

## Fostering an Unnatural Act: Does Policy Make a Difference in Collaboration in Systems of Care?

Mary I. Armstrong and Mary E. Evans

*The value of cross-agency collaboration has been widely promoted in the literature regarding children's systems of care. However, little attention has been paid to the relationship between the types of policy instruments that states use and their impact on collaboration at state and community levels. This article summarizes the findings from a study on the impact of policy on collaboration. The strongest study finding is that policies that foster collaboration include accountability procedures such as cross-agency collection and use of practical data. Other important predictor variables include the attitudes and behaviors of policymakers and the types of interorganizational structures that states implement. Effective promotion of collaboration requires both a strategic use of policy instruments and an ongoing assessment of policymaker practices related to collaboration at state and local levels. Policies that promote collaboration strike a balance between promoting a broad policy framework, providing local autonomy in how the vision is implemented, and maintaining a reasonable level of statewide accountability.*

**Keywords:** *collaboration; systems of care; policy; children's mental health*

At both the federal and state levels over the past twenty years, systems of care have been the predominant policy response to the challenge of offering appropriate services to children with serious emotional disturbances and their families. Composed of multiple child-serving sectors, the system of care concept is based upon a set of core values: services should be community-based, child-centered, family-focused, and culturally competent. In addition, guiding principles for systems of care specify that services should be comprehensive; individualized to each child and family; provided in the least restrictive, clinically appropriate setting;

Mary I. Armstrong, PhD, is associate professor at the Department of Child and Family Studies at Louis de la Parte Florida Mental Health Institute (MHC 2414), University of South Florida. Mary E. Evans, PhD, FAAN, is associate dean for research and doctoral programs at the College of Nursing, University of South Florida.

coordinated at both system and service delivery levels; involve families and youth as full partners; and emphasize early identification and intervention (Stroul & Friedman, 1996; Stroul & Friedman, 1986).

More recently, Stroul (2002) clarified the concept by emphasizing that, first and foremost, systems of care are *a range of treatment services and supports guided by a philosophy and supported by an infrastructure*. Stroul emphasized that it is essential to recognize that developing a system of care is a *multifaceted, multilevel* process that involves making changes: (1) in state policies, financing mechanisms, training, and other structures and processes to support systems of care; (2) at the local system level needed to plan, implement, manage, and evaluate the system; and (3) at the service delivery level to provide a broad array of effective, state-of-the-art treatment services and supports to children and families in an individualized and coordinated manner.

The purpose of the present research was to examine the influence of state-level policy on collaboration in systems of care. Building on the existing literature base regarding collaboration that is reviewed below, the study assumed that collaboration is a key ingredient in developing, implementing, and sustaining systems of care to serve children with serious emotional problems and that effective collaboration produces positive outcomes, including improved relationships among child-serving agencies and improved service delivery. The research assessed the level of collaboration within systems of care and how various public policy implementation strategies either facilitated or inhibited collaboration at state and community levels. The research assumed that there are two basic approaches to policy formation: backward mapping and forward mapping (Elmore, 1979/80, 1987). With forward mapping, policymaking is hierarchical and begins at the top. A clear statement of intent is articulated, as well as the rules and actions that must occur at each level. Backward mapping begins at the lowest level, where the need for the policy has been identified. Common policy strategies include legislative mandates, inducements, capacity-building efforts, and system change initiatives (Elmore, 1987). Mandates are defined as rules governing the behavior of individuals and agencies, with the assumption that clearly defined expectations are the preferred approach for achieving compliance. Inducements are transfers of money or resources on a conditional basis in return for the performance of certain actions. Capacity-building refers to the conditional transfer of money for the purpose of developing human or material resources. System change approaches involve the transfer of authority among individuals and/or agencies in order to change the service delivery system.

### **Theory Relevant to Collaboration**

A variety of theoretical frameworks have been used as the foundation for research regarding interagency collaboration in human services, described by some as “an unnatural act, performed by non-consenting adults” (Agran, Cain, & Cavin, 2002) due to the difficulty of implementation. As noted by Rivard & Morrissey (2003), resource dependency theory, which assumes interdependence

occurs when agencies rely on other organizations for resources needed to achieve their organizational objectives, was the framework for early studies of human services coordination. Studies using this framework examined the use of power through alliances as a way to reduce environmental uncertainty (Boje & Whetten, 1981), the role of formal protocols and agreements (Gans & Horton, 1975), and the effects of various types of formalization (mandated vs. voluntary) (Van de Ven & Walker, 1984).

During the 1990s a number of researchers used network-analysis techniques to examine the structural features of service systems (Heflinger, 1993; Morrissey, 1992; Rivard & Morrissey, 2003). Beckstead, Evans, and Thompson (1998) found network analysis a useful tool in examining changes in two types of systems of care: parent-designed and provider-designed. The parent-designed system showed increases in the density and centralization of its funding network, while the provider-designed system showed decreases. The client referral network in the parent-designed system became more centralized over time, while the provider-designed system showed decreases in the density and centralization of its information exchange network.

The purpose of this study was to increase knowledge about how different state policy implementation strategies impact collaboration at various system levels. The methods used to collect data are described below.

## **Method**

Multiple methods were used to collect data from states during a five-year, two-phase national study of the impact of policy on collaboration in systems of care. The qualitative study methods and analyses are reported here.

### **Participants and Group Assignments**

The first phase of the study was a national survey of state mental health authorities to collect information regarding the types of policy instruments that states used to implement children's systems of care principles, including interagency collaboration. In this phase the director of children's mental health services for each state was identified from the files of the National Association of State Mental Health Program Directors. Directors were sent a letter requesting information about the existence of a system of care within their state and the policy instruments that were used to develop that system of care. Directors were requested to send all policy documents related to establishing, maintaining, and disseminating systems of care within their state.

Thirty-nine states responded to the survey. Of these states, all but five indicated that they were establishing systems of care through legislation or other approaches (Evans, Armstrong, Beckstead, & Lee, 2006). The documents from the remaining thirty-four states were coded by two independent reviewers using a data abstraction form that included the following items: types of policy instruments used for the policy development; whether education, juvenile justice, or

### 30 *Best Practices in Mental Health*

multiple-child-serving systems were involved in the policy development; populations that were addressed in the policy; year of system initiation; and which system of care principles (i.e., community-based, family-focused, child-centered) were articulated. The data from the thirty-four states were entered into a cluster-analysis program, ClustanGraphics v. 4.08 (Wishart, 1999), to identify like groups of states. Five clusters of states with similar approaches to system of care development in their policy implementation strategies, agency partners, and principles emerged from the analysis. Cluster 1, for example, contained eight states that were distinguished by a comprehensive list of collaborating agencies. Details about the cluster analysis and the characteristics of each cluster are found in Evans et al. (2007).

#### Procedures

The second phase of the study was data collection through site visits by members of the research team to two states from each cluster. The Clustan program identified five sites, one for each cluster, that were the exemplar state for that cluster. To examine within-cluster variation, a second site was randomly chosen from each cluster, resulting in two state site visits from each cluster. Each site visit team consisted of two members of the four-member research team, with one visitor acting as the team leader.

A backward-mapping approach (Elmore, 1987) was used by the team during the site visits, with data collection beginning with parents, case managers, and core participants in the system of care in local communities, and ending with state-level policymakers and advocates. Site visit activities included key informant interviews, focus groups, observations of group meetings, and document reviews.

#### Data Collection Instruments

Three semi-structured interview protocols were developed by the research team for use with parents, service providers, and policymakers at each site. The protocols were used to guide the questioning process for all interviews and to ensure consistency in areas of inquiry across the sites. Each interview protocol included questions in three domains: perspectives on collaboration in the system of care specific to the role of the interviewee, the involvement of families in collaboration activities in systems of care, and changes that were needed in collaboration in the system of care. The interview protocol for parents was developed with input from two parents of children with serious mental health problems and was designed for use in focus groups with parents at each site. After each site visit, the team leader analyzed the interview data and prepared a summary report for each state.

#### Data Analysis

Both key state policy documents collected in phase 1 and the site-visit reports of stakeholder perceptions from phase 2 were the data sources for this qualitative

analysis of the level of collaboration. The first step in the development of a qualitative analysis plan was to develop consensus among the research team members about the domains that affect policy implementation regarding collaboration in systems of care. The team, comprising two members with policy and program experience and two researchers, agreed that both the theory about collaboration found in the literature review and a review of the site-visit reports indicated that collaboration is influenced by three related domains: the behaviors of the key players at the state and local levels with responsibility for policy implementation, the attitudes of these key players regarding collaboration, and the structural/organizational arrangements and policies of the child-serving systems and agencies. The team used the conceptual framework of the literature review to identify a set of facilitating and inhibiting factors for each domain. For example, facilitating factors in the attitudinal domain included mutual respect, shared decision-making, shared vision and values, investment in process and outcomes, cultural competence, flexibility, and stakeholder satisfaction. These factors became the coding scheme used by the team members for the initial line-by-line coding of site-visit reports and key state documents. As noted by Miles and Huberman (1994), this provisional set of codes came from the conceptual framework, research questions, and key variables to be studied. However, the team was open to the creation of new codes that emerged from the data that may not fit the original paradigm.

The second phase of data analysis assembled the codes into categories, made connections between the categories, and led to the development of a set of themes that would guide further analysis (Charmaz, 2000; Creswell, 1998; Strauss & Corbin, 1990). The presentation of the study findings is organized by the set of themes discovered in the data.

### **Findings**

Study findings are summarized below (see table 1), and then each finding is described.

**Table 1 Summary of Study Findings**

1. Collaboration is greater when there are policies across child-serving systems that consistently promote collaboration.
2. Policies that have a clearly articulated value base and expected outcomes promote collaboration.
3. States use a combination of policy instruments to promote collaboration in systems of care with varying degrees of success.
4. States use both forward-mapping and backward-mapping approaches to promote collaboration. The benefits of a grassroots approach to policy development were not found in the study.
5. Collaboration is greater when there are policies with accountability mechanisms with clear expectations and the collection of practical data for communities to use.
6. Policies that provide for adequate human and financial resources that can be used flexibly at the community level promote collaboration.

32 *Best Practices in Mental Health*

One theme that emerged is that collaboration is greater in those instances where the policies of agencies within the child-serving sectors are consistent in promoting collaboration than in those communities where the policies of agencies do not support collaboration. In the eight states where this theme was identified, there were strong examples of a history of legislative and policy initiatives that promoted interagency collaboration, such as regional coordinated care entities to reduce restrictive and/or inappropriate out-of-home placements, co-located mental health clinicians in schools, and local interagency entities that included parent representatives. For example, in one state with interagency case-review teams at the state and local levels, the members of the review teams saw their roles as making unique contributions for children whose needs crossed agency lines. While the mental health representative perceived her role as recommending and accessing services and programs, the Medicaid agency representative saw hers as bringing resources and information about Medicaid eligibility for certain children and programs. The education representative saw her role, in part, as ensuring access to a special fund when other agencies might not have funds for certain programs. Thus all the child serving agencies in this system of care had policies and roles that fostered collaboration. Another state demonstrated the theme in reverse. For a number of years this state had a children's cabinet charged with responsibility for state-level coordination of children's mental health services. However, key stakeholders reported that the cabinet had not met for several years. In addition, child welfare was represented on the cabinet by child mental health because both systems were in the same state agency, and thus child welfare was not directly involved in collaborative efforts at either the state or local levels.

A second theme identified was that collaboration was promoted when the policies that states promulgated had philosophical underpinnings with a clearly articulated value base and expected outcomes, including collaboration. Although none of the ten states had formally developed a logic model or theory of change describing the relationships among inputs, throughputs, and outcomes in their system of care development (Hernandez & Hodges, 2003), there were examples in which the leadership of the child-serving agencies together with child advocates had developed a shared vision and specific related objectives. One state, for example, had a number of initiatives that were interrelated by a theory of change regarding the reduction of the use of residential options. The goal of one of the initiatives, a Home and Community-Based Services Waiver, was to divert inappropriate admissions to inpatient care by increasing community-based services. A second initiative offered funds to community mental health centers to enhance access to community services and supports.

It was difficult to specify the most fruitful policy instruments because most of the ten states used multiple policy instruments to implement systems of care, making it difficult to assess which policy instrument or combination of instruments might be responsible for the success of systems of care. In addition, states that used mandates as part of their implementation strategy were as successful in fostering collaboration as states that used system change or inducements. Several

states used a combination of mandates, capacity building, and inducements, with variable results regarding collaboration.

Another finding related to the states' general approach to policy development and implementation. The benefits of either a backward-mapping, grassroots approach with strong local input in policy development or a forward-mapping approach were not found in the study. Only two of the ten states relied heavily on local input for policy development; collaborative behaviors were not found in these states. The other states used top-down mechanisms to foster collaboration with varying levels of success. In one state, for example, the system of care development stemmed from a consent decree, definitely a top-down approach with little concern for readiness to develop collaborative systems of care within local areas. In several of these states, policy about systems of care was developed at the state level; the local level was responsible for implementation; and the results regarding local system of care development were variable.

In addition, policies that included accountability procedures that presented clear expectations and provided for the collection of practical data for communities were more successful in producing collaboration than policies with less clear expectations and less of a focus on practical data. This theme emerged in eight of the ten states, although the data collection goals and methods differed across the sites. In one state, a service-testing methodology was implemented that focuses on intensive case studies of a sample of children with serious mental health problems. Feedback from the case studies was provided to service teams routinely, with expectations for improvements in the teams' performance. This state also produced quarterly data report cards on providers that guided local-level quality assurance activities. In summary, data were being used in a number of ways to guide decision-making and to stimulate and drive problem-solving.

Another state conducted a number of data collection and evaluation activities to determine whether the system of care was meeting the goals of reducing psychiatric hospitalization and coordinating local and state resources to serve children with emotional problems in their home, school, and community. Data were collected on the demographics and service needs of the enrolled population, cost per child, and caseload size. Outcomes data were generated and widely disseminated, demonstrating whether the children had shown gains in a number of areas, including reduction of problem behaviors, decrease in restrictiveness of placement, family empowerment, and school-based behavioral and social gains. The dissemination of these findings facilitated a shared agreement across stakeholders that inpatient care should be avoided whenever it was clinically appropriate.

One theme supported in six states was that policies that provided or built adequate human and financial resources that can be used flexibly at the community level were more successful than those with less adequate human and financial resources. One state had been creative and generous in its use of federal child welfare IV-E funds to support local infrastructures for the development of community-based systems. Local collaboration regarding planning at both system and service delivery levels was a funding requirement for local infrastructure development

34 *Best Practices in Mental Health*

grants and had become the way business is done. In addition, a portion of the funding could be used to develop innovative interagency approaches to service delivery. Two states provided modest financial support for regional and local interagency entities for the coordination of planning, collaborative initiatives, and service delivery.

**Conclusion and Discussion**

The purpose of the study was to assess the level of collaboration within systems of care and how various public policy implementation strategies either facilitated or inhibited collaboration at state and community levels. Multiple methods were used to collect data from states during a five-year, two-phase national study of the impact of policy on collaboration in systems of care. Study findings do not support either a backward-mapping or a forward-mapping approach to public policy development. Rather, states use a combination of policy instruments to support collaboration in systems of care. In addition, attention needs to be paid to organizational frameworks and structures that support collaboration as well as facilitative behaviors and attitudes on the part of key stakeholders. The findings highlight that the implementation over time of a set of consistent legislative and policy initiatives that promote collaboration does result in higher levels of working together.

Over the past two decades, the importance of cross-agency collaboration has been recognized as a key ingredient in the development, implementation, and sustainability of services to children with mental health problems and their families. The study findings contribute to an increased understanding of how various public policy implementation strategies can either facilitate or inhibit collaboration at state and local levels. For example, collaboration is greater where policies across child-serving systems consistently promote the value of collaboration. Policies that have a clearly articulated value base and expected outcomes are related to increased collaboration levels. Collaboration is greater where policies include accountability mechanisms with clear expectations and the use of practical data at the community level. Finally, collaboration is promoted by policies that provide for adequate human and financial resources that can be used flexibly at the community level. The following section explores the ramifications of key study findings and offers a number of policy recommendations for state and local key decision-makers.

It is apparent that policymakers need to recognize that collaboration must occur throughout the system of care. Policymakers at the state level should value collaboration by building it into policies and legislation, as well as modeling the collaborative behavior that they expect from local officials. It is also interesting to note that in states where there was an infrastructure or forum for coordination of policy development and service delivery, levels of collaboration at the state level were higher across sectors.

One study finding was that levels of collaboration were greater in states where policies across child-serving systems were consistent in promoting collaboration.



As noted by Hornberger, Martin, and Collins (2006), the shift from silos to integration in the development of systems of care requires both new policies and new practices. Policy implementation needs to move beyond the articulation of system of care values and principles and should include an ongoing assessment of practices and behaviors related to collaboration at state and local levels. In addition, policymakers need a consistent focus on organizational issues and how they affect service delivery (Knitzer & Cooper, 2006).

According to the study findings, it does not seem to matter whether policy development to establish collaboration in systems of care begins at the state or local level. Policymakers at both state and local levels should support efforts to establish systems of care, regardless of where these efforts are initiated. As one parent observed regarding policy development, one needs to work on implementation “from the top, from the middle, and from the bottom levels.” Evidence also suggests that a variety of policy instruments, often in combination, can be used to support effective system of care development. Mandates, for example, can be used as successfully as system change or inducements. It may be that mandates, especially when accompanied by human and financial resources, are useful in implementing systems of care.

It is interesting that one study finding—the relationship between accountability mechanisms and collaboration—has not been widely addressed in the literature. The use of data in decision-making can be an important tool in fostering collaboration in systems of care because it minimizes the individual perceptions and anecdotes that individuals may bring to the table. It assists groups in making decisions because it indicates the extent to which goals have been met successfully. For example, it provides information on the number of children placed out of home, those returned to the community, the amount of funds expended for various activities, the flow of children and families through the system, and many other aspects of system-functioning. Review of these data help systems make changes, monitor and adjust their budget, and provide information that is essential for sustainability.

### **Policy Recommendations**

The study findings point to a number of recommendations regarding policies that can support the values and principles of systems of care, including collaboration. First, infrastructures such as tiered coordinating entities or a children’s cabinet that include several child-serving systems may facilitate interagency collaboration. These entities need legislative authority to govern, a mandate to convene, and task partners on an ongoing basis. Collaboration is maximized when there is strong, visionary, and consistent leadership at all levels of the infrastructure.

Second, policies should include local autonomy in the use of human and financial resources. Funding at the local level, even at modest levels, is useful in promoting collaboration and other system of care values and principles. Local entities should have the authority to distribute resources, assign personnel, and access flexible dollars. Policies should promote and facilitate the placement of mental

health personnel in school districts, juvenile justice, and child welfare offices to provide consultation and support.

Third, clear accountability policies and standards that define cross-agency data-collection activities in agreed-upon areas (e.g., reduction of problem behaviors, school readiness and achievement, the number of out-of-state placements) promote collaboration at all system levels. The use of data by state- and local-level interagency structures to guide decision-making, planning, and allocation of new resources, promotes interagency collaboration.

Fourth, policies should strike a balance between promoting a broad policy framework with a clear set of values and expectations, providing local autonomy in how the vision is carried out, and maintaining a reasonable level of standardization and accountability statewide. As one professional stakeholder said, “They give you the whole fishing line. Occasionally they reel it in, realize they can’t handle it, and give it back.”

Fifth, policy mandates, particularly with modest funding, can be useful in getting stakeholders on the same page more quickly. Mandates coupled with funding appear to function like inducements or capacity-building policy instruments in the promotion of system of care development.

Finally, policymakers should support cross-agency initiatives to strengthen interagency collaboration and develop systems of care, regardless of whether these efforts are initiated at the local or state level.

### **Limitations & Future Research**

A major limitation of this study was the small number of sites that the team visited. The inclusion of additional sites might help to clarify the reasons for both within- and across-state differences. It is important to continue to conduct research on collaboration within systems of care. We know a good deal about the inputs to systems of care, for example, the characteristics of children and families receiving services, and we know something about outputs because of the national evaluation of the federally funded system of care sites, but we know much less about the black box of interventions in systems of care. Collaboration, as well as evidence-based interventions, leadership, management of conflict among decision-makers, and other factors may be important in mediating or moderating the system- and child-level outcomes of system of care initiatives. If collaboration is shown to be related to system and child outcomes, interventions to promote improved collaboration can be developed and implemented at both the state and local level.

### **References**

- Agran, M., Cain, H. M., & Cavin, M. D. (2002). Enhancing the involvement of rehabilitation counselors in the transition process. *Career Development for Exceptional Individuals*, 25, 141–155.

- Beckstead, J. W., Evans, M. E., & Thompson, F. (1998). Alternate strategies for creating systems of care for children: A network analysis of parent-designed and provider-designed service arrangements. In J. P. Morrissey (Ed.), *Research in Community and Mental Health: Social Networks and Mental Illness* (Vol. 9, pp. 29–38). Stamford, CT: JAI Press.
- Boje, D. M., & Whetten, D. A. (1981). Effects of organizational strategies and contextual constraints on centrality and attributions of influence in interorganizational networks. *Administrative Science Quarterly*, 26, 378–395.
- Charmaz, K. (2000). Grounded theory: Objectivist and constructivist methods. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 509–536). Thousand Oaks, CA: Sage Publications.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications.
- Elmore, R. F. (1979/80). Backward mapping: Implementation research and policy decisions. *Political Science Quarterly*, 7, 174–186.
- Elmore, R. F. (1987). Instruments and strategy in public policy. *Policy Studies Review*, 7, 174–186.
- Evans, M. E., Armstrong, M. I., Beckstead, J. W., & Lee, J. (2007). Examining the impact of policy on collaboration in systems of care for children with emotional and behavior disorders. *Journal of Child and Family Studies*, 16, 567–576.
- Gans, S. P., & Horton, G. T. (1975). *Integration of human services: The state and municipal levels*. New York: Praeger Publishers.
- Heflinger, C. A. (1993). *Final report of the implementation of the Fort Bragg evaluation project: Vol. 3* (Appendix 1: An interorganizational approach to evaluating the implementation of the Fort Bragg child and adolescent mental health demonstration project). Nashville, TN: Vanderbilt Institute for Public Policy Studies, Center for Mental Health Policy.
- Hernandez, M., & Hodges, S. (2003). *Crafting logic models for systems of care: Ideas into action*. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, Department of Child and Family Studies.
- Hornberger, S., Martin, T., & Collins, J. (2006). *Integrating systems of care: Improving quality of care for the most vulnerable children and families*. Washington, DC: Child Welfare League of America Inc.
- Knitzer, J., & Cooper, J. (2006). Beyond integration: Challenges for children's mental health. *Health Affairs*, 25(3), 670–679.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage Publications.
- Morrissey, J. P. (1992). An interorganizational network approach to evaluating children's mental health service systems. In L. Bickman & D. Rog (Eds.), *New directions for program evaluation* (Vol. 54, pp. 85–98). San Francisco: Jossey-Bass.

38 *Best Practices in Mental Health*

- Rivard, J. C., & Morrissey, J. P. (2003). Factors associated with interagency coordination in a child mental health service system demonstration. *Administration and Policy in Mental Health, 30*(5), 397–415.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage Publications Inc.
- Stroul, B. (2002). *Issue brief—system of care: A framework for system reform in children's mental health*. Washington, DC: Georgetown University Child Development Center, National Technical Assistance Center for Children's Mental Health.
- Stroul, B., & Friedman, R. M. (1996). The system of care concept and philosophy. In B. Stroul (Ed.), *Children's mental health: Creating systems of care in a changing society* (pp. 3–21). Baltimore: Paul H. Brookes.
- Stroul, B. A., & Friedman, R. M. (1986). *A system of care for severely emotionally disturbed children and youth*. Washington, DC: Georgetown University, CASSP Technical Assistance Center.
- Van de Ven, A. H., & Walker, G. (1984). The dynamics of interorganizational coordination. *Administrative Science Quarterly, 29*, 598–621.
- Wishart, D. (1999). ClustanGraphics (Version 4.08) [Computer Software]. Edinburgh, Scotland: Clustan Limited.

Copyright of Best Practice in Mental Health is the property of Lyceum Books, Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.