The Effect of Goal Alignment Patterns on Policy Outcomes For State Administered Federal Mandates

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Introduction

The governmental system in the United States has been described as a principal-agent chain wherein citizens elect legislatures, legislatures direct administrative bodies, and these administrative bodies perform tasks of import to the citizenry (Wilson, 1989; Nicholson-Crotty, 2004, Waterman and Meier, 1989; Moe, 1984). This application of the principal-agent model to government introduces an important perspective to the study of governance; namely, that the success of democratic policy is reliant on the goal alignment of multiple governmental systems with one another. If goal conflict exists between any two links of the governmental chain, the goals and intent of the citizenry can be displaced by the goals of its agents (Moe, 1984; Wilson, 1989; Nicholson-Crotty, 2004).

Intergovernmental relations in the United States are particularly vulnerable to goal conflict as the tension between centralized demands aggregated across the states and manifest in Congress may be in conflict with state-wide demands aggregated and manifest within state legislatures. Herein goal conflict may arise not solely between the legislative and administrative governmental units, but also between federal and state legislatures. The aggregation of voter preferences at the local, state and federal levels results in a set of nested preferences which may result in conflicting goals when these preferences are aggregated across governmental institutions (Keiser, 2003). Goal conflict between mandating legislatures are particularly observable in federal mandates resulting in grants to the states (Nicholson-Crotty, 2004).

These potential goal conflicts resulting from the complex institutions of American policy development and implementation suggest an important—and as yet unanswered—question: How do patterns of goal alignment across governmental institutions affect policy outcomes? In order to approach an answer to this question, this paper focuses on one specific type of intergovernmental structure: A federally funded legislative mandate which requires state legislation and administration in response to citizen-level demands. This paper focuses on the State Children's Health Insurance Program (SCHIP) as a laboratory for inquiry into the nature of governance and social choice in the United States.[1] This is a particularly timely choice as SCHIP is both expanding rapidly and requires legislative renewal in the 2007 session of Congress (CRS, 2006). However, SCHIP is merely a convenient policy vehicle for discussing a larger issue—the effect of goal alignment patterns on policy outcomes.

This paper aims to contribute in three ways to the current literature on goal alignment: First, by exploring a new means of identifying and testing policy conflict (at least at the state level) by using an adapted duration model approach. Second, by embracing the governance model (Lynn, et al., 2001) and expanding the empirical discussion of goal alignment from dichotomous pairs of principal-agent relationships to a principal-agent chain, described by Moe and others (Moe, 1984; Bendor and Moe, 1985; Waterman and Meier, 1998) which likely includes many potential patterns of goal alignment. And finally, by providing empirical evidence that such patterns exist, that they are distinguishable from one another, and that they correlate with substantive outcomes.

SCHIP Background

[1] SCHIP is associated with a federal administrative agency, the Centers for Medicare and Medicaid Services, but this agency has no direct administrative control over SCHIP. Rather, it is a federal executive agency charged with facilitating SCHIP legislation and administration, serving in part to direct potential clients to the appropriate state agency, to pursue renewal of SCHIP approval in Congress, and observe the consumption of public health services generally (CMS, 2006).

In August 1997, with bipartisan support, Congress enacted the State Children's Health Insurance Program (SCHIP) as Title XXI of the Social Security Act. SCHIP is a Federal/State partnership that gives States three options for covering uninsured children: designing a new children's health insurance program; expanding its current Medicaid program; or a combination of both strategies. The program enrolled 2.5 million children during the first three years of its existence (Simon, 2001). The SCHIP program is a federally mandated, state administered program similar in nature to Medicaid, Medicare, and other social welfare programs in the United States, but is not an entitlement. It is therefore a useful subject on which to prototype a research lens through which to view the greater web of welfare policy at-large. The physical health of children is a salient issue about which people have distinct and relatively predictable preferences. SCHIP is a relatively new social welfare program, and has been the subject of research and analysis in multiple disciplines. Therefore, an abundance of data is available.

SCHIP has an unambiguous primary goal at the federal level: To increase the enrollment of children from low income families in medical insurance programs. More specifically, to enroll targeted children—those ineligible for Medicaid but at or below 200 percent of the federal poverty line—in SCHIP. SCHIP legislation demands that participating states make every effort not only to encourage enrollment of uninsured low income children in health insurance programs, but to specifically encourage enrollment in *public programs* for which they are eligible, including SCHIP. This is unlike other social programs such as Welfare to Work or Temporary Aid to Needy Families (TANF) the ultimate goal of which is to *remove* individuals from public assistance. The lack of ambiguity of this goal at the federal level allows interpretation and implementation choices at subfederal levels to be put in specific relief. The SCHIP mandate itself has a relatively short history with few federal alterations, the history of

SCHIP, nearly a decade, is long enough to observe some trends over time and to control for other concurrent historical effects over nearly a decade of observation, and the SCHIP program displays variation across state implementation, providing an opportunity to view a variety of implementation strategies for a single public policy.

It is also important to note that the issues of goal alignment are of particular and timely interest in this 10th anniversary year of SCHIP, in which federal legislative action is required if federal spending is to continue to increase. The apparent unwillingness of the states to allocate additional funding at the state level without continued federal matching (Wolf, 2007) and the political rhetoric of federal-state conflict surrounding the president's veto of SCHIP renewal legislation provide stark examples of the policy implications of goal conflict across governance units.

Previous Research

Several streams of theory and research in public administration and political science apply to the questions of democratic control and goal alignment discussed here. The governance model proposed by Lynn, Heinrich and Hill (2001) is, in essence, a synthesis of several lines of inquiry which had previously occurred with little communication across streams of research. Because this inquiry focuses on a relatively full governance model over a single topic (rather than, e.g., focusing on a single subcomponent of the governance model over a variety of topics), multiple streams of previous research inform this model and its interpretation.

Goal conflict theory fundamentally based in legal contract theory, and relates to the goal alignment of various actors within a system. Generally couched in the principal-agent paradigm, such research is generally more focused on transaction costs than on goal alignment as an

outcome in and of itself, but this stream of research is nonetheless significant due to its focus on the competing goals which may exist (and, indeed are expected to exist) between organizations—in this case, between each element of the governance model and the next (Miller, 1990; Waterman and Meier, 1998). The governance model might be interpreted as a string of principal-agent relationships, between which the potential for goal shift and goal conflict may exist. The governance framework as originally outlined by Lynn, Heinrich and Hill describes the fundamental units of analysis occurring *between* elements of the framework in addition to the elements themselves (32). Goal clarity, ambiguity and alignment have become increasingly popular subjects for inquiry in the public administration literature (Chun and Rainey, 2005; Nicholson-Crotty, 2004). Nicholson-Crotty (2004) in particular uses the principal-agent model to describe goal conflict in terms of fund diversion in federal grants to the states. This analysis should be considered a response to Nicholson-Crotty's work, with the intent to build alternate ways of examining the goal conflict phenomenon to determine, first and foremost, whether it actually exists; and second, whether or not it is quantifiable in some substantive way.

A final stream of research is the body of literature specifically focused on the administration of welfare policy in the United States, generally either by case study, state-to-state comparison or across the so-called welfare states in cross-national comparisons. A subset of this literature is focused on the implementation, success, and outcomes related to SCHIP itself, this particular set of work spanning literatures as disparate as medical science (Szilagyi, et al, 2000), health administration (Kronebusch and Elbel, 2004), public administration (Halfon, et al., 2006), and government performance evaluation (Wooldridge, 2003). Public management scholars have also examined SCHIP for the influence of administrative choices on policy outcomes (Nicholson-Crotty, 2007).

Kempe et al. (2003) found that the primary reason for lack of public health insurance enrollment of eligible children is misunderstanding of eligibility criteria by parents. They reported that even parents who requested insurance applications failed to complete the application procedure because of a belief that their income was too high. Sadly, half of this group of individuals was eligible for SCHIP (Berman, 2003). Additional studies have found that the other main obstacles to enrollment include language barriers, poor understanding of application process, burdensome number of documents required to complete the process,[2] and fear of using publicly funded health insurance (David and Lucile Packard Foundation, 2003).

Scarr et al. (2002) conducted a study that compared children's quality of health at the beginning and end of one year of participation in a health insurance program. The study found that children experiencing poor health conditions showed significant improvement in their health, both physically and psychologically, at the end of the first year of enrollment. It also determined that children entering the program with poorest health levels demonstrated improved performance in school during this period. Most importantly, overall access to healthcare greatly increased due to the insurance coverage. Hadley found in 2003 that "the uninsured receive less preventive care, are diagnosed at more advanced disease stages, and once diagnosed, tend to receive less therapeutic care." In addition, he found that insurance coverage would reduce mortality rates for the uninsured by 10–15 percent, and that improved health facilitated higher levels of scholastic achievement. Another study showed that increasing public insurance eligibility decreased childhood mortality by 5-9 percent (Currie and Gruber, 1996).

Theoretical framework

[2] When Texas first implemented SCHIP, the state offered self-declaration of assets and streamlined documentation requirements. Families with children eligible for Medicaid enjoyed none of these simplifications. In the first 10 months of SCHIP operations, 97,512 children applying for SCHIP were referred to Medicaid because their family income fell below SCHIP eligibility levels. Of these, "only 26 percent successfully navigated the Medicaid application process and were enrolled in Medicaid" (Dunkelberg, 2003).

Theorists describing the chain of policy actors in a governance structure using the principal-agent paradigm describe these issues in terms of goal alignment or goal conflict that is both quantifiable and should be considered a variable rather than a constant (Nicholson-Crotty, 2004; Waterman and Meier, 1998). Better describing this strain between implementation and various levels of social choice, legislative choice and administration is the primary aim of this research agenda. This fundamental question has been more recently treated by Lynn, Heinrich and Hill (2001), who posit a framework for governance research which includes political assessment, legislative action, and administration. "Governance comprises structures and processes guiding administrative activity that create constraints and controls…and confer or allow autonomy and discretion on the part of administrative actors, all toward fulfilling the purposes of the enacting coalition" (32).

Research design

This paper examines the governance structure of the federally mandated, state administered social SCHIP program across 49 of the 50 American states. Tennessee is removed from the analysis due to suspension of its SCHIP program over the period of interest. The purpose of this analysis is to test, probe, predict and describe the various components of the governance model and their interrelationships. To focus this inquiry, two specific questions will be asked:

- What patterns of goal alignment can be observed within and across states?
- How, if at all, do extant goal alignment patterns affect the state-level outcomes of federally mandated policy?

The purpose of the analysis in this paper is to explore whether or not alignment patterns appear to have independent and statistically significant power in predicting SCHIP enrollment outcomes. Using administrative data collected by the Kaiser Family Foundation, the Centers for Medicare and Medicaid Services and the states themselves, independent variables presented in

this very preliminary analysis are based on a cross-section of the aforementioned 49 states for the 2005 data year. The data set includes the following annual information for each state with an SCHIP program (descriptive statistics and variable descriptions for use in this analysis are listed in Table 3):

- Annual federal matching rate for SCHIP
- Administrative policies and procedures and conformity to best practices
- Percent of state child population below 200% of federal poverty line
- SCHIP enrollment
- Percent of children not enrolled in any medical insurance program
- Gross state product
- State, federal and total spending SCHIP spending
- Medical spending as a percent of total state spending

In addition to these fairly traditional variables for predicting insurance coverage within a state (see, for example, Halfon, et al., 1999), a set of goal alignment variables is constructed. By classifying each state observation according to its state alignment (defined using a duration model approach discussed below), population-level demand for policy implementation (percent of children below 200 percent of FPL without health insurance) and expressed federal interest in accomplishing the goal *at the state level* (defined in terms of the federal matching rate), a pattern of independently varying goal alignment has been defined for each state observation. For clarity of interpretation, goal alignment is defined as alignment of a particular institution with the goal of *increasing enrollment*, as opposed to the alignment of a particular institution with other

institutions.[3] Patterns of alignment across institutions do emerge based on these classification schemes, as evidenced by a single year's observations, summarized in Table 2. [4]

Alignment classification

State alignment variables in this analysis are based on the principles of duration model analysis (Kiefer, 1988): namely, those states which were swifter in passing approved SCHIP enabling legislation are assumed to have goals more highly aligned with the federal mandate. Those states that passed SCHIP enabling legislation in the first funding year of the mandate (1998) are coded as "1". All others are coded as "0". This duration approach to the state alignment independent variable represents a departure from measures on the liberal-conservative scale (Nicholson-Crotty, 2004) and is intended as an alternative approach that may, in future analysis, be used in concert with such scales to create a more full picture of complex goal alignment patterns.

In some cases, states already had public insurance programs analogous to SCHIP; such states generally passed state legislation to enable federal funding in the first year. Some states without such programs also passed enabling legislation in the first year. Admittedly, there are likely many factors affecting the ability or interest of a state legislature to react to a federal mandate so swiftly. For the purpose of this paper, all of these factors are subsumed within the definition of legislative goal alignment (or lack thereof). Future analysis may explore these factors in detail in hopes of predicting and describing the nature of legislative goal alignment as herein defined.

[3] While the latter is ultimately the topic of interest, it is virtually impossible to interpret when using a dependent variable that relates to policy outcomes. In other words, the three units described here—federal, state and demand—would be in alignment with one another whether they all agreed that an increase in enrollment was desirable, or whether they agreed that no such increase was desirable. These predict outcomes of opposite valences and thus would not have useful predictive power.

[4] Variation in the federal and demand level alignment components are forced in that they are defined based on direction from the median. However, it is possible that even given this constraint, some patterns of goal alignment across alignment components would not be observed. This is not the case.

Demand for SCHIP within a state is defined as the percent of children 18 years of age or younger living at 200 percent of FPL and below who are uninsured. This demand measure is a relatively straightforward and commonly used measure of child insurance need, and is a very direct interpretation of the need for which SCHIP was created.

Federal matching rates are used as an indicator for federal intent to accomplish the stated SCHIP goal within any specific state. While the federal government is interested in increasing enrollment rates throughout the nation, some states may have less need for federal involvement in achieving this goal. The federal matching rate for SCHIP within states is derived from a formula compounding many factors into a single rate—these are the factors identified by the federal government as important in determining the level of funding to be provided to each state, and represent federal alignment with the goal of increasing SCHIP enrollment at the state level. This characterization of goal alignment assumes that the federal commitment to SCHIP enrollment varies by state, and that the federal legislature is demonstrably more committed to the goal of high enrollment in states where it provides a higher matching rate.

Goal alignment variables for each model were constructed by converting each alignment component to a dichotomous variable with "1" indicating alignment and "0" indicating no alignment. For state alignment, all states that enacted SCHIP legislation in the first year were assigned values of "1"; all others were assigned values of "0".[5] Demand and federal alignment variables were assigned values of "1" if they equaled or exceeded the median value for demand or federal matching rate, and "0" if they were in the lower half of states with regard to demand or federal matching rate. Median values were determined to be an appropriate cutoff for demand and federal alignment for two reasons. First, the use of national averages for determining cutoff

[5] Virtually all states had enacted SCHIP by the second year of its existence, so this coding is consistent with the duration model interpretation on which it is based.

points is favorable for the purposes of interpretation; alignment occurs when a state's demand or matching rate is equal to or higher than the national average. Second, the median value was found to be a better measure of the national average than the mean, due to the skew in the data for both of these variables. Descriptive statistics of the dichotomized goal alignment variables are shown in table 1. Descriptive statistics for all model variables, including statistics on which the goal alignment dichots were based, are provided in table 3. To control for the independent effect of the demand and federal matching rate variables, these were included in the regression analysis presented in table 4.[6]

The three alignment dichots (federal, state, demand) yield eight possible alignment patterns: Full alignment (federal, state and demand are aligned with the goal of increasing enrollment), no alignment (no alignment with the goal of increasing enrollment can be observed at the federal, state, or demand levels), and various intermittent patterns including state only, federal only and demand only, legislative alignment (state and federal are aligned but demand is not), federal/demand alignment (in which the state is not aligned), and state/demand (in which federal is not aligned). Goal alignment patterns and a listing of the states thus characterized are presented in table 2.

Descriptive analysis

The following questions serve as a map for the descriptive portion of this analysis:

- How prevalent is goal conflict within each element of governance across states?
- Is one element of governance (state legislature, state administration, local administration) more commonly misaligned than others across states?
- Is one pattern of goal alignment more prevalent than others across states?

A perfunctory look at the cross-section of alignment patterns presented above suggests that heterogeneity does exist. This is particularly intriguing in the case of demand alignment, wherein

[6] Due to autocorrelation resulting from the dichotomous nature of the state alignment variable, this variable was included in one regression model (model 2) but was subsequently dropped.

federal matching rates include the demand variable and yet appear indeed to yield an alternate measure of goal alignment.

Despite the simplicity of the coding scheme, all possible patterns of goal alignment are observed—and observed with relatively heterogeneous distribution, with two exceptions: State-only alignment (with only one observation, Ohio) and the full alignment pattern (with two observations, Alabama and Idaho). The lack of additional data makes it difficult to ascertain whether such alignment patterns are really significantly rarer, or if the lower number of observations in each case is solely a result of limited observations.

Some qualitative checks reveal some nuances in the coding scheme which increase confidence in the coding scheme. Some states had SCHIP-like Medicaid expansions prior to federal mandate. It is therefore reasonable to expect such states to demonstrate state-level goal alignment with the federal SCHIP program. This is indeed observed in the coding sample as evidenced by New York, whose program was the prototype for the national program, and Florida and Pennsylvania, both of which had comprehensive coverage available to children prior to passage of SCHIP.

Several states have biennial legislatures meeting in odd years and thus might be at a disadvantage for demonstrating state-level goal alignment as defined by passage of state-level SCHIP legislation by the end of 1998. These states are Arkansas, Montana, Nevada, North Dakota, Oregon and Texas. Two of these six states (Oregon and Texas) appear among the state-aligned observations. It is also notable that only 17 of the 49 states passed legislation by the end of 1998, indicating that meeting schedules, if an important factor at all, is but one of many factors affecting state level alignment.

There are aspects of the coding scheme that have room for improvement. For example, some states use SCHIP funding for expansion of Medicaid programs. The coding in this study includes such programs on all variables, but the figures for SCHIP enrollment may be misleading. Programs such as the one in Minnesota were already generous with Medicaid eligibility and now use SCHIP funding to offset the costs of such previously enacted programs. Minnesota appears in the "no alignment" category for all three models. While program type (expanded Medicaid, separate SCHIP or combination) was included in early analysis, it was found to have no statistical impact on the model and is not included in the analysis below. Four states currently use federal SCHIP funding to fund insurance of childless adults, clearly outside the scope of the original intent of the federal legislation. These states, Arizona, Michigan, New Mexico, and Oregon appear in different classifications. While these programs may have higher enrollments, their enrollment records for children are the only patterns of interest from a policy goal alignment standpoint. Nonetheless, the state/federal goal alignment issue presented by expanded SCHIP coverage for childless adults is a worthwhile avenue for future research.

It is acknowledged that the alignment classification scheme presented here may merit some additional scrutiny. States at or near the median for demand variables in particular are likely to be less stable in this coding scheme. However, as an initial attempt to quantify the ambiguous but important concept of goal alignment across institutions, this is an appropriate baseline attempt.

Regression analysis

The cross-sectional analysis provided here is exploratory in nature but care has been taken to minimize the effects of state characteristics and population size by using percentages and ratios normalized by population. In addition, some variables have been left in raw form in order to absorb residual state effects that may be results of state size or population. The goal alignment

patterns identified in the descriptive analysis are used as the experimental independent variables regression analysis.

The dependent variable in this analysis is a variable representing the proportion of "targeted" children who are actually enrolled in public health insurance programs. The variable is contructed as a ratio of children near poverty (under age 19, between 100-199 percent of FPL) who are covered by Medicaid or other public insurance to total targeted children, defined as children near poverty who are uninsured or covered by public insurance.[7] Because proportion data violates the continuity assumption of OLS regression, a logistic transformation of the form ln [y/(1-y)] is performed so the variable can be estimated using OLS (McDowell and Cox, 2004).

The goal of the regression analysis presented here is unusual in that the main purpose is not solely to predict the dependent variable, but also to determine whether the goal alignment pattern variables add value to outcome modeling, and to determine whether the effects of each alignment pattern can be identified independent of the others. F-tests will be used as the primary diagnostic tools for testing these hypotheses. Three models are presented in this analysis. Model 1 includes all relevant variables except for the alignment variables constructed as described above. Dummies for all three raw alignment variables (the continuous variable indicating federal alignment, the dummy for state alignment, and the continuous demand alignment variable) are included in this analysis. This model provides a baseline for analysis and describes the independent effect of the raw alignment variables. To maximize the impact of the raw alignment variables, they are included, where extant, in their continuous form.

[7] This dependent variable is deemed more appropriate than more direct SCHIP enrollment measures because of the ambiguities and discrepancies across state programs, including coverage of adults, differing eligibility levels, and other criteria. It is interesting to note, however, that similar substantive findings can be observed by using more direct SCHIP measures even when these measures differ significantly from these data.

The remaining variation in model 1 is traditionally interpreted to be the result of unobservable state-level effects. There are several hypotheses underlying the estimation of model 2, which includes all variables from model 1 (with the exception of the dummy for state alignment which, if included, would violate the full rank assumption) with the addition of the categorical alignment variables as defined in table 2.

Hypotheses:

1. *Combined effect hypothesis*: Expect to reject the hypothesis that the sum of the alignment variable slopes will be simultaneously equal to zero
2. *Improved model hypothesis*: Expect an increase in the R^2 and adjusted R^2 values for the newly specified model
3. *Distinguishable pattern hypothesis*: Expect to reject the hypothesis that the alignment variable slopes are equivalent
4. *Distinguishable pattern hypothesis, revisited*: Expect to reject the hypothesis that all individual pairs of alignment variable slopes are equivalent.
5. *Positive effect of alignment hypothesis:* Expect all slopes for patterns of goal alignment to positive slopes in comparison with the "no alignment" alignment category.

For ease of interpretation, the reference category excluded from the set of categorical goal alignment pattern variables in model 2 is the "no alignment" pattern. This variable is selected for omission because it provides straightforward hypotheses and interpretation: Based on theory, the expected result is that all of the included alignment variables will be positively correlated with outcomes in comparison with having no aligned institutions.

Federal matching rate and state demand variables are included in their continuous forms in both models to control for the effect of elements used to define the goal alignment patterns as opposed to the independent effect of the goal alignment patterns themselves. Because the defining state alignment variable originates as a dummy variable and is thus can be expressed as a linear transformation of variables already included in the model, state alignment (as a variable separate from the goal alignment patterns) is omitted.

Theory suggests that full goal alignment would lead to better policy outcomes (i.e. greater SCHIP enrollment among targeted children), whereas lack of alignment, displayed by intermittent or patterns of nonalignment, would be less effective in achieving the policy goal. Because SCHIP and other federal mandates represent fundamentally federal goals that are wholly reliant on the states for execution, it is logical that lack of state-level alignment with the goal should lead to significantly less policy effectiveness in misaligned states. In this case, we would expect to see lower enrollment rates in states with low goal alignment. The clearest prediction for the regression analysis, then, is that full alignment will have a positive impact on policy outcomes, total lack of alignment will have a negative impact on policy outcomes, and intermittent patterns will order themselves between these two extremes.

One assumption of this prediction is that alignment of each additional institution—from the demand in the client base to the administrative procedure to state legislation and spending—will increase policy outcomes. A second assumption is that the population of every state will be equally responsive to goal alignment and conflict, and that these patterns exist only in absolute dichots and not in degrees. Arbitrary cutoffs (medians in this case) may not be the best tool for analyzing the true patterns of goal alignment that may exist within and across states.

Results

The results of the analysis are best discussed in conjunction with the hypotheses listed above:

1. *Combined effect hypothesis*: As expected, reject the hypothesis that the sum of the alignment variable slopes will be simultaneously equal to zero at the 0.1 level ($p=0.018$, $f=2.19$).
2. *Improved model hypothesis*: As expected, observe an increase in the R^2 and adjusted R^2 values for the newly specified model from $R^2 = 0.782$ and adjusted $R^2 = 0.597$ in model 1 to $R^2 = 0.873$ and adjusted $R^2 = 0.695$ in model 2.

3. *Distinguishable pattern hypothesis*: Marginal f-test does not allow rejection of the hypothesis that the alignment variable slopes are equivalent at the 0.1 level (p=0.106, f=2.05).
4. *Distinguishable pattern hypothesis, revisited*: As expected, reject the hypothesis that all individual pairs of alignment variable slopes are equivalent, though only some of the patterns appear to be statistically distinguishable (see table 5).
5. *Positive effect of alignment hypothesis:* Unexpectedly, the slopes for some patterns of goal alignment have negative slopes in comparison with the "no alignment" alignment category. Particularly surprising is the negative slope for the "full alignment" variable.

As outlined above, the combined goal alignment pattern variables do appear to yield substantial improvement over the comparative model that excludes them, based on a comparison of R^2 values and an f-test of the joint hypothesis. Similarly, the effects appear to be distinguishable amongst at least some of the pattern variables observed. The f-tests described in table 5, however, suggest that some of the goal alignment patterns included here are indistinguishable and may be collapsed into broader categories of goal alignment.

Using the f-tests and theory to collapse patterns of goal alignment, model 3 is estimated with five (rather than eight) individual categories. The "no alignment" category is maintained as the primary referent, and "full alignment" is maintained as distinct from intermittent goal alignment patterns. The pattern in which state and demand goals are aligned is also maintained as a distinct category. Two additional patterns of intermittent goal alignment are specified, one compiling state-only, demand-only and legislative alignment (Intermittent 1), and one compiling federal and federal-demand patterns of goal alignment (Intermittent 2). OLS parameter estimates for model 3 are presented in table 6. This new model bears reevaluation of the aforementioned hypotheses.

1. *Combined effect hypothesis*: As expected, reject the hypothesis that the sum of the alignment variable slopes will be simultaneously equal to zero. In model 3, the null hypothesis can be rejected at the 0.01 level (p=0.095, f=4.31).
2. *Improved model hypothesis*: Model 3 yields an R^2 of 0.872 and adjusted R^2 value of 0.732. The adjusted R^2 value implies improvement over both previous models.

3. *Distinguishable pattern hypothesis*: As expected, postestimation analysis of model 3 allows rejection of the hypothesis that the alignment variable slopes are equivalent at the 0.05 level (p=0.0114, f=4.62).
4. *Distinguishable pattern hypothesis, revisited*: As shown in table 7, with the exception of the no federal alignment pattern, all of the new alignment patterns are statistically distinguishable from one another in effect at the 0.01 level. Some achieve higher levels of statistical significance.
5. *Positive effect of alignment hypothesis*: As with model 2, the slopes for some patterns of goal alignment have negative slopes in comparison with the "no alignment" alignment category, including the "full alignment" variable.

These results suggest that goal alignment patterns have the potential to yield a statistically significant combined effect on model specification for policy outcomes, that they demonstrate state-level variation not captured by data that does not simultaneously account for multiple indicators of goal alignment, and that patterns of goal alignment can be statistically distinguished from one another. The duration model approach to state-level goal alignment appears to be fruitful, and may prove useful in future analysis.

Substantively, this analysis suggests that models based on the principal-agent paradigm are indeed useful instruments for discerning patterns of investment, behavior and outcome in policy settings, and that goal alignment (or conflict) is an observable phenomenon.

Some problems of interpretation are presented by the valence of the full alignment variable. Theory suggests that full alignment would yield the best policy outcomes, or at least better policy outcomes than those observed in a no alignment setting. There are at least two plausible explanations for the phenomenon observed in this data. The first is the rather obvious observation that the estimation relies on only two observations, and these observations may provide a flawed or biased representation of what we might expect to observe in an "ideal type" for full goal alignment. The second explanation is that a form of adverse selection is taking place, in which the federal government, state government and observed demand are highly

aligned because the problem of underinsured children is egregiously large, thus yielding a higher-than-average matching rate, high state demand levels and a state legislature eager to access additional funds for alleviating the problem. This possibility describes one of the perennial problems with trying to specify and estimate goal alignment in statistical models.

Conclusion/Future research

It is apparent from the analysis presented here that patterns of goal alignment do seem to have a significant impact on achievement of policy objectives, that they are discernable from the effects of their raw progenitors, and that they are, in many cases, distinguishable from one another. This result supports a strong body of theory in governance and principal-agent models of government function that suggest that the goals of individual government entities, when in conflict, may jeopardize the success of implemented policy. Most studies of policy outcomes include state-level variation only as error term, and most fixed-effects models consciously remove important state characteristics from statistical consideration when the sources of state-level variation are not explicitly specified in the model. This paper identifies the importance of a particular state-level effect identified by principal-agent models of government function as having an effect on the potential of policy to achieve its stated objectives; namely, goal alignment across governmental institutions. As demonstrated by the R-squared values, additional state-level variation is explained through inclusion of these constructed variables.

While the duration approach to specification of state alignment appears to have been useful in this analysis, future analysis in larger, pooled data sets will require new specification of the state goal alignment variable to yield year-specific data on this variable. This may perhaps be done by generating a variable based on state actions taken in specific years or cumulatively

rather than the single dummy variable used in this analysis. The concept and methodology presented here may also be extended to other policy arenas.

An additional improvement to be made in future work includes the creation of a management-specific element to the goal alignment pattern specification. While this analysis includes several variables to account for the effect of administrative procedures on SCHIP enrollment, they are not included in the goal alignment structure in part because such an exercise proved too data-hungry for the small-n analysis provided here. Previous literature suggests not only that administrative capacity and procedures affect policy outcomes, but that goal conflict may occur between legislative bodies and administrative bodies (Lynn, Heinrich and Hill, 2001).

Resources

Arrow, Kenneth (1970). Social Choice and Individual Values. New Haven: Yale University Press.

Balla, Steven and John Wright (2001). Interest groups, advisory committees, and congressional control of the bureaucracy. American Journal of Political Science, 45:4 pp. 799-812.

Bendor, Jonathan and Terry Moe (1985). An Adaptive Model of Bureaucratic Politics. *The American Political Science Review*, Vol. 79, No. 3. (Sep., 1985), pp. 755-774.

Berman, S. (2003). Mandated child health insurance: an approach whose time has come? *Pediatrics*, 893-894.

Berry, William, Evan Ringquist, Richard Fording, and Russel Hanson (1998). Measuring citizen and government ideology in the American states. *American Journal of Political Science* 42:2 pp. 755-774.

Bianco, William T., Ivan Jeliazkov and Itai Sened (2004). The Uncovered Set and the Limits of Legislative Action. *Political Analysis* 12:3.

Blais, A. and R. Young (1999). Why do people vote? An experiment in rationality. *Public choice* 99:1.

Center for Medicare and Medicaid Services (2006). Achieving a transformed and modernized health care system for the 21st Century: Strategic plan for 2006-2009. Washington, DC: Department of Health and Human Services.

Chun, Young Han and Hal G. Rainey (2005). Goal ambiguity in US federal agencies. Journal of Public Administration Research and Theory. 15:1, pp. 1-30.

Congressional Research Service (2006). State children's Health insurance Program (SCHIP) Overview of program Rules Testimony Before the Senate Finance Halth Subcommittee.

Currie, J., & Gruber, J. (1996). Saving Babies: The efficiency and cost of recent changes in the medicaid eligibility of pregnant women. *Journal of Political Economy*, 1996, 104(6):1263-96.

David and Lucile Packard Foundation. (2003). Health insurance for the uninsured. *Policy & Practice of Public Human Services,* 61, 9.
Druckman, James N.(2000). Preference formation. *Annual review of political science* 3:1.
Dubay, L., Hill, I., & Kenney, G. (2002). Five things everyone should know about SCHIP. Washington, D.C.: *The Urban Institute*.
Dunkelberg, A. (2003). Simplified eligibility for children's Medicaid in Texas: a status report at nine months. *Center for Public Policy Priorities.* Retrieved October 7, 2003 from http://www.kff.org/content/2003/4092/4092.pdf.
Dutton, M., & Fairbrother, G. (2003). Barriers to enrollment. Retrieved October 7, 2003 from http://www.cdfny.org/reports/PDF_BarriersFinalReport.pdf.
Furlong, Scott (1998). Political Influence on the Bureaucracy: the Bureaucracy speaks. Journal of public Administration Research and theory 8:1 pp. 39-65.
Halfon, Neal, Moira Inkelas and Paul Newacheck (1999). Enrollment in the State Child Health Insurance Program: A Conceptual Framework for evaluation and Continuous Quality Improvement. The Millbank Quarterly, 77:2 pp. 181-204.
Keiser, Lael (2003). Why it Matters Whether State Bureaucrats as Opposed to Federal Bureaucrats Administer Federal Programs. In *Politics, Policy and Organizations: Frontiers in the scientific study of the bureaucracy*. George Krause and Kenneth Meier, eds. Ann Arbor: University of Michigan Press.
Kenney, G. M., Haley, J. M., & Tebay, A. (2003). Children's insurance coverage and service use improve. Washington, D.C.: *The Urban Institute*.
Kiefer, Nicholas (1988). Economic Duration Data and Hazard Functions. Journal of economic literature vol. 26 no.2.
Kirlin, John J. (1996). The Big Questions of Public administration in a democracy. *Public Administration Review* 56:5.
Kronebusch, Karl and Brian Elbel (2004). Enrolling Children in Public Insurance: SCHIP, Medicaid, and State Implementation. *Journal of Health Politics, Policy and Law*, 29:3.
Lipsky, Michael (1980). *Street-level bureaucracy: Dilemmas of the individual in public service*. New York: Russell Sage.
Lynn, Larry, Carolyn Heinrich and Carolyn Hill (2001). Improving governance: a new logic for empirical research. Washington, DC: Georgetown University Press.
McCubbins, Mathew D., Roger G. Noll, and Barry R. Weingast (1998). Political control of the bureaucracy. In Palgrave diectionary of economics and the law, ed. P. Newman, 50-55. London: Macmillan press.
McDowell, Allen and Nicholas Cox (2004). How do you estimate a model when the dependent variable is a proportion? StataCorp accessed October 15, 2007 from http://www.stata.com/support/faqs/stat/logit.html.
Miles, Allen and Matthew Huberman (1994). *Qualitative Data Analysis*. Thousand Oaks, CA:Sage
Miller, Gary (1990). Managerial dilemmas: Political leadership in hierarchies. In *the limits of rationality*, ed. Karen cook and Margaret Levi, 324-57. Chicago: University of Chicago press.
Moe, Terry M. 1984. "The New Economic Theory of Organization." *American Journal of Political Science.* 28:739-777.
Nice, David (1987). *Federalism: The politics of intergovernmental relations*. New York: St. Martins Press.

Nicholson-Crotty, Sean (2004). "Goal Conflict and Fund Diversion in Federal Grants to States." *American Journal of Political Science.* 48(1):110-122.
Nicholson-Crotty, Sean (2007). The impact of program design on enrollment in state children's health insurance programs. The policy studies journal vol. 35 no. 2 pp 23-35.
Nownes, A. J. (1992). Primaries, General Elections, and Voter Turnout: A Multinomial Logit Model of the Decision to Vote. *American politics research* 20:2.
Nurmi, A. (2005). A responsive voting system. *Economics of governance* 6:1.
Schachter, Hindy L. (1995). Reinventing Government or Reinventing Ourselves: Two Models for Improving Government Performance. *Public Administration Review*, Vol. 55.
Sen, Amartya (1995). Rationality and Social Choice. *The American Economic Review* 85:1
Simon, Matt. (2001). Children's health insurance: available, but unused *NEA Today,* 20, 31.
Skarr, D., Varni, J., Seid, M., & Burwinkle, T. S. (2002). Health status assessment project–first year results. *DataInsights*, 10, 1-11.
Smith, V. K., & Rosseau, D. M. (2005). SCHIP enrollment in 50 states: December 2004 data update. *The Kaiser Commission on Medicaid and the Uninsured.* Washington, DC: Kaiser.
Szilagyi, et al. (2000). Evaluation of a State Health Insurance Program for Low-income Children: Implications for State Child Health Insurance Programs. Pediatrics 105:2.
United States General Accounting Office. (2001). Medicaid and SCHIP, States' enrollment and payment policies can affect children's access to care. GAO-01-883.
Waldo, Dwight (1948). The Administrative State: A Study of the Political Theory of American Public Administration. New York: Ronald Press Co.
Waterman, Richard and Kenneth Meier (1998). Principal-Agent models: an expansion? *Journal of public administration research and theory* 8:1 pp. 173-202.
Wilson, James Q 1989. *Bureaucracy. What Government Agencies Do and Why they Do It.* New York. Basic Books.
Wolf, Richard (2007). Health coverage for kids tangled in debates over eligibility, funds. USA Today, march 8, 2007.
Wood, B. Dan and Richard W. Waterman (1993). The Dynamics of political-bureaucratic adaptation. *American Journal of Political Science* 37:2 pp 497-528.
Wooldridge, Judith,et. al.(2003). Interim Evaluation Report: Congressionally Mandated Evaluation of the State Children's Health Insurance Program.Washington, DC: Urban Institute.

Table 1.

Description of variables used to create alignment patterns

	Description	Mean	Standard Deviation	Min	Max
State alignment	Implemented valid SCHIP program in first funding year of federal mandate.	0.319149	0.471186	0	1
Federal alignment	1: At or above median federal matching rate.	0.5102041	0.5050763	0	1
Demand alignment	1: At or above national median for number of uninsured children below 200% of FPL.	0.5714286	0.5	0	1

Note: State alignment variable is identical to the *stalign* variable. Federal alignment is a dichotomous version of the continuous variable *fedmatch*. Demand alignment is a dichotomous version of the continuous variable *percnoinskid*. Data year for federal and demand alignment variables is 2005.

Table 2.

Goal alignment description and representative states

Alignment pattern	Aligned institutions (x indicates alignment)			Count	States
	Fed (*fedmatchrate* dummy)	State (*stalign*)	Demand (*percnoinskid* dummy)		
Full alignment	x	x	x	2	Alabama Idaho
No alignment				5	Alaska Minnesota Nevada† Rhode Island Virginia
State only		x		1	Ohio
Federal only	x			7	Arizona Indiana Kentucky Mississippi Montana† Utah West Virginia
Demand only			x	9	Connecticut Delaware Hawaii Mass Nebraska New Hampshire Washington Wisconsin Wyoming
Legislative	x	x		5	Iowa Oregon† South Carolina South Dakota Texas†
Fed/demand	x		x	11	Arkansas Georgia Kansas Louisiana Maine Missouri New Mexico North Dakota† North Carolina Oklahoma Vermont
State/demand		x	x	9	California Colorado Florida‡ Illinois Maryland Michigan New Jersey New York‡ Pennsylvania‡
Total	25	17	31	49	

† indicates biennial state legislative schedule. ‡ indicates states with prior comprehensive coverage.

Table 3. Descriptive statistics and for variables used in regression analysis

Variable	Description	Mean	Std. Dev.	Min	Max
Dependent variable					
insdvpct	Percent of targeted children enrolled in public health insurance programs. Targeted children is defined as Medicaid enrollees plus other public health insurance enrollees (children 18 and younger between 100-199 % FPL) divided by Medicaid enrollees, public health insurance enrollees and uninsured (children 18 and younger between 100-199 % FPL). Data year is 2006.	0.75	0.11	0.51	0.89
logitinsdv	Logistic transformation of insdvpct above	1.20	0.59	0.05	2.11
Alignment variables					
full_4	Categorical variable representing full goal alignment as defined in table 2.	0.04	0.20	0	1
state_4	Categorical variable representing state-only goal alignment as defined in table 2.	0.02	0.14	0	1
leg_4	Categorical variable representing state and federal goal alignment as defined in table 2.	0.10	0.31	0	1
fed_4	Categorical variable representing federal-only goal alignment as defined in table 2.	0.14	0.35	0	1
nostate_4	Categorical variable representing federal and demand goal alignment as defined in table 2.	0.22	0.42	0	1
nofed_4	Categorical variable representing state and demand goal alignment as defined in table 2.	0.18	0.39	0	1
demand_4	Categorical variable representing demand-only goal alignment as defined in table 2.	0.18	0.39	0	1
Alignment variable controls					
percnoinskid	Number of uninsured children below 200% of FPL in 2005.	6.17	3.02	2	16.2
fedmatch	Federal matching rate for 2005.	72.43	5.94	65	83.96
stalign	Implemented valid SCHIP program in FY1998	0.35	0.48	0	1
Other independent variables					
totspendperkid	Total state spending per child FY2005	96055.35	53877.56	35004.24	388784.00
gspcapita	Gross State Product in millions per capita 2005	140.37	26.23	86.98	232.27
totkids	Total children aged 18 years and under, in thousands 2005	1542.84	1816.96	123.00	10097.00
fedpercapita	Federal Government expenditure per capita FY 2004	7522.00	1649.00	5469.00	12885.00
popdens	Population per square mile 2000	182.79	252.67	1.10	1134.50
povpeople	People of all ages in poverty - percent 2003	11.85	2.80	6.40	18.30
Pctbach	Persons 25 years and over with bachelor's degree or higher 2000	23.86	4.28	14.80	33.20
forborn	Percent foreign born population 2000 (sample)	7.23	5.71	1.10	26.20
pctunder5	Percent of population under 5 years of age 2005	6.66	0.77	5.10	9.50
pctunder18	Percent of population under 18 years of age 2005	24.28	1.82	21.00	30.10
admin1	1=Joint application with Medicaid 0=Separate application 2006[8]	0.94	0.24	0	1
admin2	1=No face-to-face interviews for application 0=Requires face-to-face 2006	0.94	0.24	0	1
admin3	1=Asset test required 0=No asset test 2006	0.96	0.20	0	1
admin4	1=Presumptive eligibility 0=No presumptive eligibility 2006	0.16	0.37	0	1
admin5	1=Self declaration of income 0=No self declaration of income allowed 2006	0.24	0.43	0	1
admin6	1=Joint renewal form with Medicaid 0=No joint form 2006	0.63	0.49	0	1
admin7	1=No face-to-face interviews for renewal 0=Face-to -face required 2006	0.98	0.14	0	1
admin8	1=12-month continuous eligibility 0=No continuous eligibility 2006	0.55	0.50	0	1

[8] Includes states with no separate program

Table 4: Regression analysis results: Factors affecting proportion of targeted children (100-199% FPL)[9] who are enrolled in public health insurance; *n* = 49

	Model 1				Model 2			
	β-Coefficient	*t*	*P-value*		*β-Coefficient*	*t*	*P-value*	
full_4	--	--	--		-0.50387	-1	0.329	
state_4	--	--	--		0.567388	1.21	0.241	
demand_4	--	--	--		0.552929	1.96	0.064	*
leg_4	--	--	--		0.44289	1.17	0.258	
fed_4	--	--	--		0.04128	0.11	0.915	
nostate_4	--	--	--		0.068663	0.19	0.854	
nofed_4	--	--	--		-0.07251	-0.24	0.816	
stalign	-0.14109	-0.86	0.396		--	--	--	
fedmatch	0.014276	0.36	0.723		0.022223	0.49	0.628	
percnoinskid	-0.1755	-6.32	0.000	***	-0.16886	-6.68	0.000	***
totspendperkid	-7.26E-07	-0.41	0.687		1.40E-06	0.79	0.436	
gspcapita	-0.00116	-0.23	0.820		-0.00544	-1.15	0.262	
incomepercap	-8.6E-05	-0.93	0.359		-1.7E-05	-0.20	0.845	
totkids	-7.8E-05	-1.21	0.237		-9.4E-05	-1.47	0.156	
fedpercapita	-2.6E-05	-0.64	0.527		-1.4E-05	-0.35	0.727	
povpeople	0.046245	1.02	0.315		0.065634	1.65	0.114	
popdens	0.000058	0.11	0.917		-0.00031	-0.63	0.534	
pctbach	0.032956	1.30	0.205		0.025138	1.00	0.331	
forborn	0.034091	1.72	0.098	*	0.033247	1.76	0.094	*
pctunder18	0.272521	2.25	0.033	**	0.312254	2.87	0.010	**
pctunder5	-0.69116	-2.51	0.019	**	-0.78593	-3.22	0.004	***
admin1	0.813928	2.49	0.020	**	0.81029	2.52	0.020	**
admin2	-0.03763	-0.11	0.916		-0.21299	-0.62	0.542	
admin3	0.258557	0.78	0.444		0.656857	1.88	0.075	*
admin4	-0.06271	-0.34	0.736		0.003155	0.02	0.986	
admin5	0.007727	0.05	0.961		0.145363	0.82	0.420	
admin6	-0.33249	-1.92	0.065	*	-0.24129	-1.37	0.187	
admin7	0.300826	0.57	0.575		0.791495	1.60	0.125	
admin8	-0.08077	-0.59	0.561		0.152496	1.00	0.331	
_cons	-0.99268	-0.22	0.827		-4.12969	-0.91	0.374	
R^2	0.782				0.873			
Adjusted R^2	0.597				0.695			

[9] Dependent variable has been mapped to a continuous scale using logistic transformation.

Table 5: f-test results for model 2 (see table 4).

	state_4	*leg_4*	*fed_4*	*nostate_4*	*Nofed_4*	*demand_4*
full_4	0.0461 (4.52)	0.0285 (5.57)	0.1438 (2.31)	0.0775 (3.46)	0.2872 (1.20)	0.0144 (7.18)
state_4		0.7681 (0.09)	0.2242 (1.57)	0.2208 (1.60)	0.1546 (2.19)	0.9720 (0.00)
leg_4			0.1899 (1.84)	0.1934 (1.81)	0.1526 (2.21)	0.7117 (0.14)
fed_4				0.9057 (0.01)	0.7405 (0.11)	0.1152 (2.71)
nostate_4					0.6240 (0.25)	0.0687 (3.70)
nofed_4						0.0151 (7.07)

Note: Values in parentheses are f-statistics

Table 6: Regression analysis results: Factors affecting proportion of targeted children (100-199% FPL)[10] who are enrolled in public health insurance; *n* = 49

	Model 3			
	β-Coefficient	***t***	***P-value***	
Full alignment	-0.47353	-1.04	0.310	
Intermittent 1	0.539855	2.09	0.048	**
Intermittent 2	0.08902	0.28	0.782	
State and demand only	-0.07783	-0.27	0.786	
fedmatch	0.017883	0.45	0.660	
percnoinskid	-0.16787	-7.12	0.000	***
totspendpe~d	1.44E-06	0.87	0.391	
gspcapita	-0.00555	-1.27	0.217	
incomepercap	-1.3E-05	-0.16	0.874	
totkids	-9.6E-05	-1.77	0.091	*
fedpercapita	-1.2E-05	-0.34	0.736	
povpeople	0.066766	1.81	0.084	
popdens	-0.00033	-0.71	0.485	
pctbach	0.02251	0.99	0.332	
forborn	0.033495	2	0.057	*
pctunder18	0.309521	3.05	0.006	***
pctunder5	-0.7845	-3.44	0.002	***
admin1	0.798278	2.75	0.012	**
admin2	-0.22365	-0.74	0.465	
admin3	0.72691	2.55	0.018	**
admin4	0.013955	0.09	0.933	
admin5	0.166135	1.09	0.286	
admin6	-0.21568	-1.46	0.157	
admin7	0.805621	1.75	0.093	*
admin8	0.164015	1.17	0.252	
_cons	-3.90746	-0.93	0.360	
R^2	0.8717			
Adjusted R^2	0.7323			

[10] Dependent variable has been mapped to a continuous scale using logistic transformation.

Table 7: f-tests for model 3

Table 7: f-test results for model 3 (see table 6)			
	Intermittent 1	Intermittent 2	State and demand only
Full alignment	.0071 (8.72)	0.0608 (3.89)	0.2788 (1.23)
Intermittent 1		0.0267 (5.61)	0.0087 (8.22)
Intermittent 2			0.5059 (0.46)
Note: Values in parentheses are f-statistics			