

CHL's Ecological Model for Advancing Health and Learning

- For Review and Discussion

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Introduction

The Center for Health and Learning (CHL) is a nonprofit organization located in Brattleboro, Vermont, founded in 1999. The Center's mission is to promote the health and well-being of children, families, schools and communities. Through policy development, educational resources, professional development, leadership training, and technical assistance, CHL seeks to build a foundation for healthy communities both in Vermont and nationwide. The Center's programs and services are based on the fundamental belief that the most effective and efficient way to advance health and learning is to foster cross-sector collaboration around integrated and strategic health and educational initiatives.

This strategy is particularly relevant in the light of recent reports by the Robert Wood Johnson Foundation and ASCD. These organizations, both of which are leading voices in the health and education fields respectively, advocate for a radical new approach to health and well-being; an approach which is strategically aligned with CHL's current work and its goals for the future. The Robert Wood Johnson Foundation's *Commission to Build a Healthier America* describes the present condition of America's healthcare policy and services as critically compromised and in urgent need of transformation. According to the Commission's Report, *Time to Act*, Americans must create "a seismic shift in how we approach health and the actions we take" and the changes necessary will require no less than "a revolution in the mindset of individuals, community planners and health professionals." The Commission recommends: 1) focusing on families and communities so they build a strong early foundation for a lifetime of good health; 2) fully integrating health into community development, and 3) encouraging health care professionals and institutions to move beyond treating illness to helping people lead healthy lives (RWJF Commission, 2014).

ASCD is a global community comprised of 140,000 education leaders dedicated to excellence in learning, teaching and leading. Since 2007, ASCD's *Whole Child Initiative* has been seeking to create a new vision for education that moves beyond a narrow focus on academic achievement to a broad and holistic commitment to the long-term development and success of children. This initiative builds on the longstanding work of the Centers for Disease Control (CDC), which first introduced the need for comprehensive and coordinated approaches to school health that include engagement of community stakeholders to address the health needs of children while promoting academic success. In their 2014 publication, *Whole School, Whole Community, Whole Child*, ASCD and CDC together make a strong argument for "greater alignment, integration, and collaboration between health and education to improve each child's cognitive, physical, social and emotional development."

CHL's pioneering work in linking health and education, together with its innovative accomplishments in suicide and addictions prevention and the promotion of mental health wellness, make it highly qualified to align and activate these forward-looking proposals and advance the revolution in health promotion and learning. CHL's *Ecological Model for Advancing Health and Learning* seeks to integrate and coordinate all levels and sectors of the system to significantly improve health and learning outcomes for children, families and communities.

As it recalibrates and strengthens its resources to build on the findings of the Johnson Foundation, ASCD and the CDC, CHL seeks funding to engage with education, health and human service agencies at the federal, state and community levels to develop, implement and test this ecological model in Vermont and then disseminate it nationally. By developing tools, resources, sample policies, education and training programs, and by providing real-life examples of integration and coordination at the state and local level, CHL is confident that the implementation of this model will ultimately contribute to a healthier America, more cost effective health services, and better academic outcomes.

The Need for a New Ecological Model for Advancing Health and Learning

America ranks 27th among affluent nations in life expectancy and 30th in infant mortality. At the same time, our nation spent more than \$2.7 trillion dollars on health care in 2011, more than any other country. The end result is costly for all of us in terms of poorer quality of life, lost productivity and limited resources for education, social services and other spending priorities.

The prevalence of substance abuse and risky behaviors among our nation's youth is especially problematic. For example,

- According to data collected by the Substance Abuse and Mental Health Services Administration in 2012, 2.2 million youth aged 12 to 17 reported having a major depressive episode during the preceding year.
- In addition, an estimated 23.1 million Americans aged 12 and older needed treatment for substance abuse, which in turn can lead to other chronic diseases such as diabetes and heart disease.
- These disorders are a leading cause of disease and disability in the United States and are expected to surpass all physical diseases as a major cause of disability worldwide by 2020.
- Homicides and suicides are two of the top three causes of death among our nation's teens – the third being accidents.

Sociologists attribute the increase in gangs, teenage homicide, teen suicide, teen pregnancy, school dropouts, and other problems to a rapidly changing society and family structure. Prevention efforts require understanding the root causes of these unhealthy behaviors, a willingness on the part of the public to change those causes, and a multi-system response with all sectors of the community involved.

If Americans want to improve health and educational outcomes, and reduce costs dramatically, we need to totally revamp the nation's health care system focusing especially on helping our nation's young people develop a healthier life style. As the Robert Wood Johnson Commission asserts: "The key to better health does not lie primarily in more effective health care . . . It will take new perspectives, actors, and policies, and will require seamless integration and coordination of a range of sectors and their work." (p.2).

The Model

Building on its previous success with Umatter™ – a nationally recognized and comprehensive statewide approach to youth suicide prevention - CHL plans to design, test and disseminate a strategic, coordinated process that links the educational system and the health care system and promotes the health and learning of all children and youth, including those who are most at risk. The ultimate goal of the model is to substantially improve health and educational outcomes for children aged 0-18 and their families by creating a fully integrated system that promotes a seamless interface among multiple sectors, including education, health, mental health, social services and juvenile justice.

Key Elements

The graphic on the next page shows the key elements of an ecological model which, philosophically, recognizes the dynamic interrelatedness among personal and environmental factors in individual and social life. Its ecological approach fosters connectedness across multiple levels of the system—state, community, and individual and promotes coordination across sectors including health, education, justice and others.

State Level

At the state level, the model is driven by a population-based approach to enhancing the health and well-being of all. A population-based approach includes assessment of the needs of a population, implementation of evidence-based approaches to address those needs, and tracking results over time to see if targeted health outcomes have improved.

The model also calls for promoting health in all state policy, including health and mental health, education, transportation and environmental policy. This means that, for every policy or program decision made, the implications for health will be considered.

By coordinating their efforts and pooling their funding sources, state agencies can strengthen their capacity to provide cross-sector training; create a statewide clearinghouse where examples, evidence-based tools and other resources can be shared; and leverage financial and other support to local communities, especially those whose population is at greater risk due to poverty and other factors.

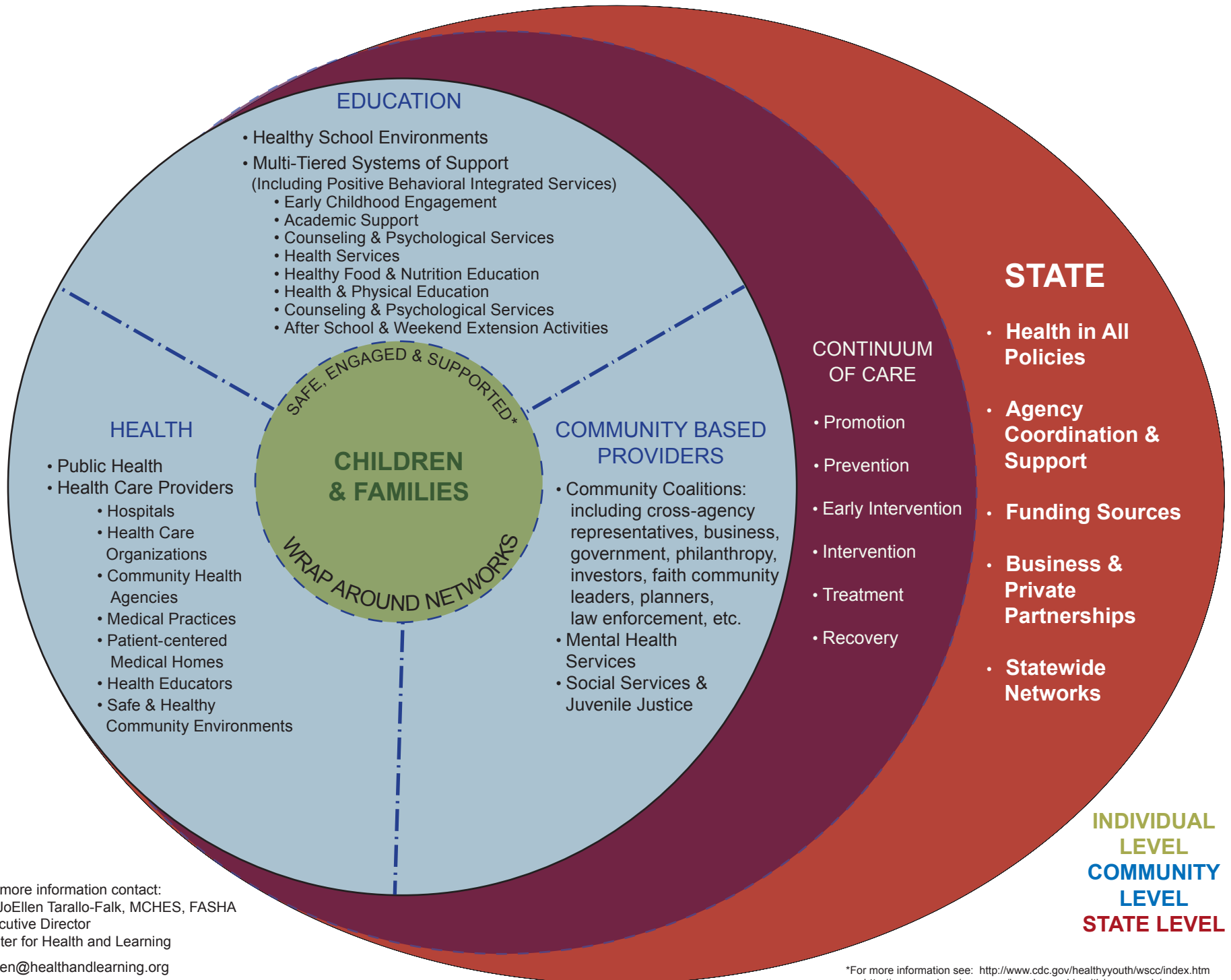
Finally, by creating and strengthening public-private partnerships and mobilizing statewide networks, states can maximize knowledge sharing, expand existing resources and generate cost-effective models for cross-sector and cross-site collaboration.

STATE

- Health in All Policies
- Agency Coordination & Support
- Funding Sources
- Business & Private Partnerships
- Statewide Networks

ECOLOGICAL MODEL FOR ADVANCING HEALTH & LEARNING™

Linking Health & Educational Outcomes



For more information contact:
Dr. JoEllen Tarallo-Falk, MCHES, FASHA
Executive Director
Center for Health and Learning
joellen@healthandlearning.org

*For more information see: <http://www.cdc.gov/healthyyouth/wsc/index.htm>
<http://www.ascd.org/programs/learning-and-health/wsc-model.aspx>

Community Level

Within the community, the model seeks to develop a coordinated and well-managed system that expands and formalizes the links between education, health and other community service providers. The ultimate goal is to develop a case-managed approach that guarantees children and families easy access to a continuum of services that foster health and well-being. In addition, local select boards and school boards are expected to consider the health impact of their programmatic and policy decisions.

Education

Research shows that when children's basic nutritional and health needs are met, they achieve at higher levels. School-based and school-linked health centers that provide access to needed physical, mental and oral health care, for example, are associated with improved attendance, behavior and achievement. That is why integrating health promotion and multi-tiered system of support are essential for ensuring both the academic success and health of children.

The Center for Disease Control's Division of Adolescent and School Health has long promoted a coordinated school health program that includes a safe and healthy school environment, academic support; counseling, psychological and social services, health education, physical education, nutrition education and services (CDC, 2014). After-school and weekend extension activities also foster greater attachment to school and prevent risky behaviors during the many hours that children are not in class.

EDUCATION

- Healthy School Environments
- Multi-Tiered Systems of Support
(Including Positive Behavioral Integrated Services)
 - Early Childhood Engagement
 - Academic Support
 - Counseling & Psychological Services
 - Health Services
 - Healthy Food & Nutrition Education
 - Health & Physical Education
 - Counseling & Psychological Services
 - After School & Weekend Extension Activities



HEALTH

- Public Health
- Health Care Providers
 - Hospitals
 - Health Care Organizations
 - Community Health Agencies
 - Medical Practices
 - Patient-centered Medical Homes
 - Health Educators
 - Safe & Healthy Community Environments

COMMUNITY BASED PROVIDERS

- Community Coalitions: including cross-agency representatives, business, government, philanthropy, investors, faith community leaders, planners, law enforcement, etc.
- Mental Health Services
- Social Services & Juvenile Justice

Health

At the community level, the model includes all components of the traditional health care system, including public health and health care providers, including hospitals and health care organizations, community health agencies, private medical practices and patient-centered medical homes. All of these organizations and individuals must coordinate their efforts if children and their families are to receive efficient and effective health care. Another critical feature of the community health care system is health education and health coaching, so that children and their families understand the importance of healthy behaviors and how to implement them. Finally, creating a safe and healthy community environment that minimizes crime and violence, provides clean air and water and provides opportunities for sports and recreation is an essential component of the model.

Community-Based Providers

While often overlooked, these are also a key element in the ecological model. These include mental health services, social services, and juvenile justice and community coalitions that bring together business, government, philanthropy, investors, the faith community, community planners, community development, law enforcement, etc. As the Robert Wood Johnson Commission (2014) notes, “Meaningful, needle-moving outcomes will not be achieved without these kinds of efforts. While some effective cross-sector collaboration is beginning to occur, much more is needed.”

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- Robert Wood Johnson Commission



Individual Level

Finally, the model includes children and their families. Since children's early experiences and environmental influences have a significant impact on their cognitive, mental and physical health well into adulthood, a top priority is on prevention strategies that engage families in creating safe and stable environments and promote the use evidence-based parenting practices that support mental health and reduce trauma. Families themselves need to be actively engaged in their children's education, encouraged to get access to services and lead healthy lifestyles and supported with a host of wrap-around services.



Continuum of Care

The graphic also highlights another key feature of the model: a continuum of care that spans promotion, prevention, early intervention, intervention, treatment and recovery. Today, most health care resources are devoted to treatment and recovery services, which often come too late to make a real difference and are prohibitively expensive. To achieve a dramatic improvement in health outcomes at an affordable price requires a greater emphasis on mental health wellness and the implementation of “upstream approaches” that offset critical health problems before they develop.

Recognizing that payment reform is central to health care reform, CHL expects that implementing this ecological model will also provide an opportunity for trying out innovative funding approaches that support key elements of the model.

CONTINUUM OF CARE

- Promotion
- Prevention
- Early Intervention
- Intervention
- Treatment
- Recovery



Underlying Principles

While the model is ambitious, it is also achievable and results-oriented, and based on the following principles:

1. **Promote social connectedness.** The entire model is based on the concept of social connectedness as a primary prevention strategy – connectedness between individuals, connectedness of individuals and their families to schools and other community organizations, and connectedness among community organizations and social institutions.
2. **Focus on root causes.** To significantly increase health care outcomes, all components of the system must understand and work together to address root causes, including psychological disorders, disruptive life events, and unhealthy school and family environments.
3. **Use evidence-based practices.** It is essential that all participants in the system understand these practices and use them to significantly improve student health and learning.
4. **Pay special attention to those groups that are at greater risk due to poverty, racial and cultural barriers, gender or sexual orientation, , and implement strategies that are sensitive to cultural and linguistic differences.**
5. **Use a strength-based approach.** At the state and community levels, the goal is to strengthen the existing infrastructure, enhance current policies, programs and practices; and create new pathways and linkages between the sectors, capitalizing on existing health and education reform efforts. At the individual level, the aim is to promote self-help and resiliency in families.
6. **Enhance the capacity of communities to improve health outcomes over time.** Using collaborative and strategic planning models for health and educational planning, the emphasis will be on data-informed decision making; results-based accountability; and the creation of learning communities to facilitate knowledge sharing, remove barriers and connect knowledge with action.



CHL's Role

CHL's core services of professional development and health promotion, its existing role as a convener of statewide projects, and its national contributions to the field of school health, ideally position it to facilitate these connections among a broad scope of service providers. CHL's overriding goal is to develop the model and facilitate its implementation, evaluation, dissemination and replication, remaining fully aware and adhering to the politics of process. In order to achieve this goal, CHL will:

- work with state policymakers to conduct statewide needs assessments to inform state policy;
- facilitate statewide networking and help create local coalitions bridging schools, communities and families to facilitate health outcomes and promote the role that good health plays in academic success;
- develop tools and resources to support the comprehensive model;
- provide training and technical assistance to build state and local workforce capacity;
- develop public information campaigns that support key health care messages that are evidence-based and engage families, schools and communities;
- design and conduct an in-depth demonstration project in one or two communities as an example of collaborative and coordinated care that focuses on enhancing health and learning;
- develop tools and programs for parents so they not only feel engaged, educated and supported, but also have the knowledge and skills needed to prevent health and learning problems and promote resiliency;
- explore and recommend innovative funding models that support implementation of evidence-based strategies for prevention and incentivize families and partners to participate in them; and
- engage in ongoing monitoring and evaluation, including tracking and disseminating agreed upon population-based and community measures and evaluating services on their ability to meet the needs of all clients regardless of race, creed, religion, sexual identity and physical and mental status.



Expected Outcomes

CHL will convene an advisory group – e.g., representatives from schools, mental health agencies, health care and social services, law enforcement and faith-based organizations – to provide ongoing input to the assessment, planning, implementation and evaluation of the system. With the group's assistance, CHL will continually monitor the implementation of its integrated and systemic model using designated performance measures such as observed changes in state-level policies and practices; increased coordination and networking among families, schools, health care and other community agencies; the creation of local coalitions; development and use of new tools and resources to support the model; and the nature, extent and impact of training and technical assistance efforts.

In addition, CHL will work with advisory group members to identify and measure short- and long-term effects of the model on various child and family outcomes. Some of these will be easy to measure by using readily available state population data, while others may require the administration of parental or school-based surveys or other tailored data collection methods. Below are illustrative examples of expected outcomes:

Effects on children and youth:

- Improved academic achievement
- Improved attendance
- Increased school graduation rates
- A reduction in the number of disciplinary referrals, suspensions and expulsions
- Increased self-esteem and more positive attitudes toward school
- Reduced rates of teen pregnancy and use of alcohol, tobacco and other drugs
- Reduced rates of juvenile crime, teen violence, bullying and suicide
- Improvements in other health outcomes, including reduced obesity and oral care issues

Effects on parents

- Improved parenting skills and decreased family violence
- Increased participation in school and community events
- Increased communication with schools and community health providers
- Perceptions of improved sensitivity to the needs of the family, social support, education and health care services by health providers, schools and other community health providers



Conclusion

The current realities of health and educational reform have converged to make now the right time to bring about a sweeping transformation in 1) how our nation's citizens understand and accept what good health means 2) how health care is organized and delivered and 3) how states and communities work across sectors and levels to promote improved health and learning outcomes.

The Center for Health and Learning proposes to contribute to this transformation by developing, implementing, evaluating and disseminating an integrated and systemic model of comprehensive health care that will be demonstrated in Vermont or another vicinity, and serve as a paradigm for replication nationwide.

At the heart of the model is the premise that states, communities, schools and individuals constitute a web of connection and should participate in an integrated health system that delivers a continuum of care focused on health promotion, prevention, early intervention, intervention, treatment and recovery.

The proposed model links educational, health, other community providers, as well as the broader community in achieving the common goals of increasing the health of the populace, reducing health care costs, and achieving school success. It is an ecological model that requires the engagement of diverse public and private partners interested in improving care coordination and healthy behaviors in Vermont and the nation as a whole. Funding to support the efforts of the Center for Health and Learning to design and implement an integrated and systemic model that addresses these needs will contribute to the speed and efficiency with which the urgently needed transformation of American health and education becomes reality.

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