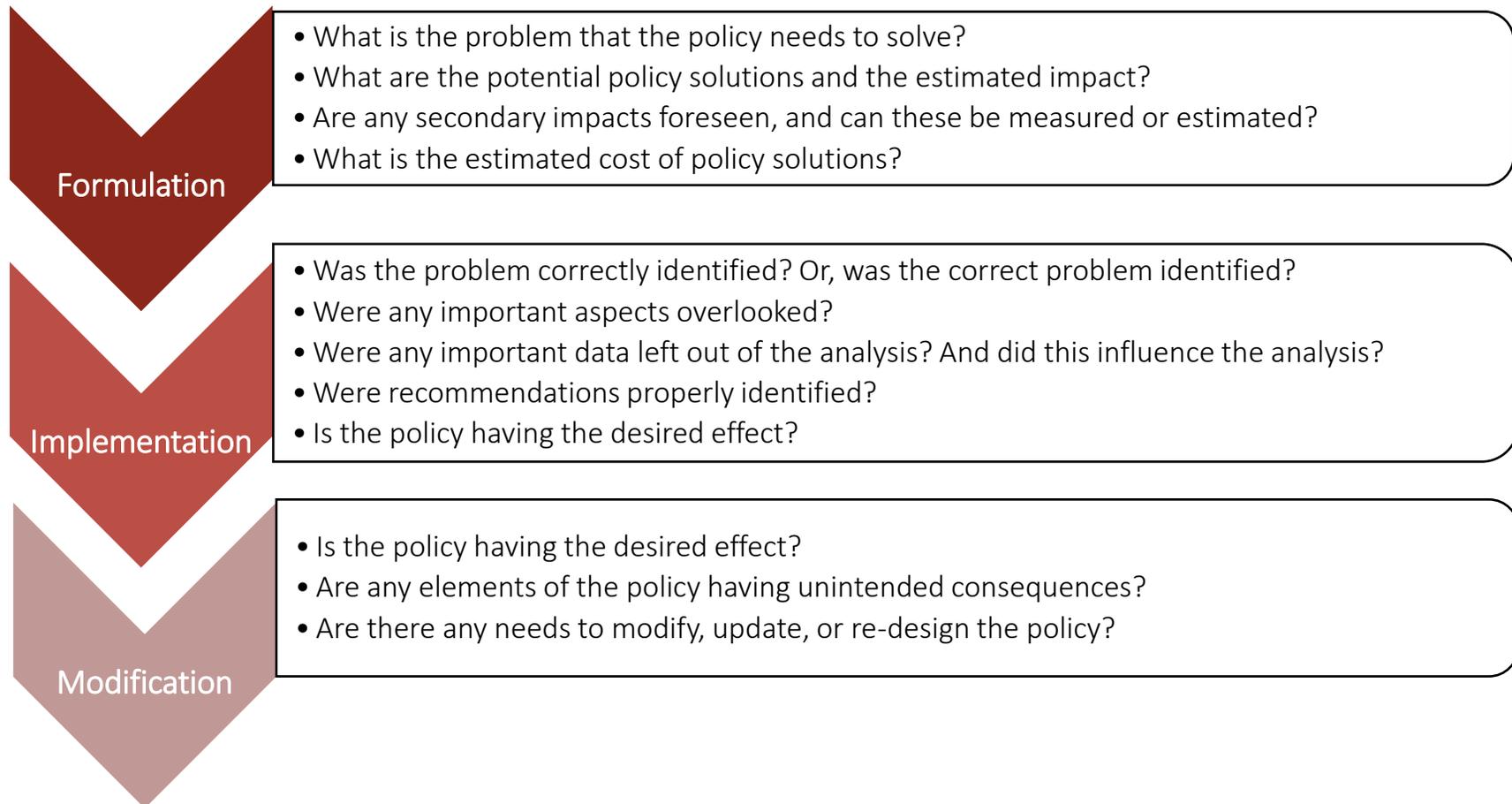
## Public Policymaking Process in the United States



Source: Adapted from *Health Policymaking in the United States*, third edition, Beaufort B. Longest, Jr., Health Administration Press Admission of the Foundation of the American College of Healthcare Executives, 2002.

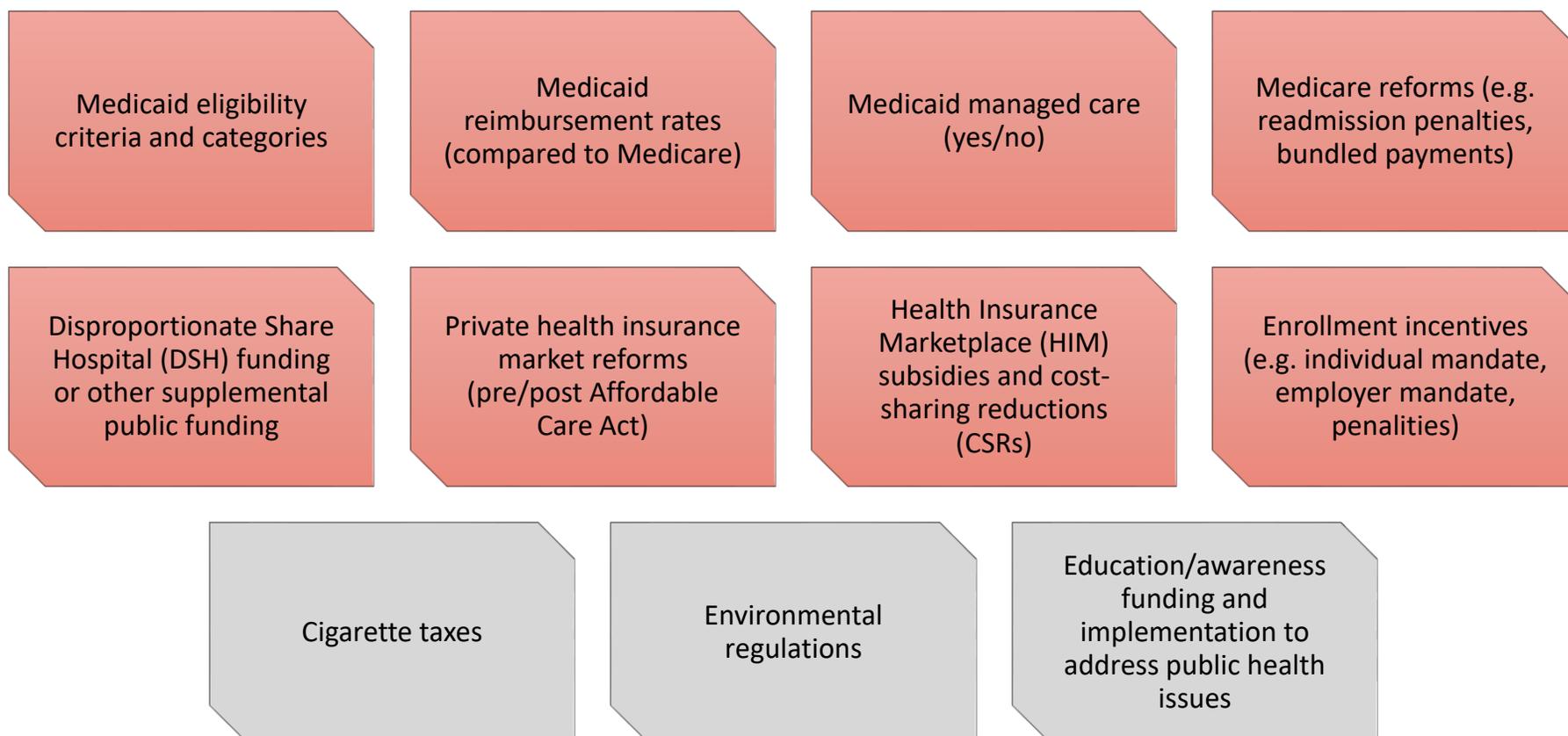
## Example Research Questions by Policymaking Phase

After the researcher determines the appropriate phase of the policymaking process, the research question must be customized accordingly. Below are example research questions for each phase of the process.



## Example Policy Variables

Below are examples of both direct policy variables (orange) as well as indirect policy variables (grey) that are used in health policy analysis.



## Developing Cost Measures for Policy Analysis

The political environment increasingly requires evidence that includes costs. Example analyses include cost-effectiveness, cost-benefit analysis, modeling of individuals' decisions, and predicting budgetary impacts. Policy analysis can use cost variables at the provider level, patient level, and/or societal level. Suggestions for each level are included below.

\*Some cost data is available for public use on the [CHEP website](#).

### For the provider

- Hospitals, physicians, etc.
- Best to acquire internal hospital cost data
- Focus on variable costs
- Can separate into components (or, drugs, etc.)
- Using survey data (e.g. Medical Expenditure Panel Survey) if it is a broad policy question

### For the patient

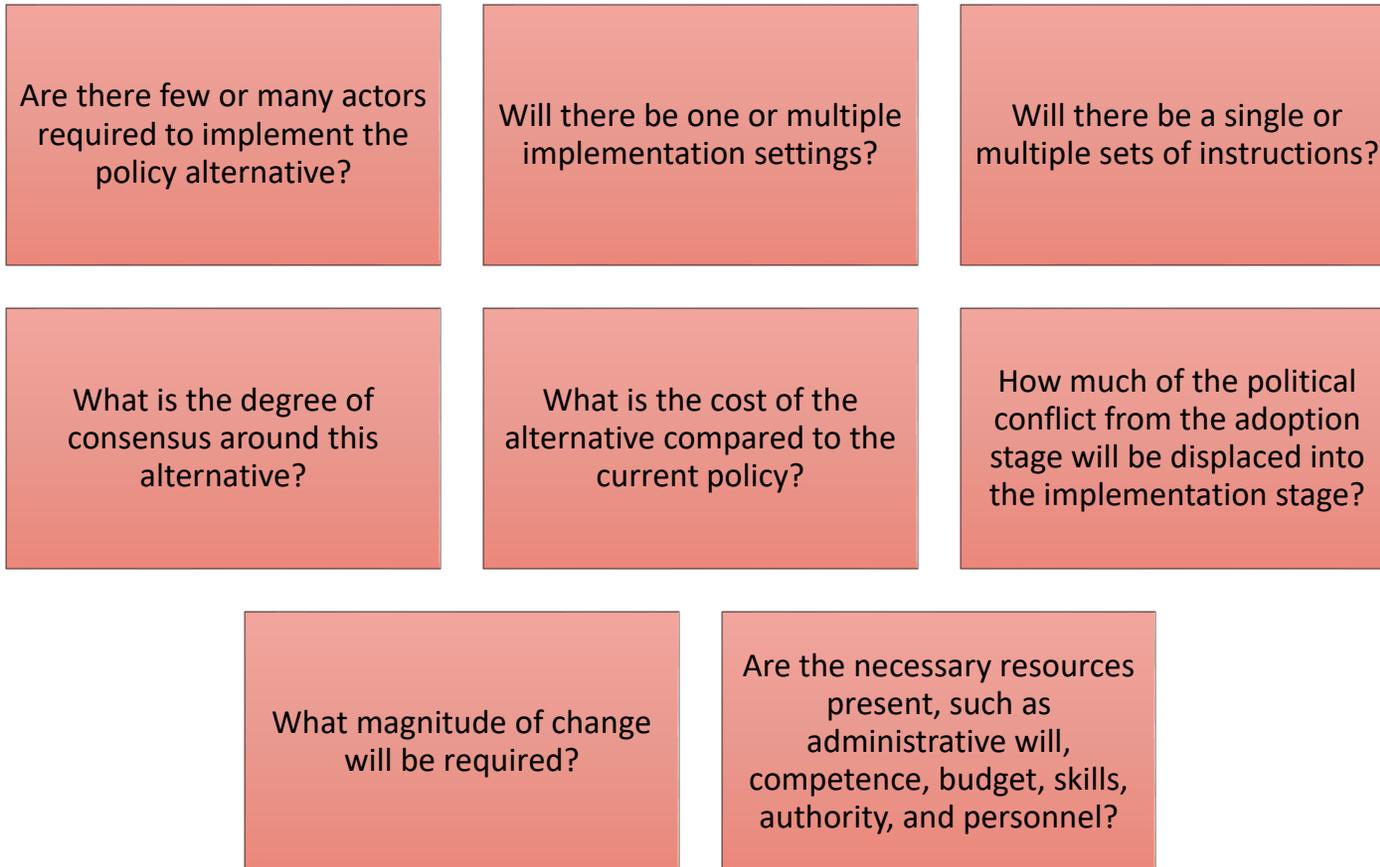
- Health costs (e.g. premiums, cost-sharing, total out-of-pocket costs)
- Lost wages (e.g., cost of absenteeism from work due to a chronic condition)

### For society

- Measure extent of "bending the cost curve"
- Cost-benefit analysis
  - Cost reductions from interventions and social services that address social determinants of health
  - Preventive health cost and benefit on overall population health

## Policy Implementation: Understanding the Rulemaker's Perspective

The academic researcher answers questions such as “what design will make the best intervention?” and “what will be the impact?” while the rulemaker has to consider the following questions during the Policy Implementation phase.



## Studying Health Policies and Reforms

Randomized controlled trials are difficult to execute in social science research. However, researchers can still study the effects a policy has had on different geographic regions, populations, etc. to determine the policy effectiveness. Health care reforms, such as the Affordable Care Act (ACA) of 2010, create many research opportunities to study the variation of impact often based upon differences in implementation. These opportunities are referred to as *natural experiments*. State-specific policies and provisions also present opportunities to study the resulting health and economic outcomes in a particular state in comparison to other states. The next section of this toolkit outlines provisions of the ACA and examples of other policies that could be studied in policy analysis research projects.

### Affordable Care Act Provisions

- 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 IV: Prevention of Chronic Disease and Improving Public Health
- Title V: Health Care Workforce
- Title VI: Transparency and Program Integrity
- Title VII: Improving Access to Innovative Medical Therapies
- Title VIII: Community Living Assistance Services and Supports Act (CLASS)
- Title IX: Revenue Provisions
- Title X: Reauthorization of the Indian Health Care Improvement Act

## Example Topics for Policy Analysis from the Affordable Care Act

Quality Improvements	
<p><i>Physician Quality Reporting System (PQRS):</i> Mandatory physician participation in PQRS. Physicians are subject to penalties for not participating starting in 2015 (1.5% in 2015 and 2% in 2016 and following years).<sup>2</sup></p>	<p><i>Reducing Hospital Admissions:</i> A risk-adjusted method is used to calculate benchmark levels of readmission rates based upon national averages for certain health conditions (i.e. COPD, heart attack, pneumonia); hospitals with a readmission rate in excess of the benchmark receive a reduced Medicare payment.<sup>3</sup></p>
<p><i>Community-Based Transitions Program (CCTP):</i> Funding for community-based organizations was provided for transition services with the intent of reducing 30 day hospital readmission rates.<sup>3</sup></p>	<p><i>Hospital Value-Based Purchasing (HVBP):</i> The program rewards acute-care hospital with incentive payments for the quality of care provided to Medicare beneficiaries starting in fiscal year 2013. Performance measures are based on process, outcomes, and patient experience.<sup>4</sup></p>
<p><i>Hospice Quality:</i> Hospice quality reporting began in 2014 and is expected to become publicly available in 2017. Hospitals that do not report quality data will have a 2% reduction in their annual payment update, beginning in 2014.<sup>5</sup></p>	<p><i>Medicare Hospital Acquired Condition Reduction Program:</i> Since fiscal year 2015, hospitals have been ranked in quartiles based on their risk-adjusted hospital acquired conditions. Payments are reduced to hospitals that fall into the lowest performance category.<sup>6</sup></p>

## Prescription Drugs

Progressively closing the Medicare Part D “donut hole” by 2020 when enrollees will pay the same percentage from the time they meet the deductible until reaching the out-of-pocket spending limit. Enrollees will pay the following for prescription drugs over time as the coverage gap is closed.<sup>3,16</sup>

- 2015: 45% for brand-names and 65% for generics
- 2016: 45% for brand-names and 58% for generics
- 2017: 40% for brand-names and 51% for generics
- 2018: 35% for brand-names and 44% for generics
- 2019: 30% for brand-names and 37% for generics
- 2020: 25% for brand-names and 25% for generics

## Women’s Health

Insurers are required to cover the following preventive services without cost-sharing:<sup>7</sup>

- Well-woman visits
- Gestational diabetes screening
- HPV DNA testing
- STI counseling
- HIV screening and counseling
- Contraception and contraceptive choice counseling
- Breastfeeding support, supplies and counseling
- Interpersonal and domestic violence screening and counseling

## Innovation Models

*Center for Medicare & Medicaid Innovation (CMMI)*: The center uses demonstrations (like the ones mentioned below) to test payment and delivery models to improve care and reduce expenditures.<sup>3,8,9</sup>

- *Accountable Care Organizations (ACOs)*: i.e. Next Generation ACO Model, Pioneer ACO
- *Episode-Based Payment Initiatives*: i.e. BPCI Retrospective Acute Hospital Stay Only, Medicare Acute Care Episode – ACE)
- *Innovations to accelerate new payment and delivery models*: i.e. Home Health Value-Based Purchasing Model, Accountable Health Communities Model
- *Medicaid Innovations*: i.e. Medicaid Incentives for Prevention of Chronic Diseases, Medicaid Innovation Accelerator Program
- *Primary Care Transformation*: strives for more comprehensiveness in primary care; to improve the care of complex patients; to facilitate connections to community-based services; and to move reimbursement towards value-driven, population-based care. (i.e. Comprehensive Primary Care Plus, Independence at Home Demo)
- *Dual-eligible innovations*: i.e. Imitative to Reduce Avoidable Hospitalizations Among Nursing Facility Residents, Financial Alignment for Medicare-Medicaid Enrollees
- *Initiatives to speed adoption of best practices*: i.e. Medicare Diabetes Prevention Program, Community-Based Care Transitions Program

Mental Health	Health Care Workforce	Oral Health
<p>As of 2014, health insurers are no longer allowed to deny coverage or charge more based on pre-existing health conditions, including mental illness.<sup>10</sup></p>	<p>Awards for the National Health Service Corps student loan forgiveness programs were increased. The program aims to recruit primary care providers to work in rural or underserved areas.<sup>3,11</sup></p>	<p>Oral health for children (under the age of 19) was added as an Essential Health Benefit in individual and small group health insurance plans that are offered on and off the Health Insurance Marketplaces.<sup>12,13,14</sup></p>
<p>Mental health and behavioral services were added as an Essential Health Benefit. Health plans must cover behavioral health treatment such as psychotherapy and counseling; mental health and behavioral health inpatient services; and substance abuse treatment.<sup>7</sup></p>	<p><i>Medicare Primary Care Incentive Program (PCIP)</i>: Medicare payment rates increased by 10% for primary care providers (and general surgeons) starting in 2011; however, funding for PCIP expired at the end of 2015.<sup>3,10</sup></p>	<p>Establishment of a five-year national public education campaign focused on oral health prevention and education by the Centers for Disease Control and Prevention (CDC) along with professional oral health organizations.<sup>11,12,13</sup></p>
<p>“Parity” was established between mental health benefits and medical/surgical benefits. Insurer limits applied to mental health services can’t be more restrictive than limits applied to medical and surgical benefits. The limits covered by parity protections include: financial, treatment (number of covered visits), and care management (authorization to receive treatment).<sup>7</sup></p>	<p>Unused Medicare resident slots were redistributed to hospitals meeting certain criteria: rural training tracks, geriatric training tracks, and serve areas where there is a health professional shortage or are expanding/creating primary care programs.<sup>3,10</sup></p>	<p>Increased funding for school-based health centers, public health infrastructure, oral health programs, and national oral health surveillance programs.<sup>11,12,13</sup></p> <p>Increased grant opportunities for general, pediatric, and public health dentists.<sup>11,12,13</sup></p>

Prevention	Medicare Advantage
<p>Private health plans must cover select preventative services without cost-sharing, including: blood pressure, diabetes, and cholesterol tests; cancer screenings; weight loss counseling; treating depressions; tobacco cessation counseling; reducing alcohol use; vaccines; and well-baby and well-child visits up to age 21.<sup>11,15,16</sup></p>	<p>A quality rating system was created and linked to bonus payments, which started in 2012. Medicare Advantage contracts are evaluated on process, patient access, patient experience and complains, intermediate health outcomes, health outcomes, and quality improvement. Contracts that achieve high star ratings receive a bonus payment; from 2012-2014, contracts with 3 or more stars received bonuses and after 2014 contracts with 4 or more stars receive bonuses.<sup>17,18,19</sup></p>
<p>Increased federal funding (1% Federal Medical Assistance Percentage increase) for state Medicaid programs that cover preventative services and vaccines without cost-sharing.<sup>11,14</sup>Error! Bookmark not defined.</p>	<p>Medicare Advantage plans receive reduced payments over the years 2012-2017 with the intent of better aligning payments to traditional Medicare. In 2011, county benchmarks were set to their benchmark in 2010. Beginning in 2012, a quartile system is used to determine benchmarks. Counties are ranked according to the average traditional Medicare costs and divided into quartiles. Benchmarks for counties in the highest quartile are set to 95% of the county's traditional Medicare costs; benchmarks in the lower three quartiles are set to 100%, 107.5%, and 115% of the county's traditional Medicare costs, respectively.<sup>21,22,23</sup></p>
<p><i>National Prevention, Health Promotion, and Public Health Council</i> established to make recommendations to the Congress and the President.<sup>11,14</sup>Error! Bookmark not defined.</p>	<p>Medical loss ratio (MLR) of 85% was established to regulate insurer revenue that must be spent on clinical services, prescription drugs, quality improvements, and enrollee benefits compared to administrative and marketing expenses. Insurers that do not meet the threshold are subject to penalties.<sup>21,22,23</sup></p>
<p><i>Prevention and Public Health Fund</i> funded through fiscal year 2019 to invest in programs such as: school-based health centers, Medicaid programs, community transformation grants for state and local governments, programs to increase physical activity among older adults, to increase surveillance and response to emergencies, and grants for early childhood visit programs.<sup>11,14</sup>Error! Bookmark not defined.</p>	<p>Centers for Disease Control and Prevention (CDC) funding for technical assistance on workplace wellness programs to advise on measuring participation, methods for increasing participation, and methods to analyze effectiveness on health outcomes.<sup>11,14</sup>Error! Bookmark not defined.</p>

## Example State-level Topics for Policy Analysis

Tobacco Taxes	Sugar Sweetened Beverage Taxes
<p>States have varying excise tax rates, ranging from over \$4.00 in New York to \$0.17 in Missouri in 2016.<sup>20</sup> States also generate varying amounts of revenue from tobacco taxes as a result.<sup>21</sup></p>	<p>Two localities (Berkley, CA and Philadelphia, PA) have a tax on sugar sweetened beverages, as of January 2016. And 22 states apply general sales tax rates to soda but do not tax groceries.<sup>22</sup></p>
Prescription Drug Monitoring Programs	Sex Education
<p>All states, except Missouri, have a statewide prescription drug monitoring program (PDMP) as of June 2016. However, states vary in their requirements of how frequently data must be submitted to the PDMP and the criteria for when prescribers are required to check the PDMP.<sup>23</sup></p>	<p>Most states include sexual education and HIV education in the curriculum for public schools; although, the requirements differ by state. Twenty-two states require both sex education and HIV education. Some states require one or the other. Many states also require that the information is “medically accurate”, appropriate for the students’ age, not promoting religion, and not biased against race, sex, or ethnicity.<sup>24</sup></p>

## Dissemination of Research to Policy

What messages and methods work to deliver research to policy? Researchers should tailor their message and medium depending on the audience. Below are suggestions for disseminating analysis to policymakers.

CHEP is available to work with researchers as they develop and disseminate their work. Example briefs are available on the [CHEP website](#).

Create different products for different stakeholder audiences

Clearly identify benefits, who might lose out, and what costs to the government are associated with the issue

Use policy briefs, factsheets, and other non-academic delivery mechanisms

Liberally use graphics, maps, and modern technology

Unless purpose is direct advocacy, use a nonpartisan approach

Techniques used in academia often do not resonate with policymakers

Devote time and resources to delivery of messages to policymakers

## Data Resources

- Assistant Secretary for Planning and Evaluation (ASPE), Department of Health and Human Services <http://aspe.hhs.gov/>
- Bureau of Labor Statistics (BLS) <http://www.bls.gov/>
- Centers for Medicare & Medicaid Services (CMS) <http://www.cms.gov/Research-Statistics-Data-and-Systems/Research-Statistics-Data-and-Systems.html>
- CHEP databases (Medicaid, health costs & budget, health insurance coverage) <https://publichealth.wustl.edu/health-economics/policy-data/>
- CMS Center for Consumer Information & Insurance Oversight (CCIIO) <http://www.cms.gov/cciiio/>
- Federal Register <https://www.federalregister.gov/>
- Healthcare.gov <https://www.healthcare.gov/>
- Kaiser Family Foundation ([www.kff.org](http://www.kff.org)); especially state health facts: <http://kff.org/statedata/>
- Medical Expenditure Panel Survey (MEPS) <http://meps.ahrq.gov/>
- MO HealthNet (Missouri Medicaid) <http://dss.mo.gov/mhd/>
- United States Census <http://www.census.gov/topics/health.html>

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