



## Frontiers in Public Health Services and Systems Research

Volume 3 | Number 4

Article 3

October 2014

### The Role of Leadership in Creating a Strategic Climate for Evidence-Based Practice Implementation and Sustainment in Systems and Organizations

Gregory A. Aarons

*University of California, San Diego, gaarons@ucsd.edu*

Mark G. Ehrhart

*San Diego State University, mehrhart@mail.sdsu.edu*


Lauren R. Farahnak

*University of California, San Diego, lfarahnak@ucsd.edu*

Marisa Sklar

*University of California, San Diego, masklar@ucsd.edu*

Follow this and additional works at: <https://uknowledge.uky.edu/frontiersinphssr>

 Part of the [Health and Medical Administration Commons](#), [Health Policy Commons](#), [Health Services Administration Commons](#), [Health Services Research Commons](#), [Leadership Studies Commons](#), [Organization Development Commons](#), and the [Public Administration Commons](#)

#### Recommended Citation

Aarons GA, Ehrhart MG, Farahnak LR, Sklar M. The Role of Leadership in Creating a Strategic Climate for Evidence-Based Practice Implementation and Sustainment in Systems and Organizations. *Front Public Health Serv Syst Res* 2014; 3(4).  
DOI: 10.13023/FPHSSR.0304.03

This From the Annual Review is brought to you for free and open access by the Center for Public Health Systems and Services Research at UKnowledge. It has been accepted for inclusion in Frontiers in Public Health Services and Systems Research by an authorized administrator of UKnowledge. For more information, please contact [UKnowledge@lsv.uky.edu](mailto:UKnowledge@lsv.uky.edu).

---

# The Role of Leadership in Creating a Strategic Climate for Evidence-Based Practice Implementation and Sustainment in Systems and Organizations

## Abstract

There is a growing impetus to effectively implement evidence-based practices (EBPs) in health and allied health settings in order to improve the public health impact of such practices. To support implementation and sustainment of EBPs, it is important to consider that health care is delivered within the outer context of public health systems and the inner context of health care organizations and work groups (3). This article identifies two relevant types of leadership for implementation and recommends steps that leaders can take in developing a strategic climate for EBP implementation and sustainment within the outer and inner contexts of health and allied health care systems and organizations.

## Keywords

Leadership, implementation, sustainment, system, organization, evidence-based public health, evidence-based practice

## Cover Page Footnote

This Frontiers article is a shorter version of the following article: Aarons GA, Ehrhart MG, Farahnak LR, Sklar M. 2014. Aligning leadership across systems and organizations to develop a strategic climate for evidence-based practice implementation. *Annu. Rev. Public Health* 35:255-74. Please enjoy complimentary access, courtesy of the Annual Review of Public Health. Click here to access the review: <http://bit.ly/SEnPYM>

Leaders play a critical role in determining the nature of system and organizational contexts. Drawing from concepts of leadership and “embedding mechanisms,” we describe strategies that system, organization, and work group leaders can apply to develop strategic climates that support the implementation and sustainment of evidence-based practices (EBPs) in health care and allied health care systems and organizations (2).

## IMPLEMENTATION CLIMATE

The climate of service systems and organizations is associated with numerous outcomes that play an important role in implementation, including stakeholder and employee attitudes, motivation, and performance (8). In contrast to molar (i.e., general) climates that represent the overall system or organizational environment, focused or “strategic” climates represent the extent to which events, practices, and procedures align with and support a specific criterion of interest such as the implementation and sustained use of EBPs. Strategic climate captures the meaning that stakeholders and employees derive from policies and procedures regarding what systems and organizations value and support (6). We build on previous work that identifies EBP implementation climate as a measurable and important strategic climate (7).

Our focus on implementation climate refers specifically to the implementation of EBP in health care settings. We define EBP implementation climate as the shared perceptions of the policies, practices, procedures, and behaviors that are rewarded, supported, and expected in order to facilitate effective EBP implementation and use. EBP implementation climate can be developed when leaders at the system, organization, and work group levels communicate the importance of EBP implementation through the policies, procedures, and reward systems they establish. When EBP implementation climate levels are high, health care providers clearly understand that leaders (e.g., policy makers, agency executives, program managers, supervisors) endorse and support EBP implementation and use. The development of a strategic EBP implementation climate can be influenced by leaders at the system, organization, and work group levels, and we contend that EBP implementation climate levels will be highest (and thus EBP implementation most effective) when there is congruence of support across all levels of leadership.

## LEADERSHIP

Leadership is important in supporting change such as EBP implementation (5). Leadership facilitates processes that are important in fostering implementation, including a supportive work group climate, positive employee work attitudes, positive attitudes toward EBP, and commitment to organizational change. In the same way that climate research has distinguished between the general organizational climate (i.e., molar climate) and climate with a specific focus (e.g., implementation climate), approaches to leadership can also be more general or more focused. Most of the research to date on the role of leadership in implementation has focused on more general approaches; in our work, we combine a general approach to leadership (transformational leadership) with leadership focused specifically on issues related to implementation.

Transformational leadership inspires and motivates others to follow an ideal or course of action and is composed of four types of leader behaviors: individualized consideration (appreciation of others' individual attributes and needs), intellectual stimulation (stimulating critical thinking and accept different perspectives), inspirational motivation (inspiring and motivating staff), idealized influence (leader acts confidently and instills pride, respect, values, and a strong sense of purpose and collective sense of mission) (5). Transformational leadership is associated with the success of implementation efforts (9), in supporting positive attitudes toward EBP in statewide system change efforts and has been particularly important for ameliorating the negative impact of organizational stress during large-scale health care system reform (4).

Because transformational leadership does not specifically address issues related to implementation, we recently developed the concept of implementation leadership (1). Implementation leadership has four dimensions: 1) Proactive leadership (leaders establish standards, develop plans, and remove obstacles to implementation), 2) Knowledgeable leadership (leader understands and is able to articulate knowledge of EBP), Supportive leadership (leader supports others efforts to learn and utilize EBP), and 4) Perseverant leadership (leader supports EBP implementation in a consistent and deliberate way). To assess implementation leadership, we developed the Implementation Leadership Scale (ILS), a very brief measure that is freely available (<http://www.implementationscience.com/content/9/1/45>). Implementation leadership is consistent with strategies and leader behaviors that we believe contribute to developing strategic climates for EBP implementation and sustainment. We assert that leaders can use both implementation leadership and transformational leadership approaches to develop and support the use climate embedding mechanisms to develop strategic climates in service systems and organizations.

## **CLIMATE EMBEDDING MECHANISMS**

To illuminate how implementation leadership and transformational leadership are related to implementation climate, we build on Schein's (10) work on leadership and organizational culture and climate that describes the primary and secondary "embedding mechanisms" leaders at multiple levels use to communicate their values and priorities. The six primary embedding mechanisms described by Schein are:

1. what leaders pay attention to, measure, and control on a regular basis
2. how leaders react to critical incidents and organizational crises
3. how leaders allocate resources
4. deliberate role modeling, teaching, and coaching
5. how leaders allocate rewards and status
6. how leaders recruit, select, promote, and excommunicate

When applied to EBP implementation, primary embedding mechanisms can be used to ensure that employees understand the importance of the implementation of a particular EBP as an organizational priority. For instance, system, organizational, and group leaders can send consistent messages regarding the value of EBPs through a variety of mechanisms, including in press releases, newsletters, and meetings. Similarly, the act of allocating of resources for EBPs while reducing resources for non-EBPs can signify the importance of EBPs in a system or organization.

Schein also outlined secondary mechanisms that support and perpetuate the strategic climate, provided these are consistent with the primary mechanisms above. The six secondary mechanisms include:

1. organizational design and structure
2. organizational systems and procedures
3. rites and rituals of the organization
4. design of physical space, facades, and buildings
5. stories about important events and people
6. formal statements of organizational philosophy, creeds, and charters

The secondary mechanisms can be used by leaders across system, organization, and group levels. For instance, system and organization leaders can formalize the importance of implementing EBPs in their mission statements. At the work group level, leaders can highlight certification on EBPs as a rite of passage, and encourage their staff to share stories of the successful application of EBPs or of overcoming obstacles in the implementation of EBPs.

## **IMPLICATIONS AND CONCLUSIONS**

We suggest that leaders can enact specific implementation leadership and transformational leadership strategies to enhance structures, processes, and activities that promote outer system and inner organizational climates conducive to EBP implementation. For example, leaders can apply both implementation leadership and transformational leadership strategies in role modeling, teaching, and coaching. Implementation leadership strategies such as being proactive and perseverant can inform how leaders react to critical incidents or implementation challenges. These are just two examples of how leadership can inform the development of embedding mechanisms. It is incumbent on leaders at multiple levels and from policy to practice to develop strategies for health and allied health care systems and organizations that demonstrate commitment to evidence-based care and that can be recognized and embraced by health care providers across levels. Research suggests that the more primary and secondary embedding mechanisms that can be applied with congruence across outer and inner contexts, the more likely it will be that strategic climates to support EBP implementation can be developed. Such climates should, in turn, support effective and continued EBP implementation and sustainment to improve the public health impact of effective health care innovations and interventions.

**SUMMARY BOX:**

- Both strong general leadership and strong implementation leadership are needed to align systems and organizations to support evidence-based practice implementation and sustainment
- Strategic climate for EBP can be developed in systems and organizations through alignment of structures, processes, and communications that identify and reinforce that EBP is valued and supported
- Leaders can utilize embedding mechanisms to communicate the importance of evidence-based health approaches in service systems and organizations.
- To increase the implementation of evidence-based public health innovations policy makers, system leaders, and organizations should work to align embedding mechanisms across systems and organizations in order to develop a context that supports effective public health policies and practices and their implementation and sustainment.

## REFERENCES

1. Aarons GA, Ehrhart MG, Farahnak LR. 2014. The Implementation Leadership Scale (ILS): Development of a brief measure of unit level implementation leadership. *Implement. Sci.* 9:45-54
2. Aarons GA, Ehrhart MG, Farahnak LR, Sklar M. 2014. Aligning leadership across systems and organizations to develop a strategic climate for evidence-based practice implementation. *Annu. Rev. Public Health* 35:255-74
3. Aarons GA, Hurlburt M, Horwitz SM. 2011. Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Adm Policy Ment Hlth* 38:4-23
4. Aarons GA, Sommerfeld DH, Willging CE. 2011. The soft underbelly of system change: The role of leadership and organizational climate in turnover during statewide behavioral health reform. *Psychol. Serv.* 8:269-81
5. Bass BM, Avolio BJ. 1990. The implications of transformational and transactional leadership for individual, team, and organizational development. In *Research in organizational change and development*, ed. W Pasmore, RW Woodman:231-72. Greenwich, CT: JAI Press.
6. Ehrhart MG, Schneider B, Macey WH. 2014. *Organizational climate and culture: An introduction to theory, research, and practice*. New York, NY: Routledge.
7. Jacobs SR, Weiner BJ, Bungler AC. 2014. Context matters: Measuring implementation climate among individuals and groups. *Implement. Sci.* 9:46
8. Kuenzi M, Schminke M. 2009. Assembling fragments into a lens: A review, critique, and proposed research agenda for the organizational work climate literature. *J. Manage.* 35:634-717
9. Michaelis B, Stegmaier R, Sonntag K. 2010. Shedding light on followers' innovation implementation behavior: The role of transformational leadership, commitment to change, and climate for initiative. *J. Manage. Psychol.* 25:408-29
10. Schein E. 2010. *Organizational culture and leadership*. San Francisco, CA: John Wiley and Sons.