

# BRIGHT FUTURES

Guidelines for Health Supervision of  
Infants, Children, and Adolescents

THIRD EDITION



**Bright  
Futures™**

prevention and health promotion  
for infants, children, adolescents,  
and their families™

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™



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Guidelines for Health Supervision of  
Infants, Children, and Adolescents

THIRD EDITION

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*Editors*

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## Dedication

The Third Edition of *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents* is dedicated to Morris Green, MD, original chairperson of the Bright Futures initiative and editor of the First Edition of the Guidelines. His vision and leadership continue to inspire all of us who work for brighter futures for children and families.



## *The Challenge of Bright Futures*

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...For many children and their families, each new day is an opportunity for further self-realization, enhancement of good health, and promotion of self-esteem. For millions of others, however, the future holds little promise; their health status is poor, their health risks are many, and their prospects for successfully overcoming these problems are limited. These children, and all our nation's children, deserve the attention, the encouragement, and the intervention of health professionals from many disciplines to ensure that they develop the healthy bodies, minds, emotions, and attitudes to prepare them to be competent and contributing adults.

Health supervision policies and practices have not kept up with the pervasive changes that have occurred in the family, the community, and society. It has become evident that a "new health supervision" is urgently needed to confront the "new morbidities" that challenge today's children and families.

The goal of Bright Futures is to respond to the current and emerging preventive and health promotion needs of infants, children, and adolescents. ...[T]he guidelines are an exciting response to the needs of the times, a vision for the future, and, more importantly, a direction for child health supervision well into the 21st century.

The next step will be to promote the implementation of Bright Futures in the great variety of settings and arrangements that provide opportunities for health supervision throughout this country. It is also important to further an in-depth exploration of the science of prevention and health promotion and engage health professionals, educators, and families in this venture. It is time to walk into that bright future.

—*Morris Green, MD*  
*Bright Futures Guidelines, 1994*



## Mission Statement, Core Values, and Vision of the American Academy of Pediatrics

### ***Mission***

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The mission of the American Academy of Pediatrics is to attain optimal physical, mental, and social health and well-being for all infants, children, adolescents, and young adults. To accomplish this mission, the Academy shall support the professional needs of its members.

### ***Core Values***

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We believe:

- In the inherent worth of all children; they are our most enduring and vulnerable legacy.
- Children deserve optimal health and the highest quality health care.
- Pediatricians are the best qualified to provide child health care.

The American Academy of Pediatrics is the organization to advance child health and well-being.

### ***Vision***

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Children have optimal health and well-being and are valued by society. Academy members practice the highest quality health care and experience professional satisfaction and personal well-being.



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## What Is Bright Futures?

Bright Futures is a set of principles, strategies, and tools that are theory based and systems oriented that can be used to improve the health and well-being of all children through culturally appropriate interventions that address the current and emerging health promotion needs at the family, clinical practice, community, health system, and policy levels.

## ***Bright Futures Mission***

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The mission of Bright Futures is to promote and improve the health, education, and well-being of infants, children, adolescents, families, and communities.

## ***Development of Bright Futures***

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- The Bright Futures project was initiated in 1990 by the Health Resources and Services Administration's (HRSA) Maternal and Child Health Bureau (MCHB), with additional program support from the Medicaid Bureau of the Health Care Financing Administration (now the Centers for Medicare & Medicaid Services).
- The first edition of *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents* was published in 1994. The second edition was published in 2000 and was revised in 2002. Both editions were published under the auspices of the National Center for Education in Maternal and Child Health (NCEMCH).
- This *Bright Futures: Guidelines for Health Supervision of Infants, Children and Adolescents, 3rd Edition*, was published in 2008.
- This edition updates and revises the guidelines, incorporating current scientific knowledge in health practice.
- This edition was developed through the collaboration of 4 multidisciplinary panels of experts in infancy, early childhood, middle childhood, and adolescent health.
- This edition was reviewed by more than 1,000 health care and public health professionals, educators, parents, and child health advocates throughout the United States.

## ***Funding of Bright Futures***

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Since its inception in 1990, Bright Futures has been funded by the US Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau.

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The Bright Futures Steering Committee oversees the Bright Futures Education Center efforts. The Steering Committee provides advice on activities and consultation to chairpersons and staff of the Bright Futures Education Center and the Center's Project Advisory Committee (PAC).

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The Bright Futures Education Center PAC provides guidance on activities and consultation to chairpersons and staff of the Bright Futures Education Center. The PAC members serve as organizational representatives on the Center PAC, reporting on Bright Futures activities to constituents and eliciting organizational interest and support. Members promote Bright Futures content and philosophy to other national, state, and local organizations, assist in increasing collaborative efforts among organizations, and promote Center activities by offering presentations and trainings to colleagues within constituent organizations.

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The Bright Futures Pediatric Implementation Project PAC oversees the activities of the Bright Futures Pediatric Implementation Project. The overall goal of the project is improved health promotion and prevention practices among child and adolescent health professionals through the effective implementation of the *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*.

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# A Bright Future for Every Child

—Morris Green, MD, FAAP, and Judith Palfrey, MD, FAAP  
June 2007

## Recognizing the Social Determinants of Children's Health

More than 15 years ago, the members of the first Bright Futures team were given the task to imagine our country's health picture if every child in America could look forward to a bright future—every child, regardless of race, religion, background, income, politics, or any other factor.

Imagine a bright future for every child in America. What would it look like? Who would be part of it? Who would sustain it? How would a truly bright future for children and youth intersect with change and brighten the present and future of all in the United States? Would a bright future for children translate into a brighter future for everyone?

With those questions in their collective conscious, the group developed the Bright Futures Children's Health Charter<sup>1</sup> (see box on page xvi). This charter delineates the necessities and entitlements that all children deserve and, indeed, must have to look ahead to a bright future. The charter states unequivocally, the explicit connection between a wide range of social determinants and the health of children and youth.

## Making a Bright Future a Reality

First published in 1994, *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents* provided a standardized, well-researched way in which everyone who cares for children in any

capacity can help realize the charter's goals—one child at a time.

The guidelines were updated in 2000, and again in this third edition, to address the ever-changing landscape in which our children are living. This latest edition, for example, includes special emphasis on 2 new significant challenges: mental health and healthy weight. Woven throughout the guidelines are new discussions about cultural competence, complementary and alternative medicine, and caring for children with special health care needs.

Like previous editions, this third edition of the Guidelines outlines activities that are vital to achieving the health goals of the Children's Health Charter, setting forth specific guidance to:

- Enhance health care professionals' knowledge, skills, and practice of developmentally appropriate health care in the context of family and community.
- Promote desired social, developmental, and health outcomes of infants, children, and adolescents.
- Foster partnerships between families, health care professionals, and communities.
- Increase family knowledge, skills, and participation in health-promoting and prevention activities.
- Address the needs of children and youth with special health care needs through enhanced identification and services.

## Foreword

### Bright Futures Children's Health Charter<sup>1</sup>

- Every child deserves to be born well, to be physically fit, and to achieve self-responsibility for good health habits.
- Every child and adolescent deserves ready access to coordinated and comprehensive preventive, health-promoting, therapeutic, and rehabilitative medical, mental health, and dental care. Such care is best provided through a continuing relationship with a primary health professional or team, and ready access to secondary and tertiary levels of care.
- Every child and adolescent deserves a nurturing family and supportive relationships with other significant persons who provide security, positive role models, warmth, love, and unconditional acceptance. A child's health begins with the health of his parents.
- Every child and adolescent deserves to grow and develop in a physically and psychologically safe home and school environment free of undue risk of injury, abuse, violence, or exposure to environmental toxins.
- Every child and adolescent deserves satisfactory housing, good nutrition, a quality education, an adequate family income, a supportive social network, and access to community resources.
- Every child deserves quality child care when her parents are working outside the home.
- Every child and adolescent deserves the opportunity to develop ways to cope with stressful life experiences.
- Every child and adolescent deserves the opportunity to be prepared for parenthood.
- Every child and adolescent deserves the opportunity to develop positive values and become a responsible citizen in his community.
- Every child and adolescent deserves to experience joy, have high self-esteem, have friends, acquire a sense of efficacy, and believe that she can succeed in life. She should help the next generation develop the motivation and habits necessary for similar achievement.

<sup>1</sup>Green M, ed. *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*. Arlington, VA: National Center for Education in Maternal and Child Health; 1994

### Prevention Works

As demonstrated by the charter, the Bright Futures initiative is rooted in the philosophy of preventive care. Bright Futures stands on the firm foundation of years and years of experimentation and experience with preventive strategies by child health care professionals, public health officials, and other community-based workers. The third edition of the Guidelines challenges families, health care professionals, insurance companies, and government agencies to make the most of the knowledge we already have. Prevention works when practiced. The third edition of

the Guidelines is about putting prevention into full-scale practice for every child.

This new edition catalogues the most effective preventive interventions in children's safety and health, as agreed upon by experts in the fields of child health care, public health, government, nutrition, mental health, social work, education and more. Before being included in the new edition, each recommendation was reviewed by a panel of experts and was subject to public review. More than 1,000 experts contributed over the course of the whole project.

Bright Futures urges everyone who cares for children to make the most of this well-founded and experience- and evidence-based knowledge so that children across the country receive equal, accessible, high-quality care.

### Families Matter

Epidemiologic, sociologic, and genetic studies have increasingly shown the correlation between parental and child health, and the critical importance of a family-centered approach to child health. Many times, the most effective health messages a child receives originate in the home. Families have been partners from the beginning of the Bright Futures initiative. This third edition begins with an elegant description of who constitutes a family and a delineation of how family strengths support children and communities.

The Guidelines also reflect the Bright Futures concept of caring for children in a “medical home.” A medical home is not a building, house, or hospital; it is a family-centered partnership and approach to providing high-quality, cost-effective health care that is accessible, continuous, comprehensive, coordinated, compassionate, and culturally effective.

This edition demonstrates effective partnership models that put families in control of health information and health decisions.

Families are part of the team that includes a variety of professionals and laypeople, and the community as a whole. It is only through a successful partnership between the family and others that a child can be set on the path to a bright future.

### Health Promotion Is Everybody's Business

Health is the responsibility of parents, communities, child-helping individuals and organizations (including health care professionals), government agencies, and the children and youth themselves. This third edition of the Guidelines underscores the importance of seeing health in this broadest context, as healthy communities support healthy children. Communities that may be suffering because of lack of resources, cohesion, leadership, and vision may create ill health and hopelessness among children, youth, and families. This new edition of the Guidelines provides information that communities can use to raise their health consciousness.

Imagine the great strides that could be made if more communities embraced the idea of healthfulness. Until children's health is seen as everybody's business, the goals of the Bright Futures initiative will not be reached. This third edition is the road map that shows all of us the way toward a brighter future.

## References

1. Green M, ed. *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*. Arlington, VA: National Center for Education in Maternal and Child Health; 1994
2. Centers for Disease Control and Prevention. Promoting oral health: interventions for preventing dental caries, oral and pharyngeal cancers, and sports-related craniofacial injuries: a report on recommendations of the Task Force on Community Preventive Services. *MMWR*. 2001;50(No RR-21):1-13



# Bright Futures: A New Approach to Health Supervision for Children

The *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents* describes a system of care that is unique in its attention to health promotion activities and psychosocial factors of health and its focus on youth and family strengths. It also is unique in its recognition that effective health promotion and disease prevention require coordinated efforts among medical and nonmedical professionals and agencies, including public health, social services, mental health, educational services, home health, parents, caregivers, families, and many other members of the broader community. The Guidelines address the care needs of all children and adolescents, including children and youth with special health care needs and children from families from diverse cultural and ethnic backgrounds.

In 2001, the Maternal and Child Health Bureau (MCHB) of the US Department of Health and Human Services' Health Resources and Services Administration awarded cooperative agreements to the American Academy of Pediatrics (AAP) to lead the Bright Futures initiative. When the third edition of the *Bright Futures Guidelines* project started, many separate "guidelines" advised pediatric health care professionals on how to conduct a health supervision visit. Philosophies and approaches varied with the authoring group's goals, but many shared themes were evident. Among these guidelines, the *Bright Futures Guidelines*, the *AAP Guidelines for Health Supervision*, and the American Medical Association (AMA) *Guidelines for Adolescent Preventive Services: Recommendations and*

*Rationale*<sup>1</sup> were the most widely used. Although their similarities were greater than their differences, the lack of uniformity presented difficulties for health care professionals. With the encouragement and strong support of the MCHB, the AAP and its many collaborating partners set out to write this new edition of *Bright Futures Guidelines* as a uniform set of recommendations for health care professionals.

## An Evolving Understanding of Health Supervision for Children

Health supervision for children has evolved tremendously in the past half century, when it was first employed to address concerns of nutrition, child rearing, and the prevention of infectious diseases. As is true of the 2 previous editions, this third edition of the *Bright Futures Guidelines* has sought to advance the health of children and youth, with focused attention to key health components and interventions. However, few studies have evaluated health supervision care in this country, and similar systems do not exist in other regional or national health care systems for comparison.

When the Bright Futures Project Advisory Committee (PAC) convened for the third edition, the members began with key questions: What is Bright Futures? How can a new edition improve upon existing guidelines? Most importantly, how can a new edition improve the desired outcome of guidelines, which is child health? The PAC turned to the previous editions of *Bright Futures Guidelines* for insight and direction.

The first edition of the *Bright Futures Guidelines*, published in 1994, emphasized the psychosocial aspects of health. Although other guidelines at the time, notably the AAP *Guidelines for Health Supervision*, considered psychosocial factors, Bright Futures emphasized the critical importance of child and family social and emotional functioning as a core component of the health supervision encounter. In the Foreword to the first edition, Morris Green, MD, and his colleagues demonstrated this commitment by writing that Bright Futures represents "... 'a new health supervision' [that] is urgently needed to confront the 'new morbidities' that challenge today's children and families."<sup>2</sup> The third edition continues this emphasis.

The second edition of the *Bright Futures Guidelines*, published in 2000, moved the project in new directions by emphasizing that care for children could be defined and taught to both health care professionals and families. In collaboration with Judith S. Palfrey, MD, and an expert advisory group, Dr Green retooled the initial description of Bright Futures to encompass this new dimension: "Bright Futures is a vision, a philosophy, a set of expert guidelines, and a practical developmental approach to providing health supervision to children of all ages from birth to adolescence."<sup>3</sup> The Green and Palfrey concept of Bright Futures was further qualified in *Bright Futures in Practice: Mental Health*, by editors Michael Jellinek, MD; Mary Froehle, PhD; Bina Patel, MD; and Trina Anglin, MD, PhD; and their contributors: "Bright Futures is a national initiative to promote the health and well-being of infants, children, adolescents, families, and communities."<sup>4</sup> The *Pediatrics in Practice: A Health Promotion Curriculum for Child Health Professionals*,<sup>5</sup> derived from the Green and Palfrey second edition, described an innovative health promotion curriculum to help health care professionals and families integrate Bright Futures

principles. The developers established the following 6 core concepts of Bright Futures:

- Partnership
- Communication
- Health promotion and illness prevention
- Time management
- Education
- Advocacy

These 6 core concepts are woven throughout the health supervision guidance of the third edition.

### Developing the Third Edition

The third edition of the *Bright Futures Guidelines* represents the next steps in the journey envisioned by Dr Green when he called Bright Futures, "a vision for the future" and "a direction for child health supervision well into the 21st century." Bright Futures Expert Panels, working through the Bright Futures Education Center Steering Committee, first met in September 2003 to begin the process of drafting and developing the document.

The 4 multidisciplinary Expert Panels were divided by the ages/stages of Infancy, Early Childhood, Middle Childhood, and Adolescence. Each panel was cochaired by a pediatrician content expert and a panel member who represented family members or another health profession. The 38 members of the Expert Panels were individuals who represented a wide range of disciplines and areas of expertise. These representatives included mental health experts, nutritionists, oral health practitioners, family medicine providers, nurse practitioners, family and school representatives, and members of AAP national committees with relevant expertise (eg, Committee on Psychosocial Aspects of Child and Family Health, Committee on Practice and Ambulatory Medicine, and Committee on Adolescence).

At several stages during the draft development process, the AAP conducted reviews of

the draft on a secure Web site. The drafts initially were reviewed by select AAP committees, sections, and programs, and a wide variety of individuals from various organizations and agencies. Simultaneously, a multidisciplinary group of experts in children and youth with special health care needs, including families, reviewed the guidelines and submitted additional content. After each review, the Expert Panels considered all comments and revised the draft accordingly. External reviewers who represented professional organizations or institutions, and individuals with expertise and interest in this project, gave helpful and essential final comments and endorsements.

In parallel efforts, a work group that consisted of members from the Expert Panels and Committee on Practice and Ambulatory Medicine worked on revising the AAP Recommendations for Preventive Pediatric Health Care (also known as the Periodicity Schedule) to be consistent with the Guidelines. The National Center for Cultural Competence assisted the panels in ensuring that the *Bright Futures Guidelines* were culturally and linguistically appropriate.

Concurrently, the Expert Panels worked with other groups on the project. A Users Panel reviewed Bright Futures materials to make recommendations for reaffirmation, revision, retirement, and development of new materials. The Pediatric Implementation Project worked to identify barriers to providing preventive services by child and adolescent health care professionals and to plan for implementation in the many care delivery settings, including private offices, public health clinics, and school-based health centers.

### **Building on Strengths, Moving in New Directions**

As work began on this edition, Dr Green joined as a guest at the first PAC meeting and spoke of the “enduring, refreshing, and contagious vitality of Bright Futures.”

He challenged the PAC to consider which Bright Futures concepts could be used and further developed to drive positive change and improve clinical practice. Keeping in mind this challenge and recognizing that the science of health care for children continues to expand, the *Bright Futures Guidelines* developers have created a third edition that builds on the strengths of previous editions while also moving in several new directions.

### ***An Emphasis on the Evidence Base***

Dr Green urged the continued exploration of the science of prevention and health promotion to document effectiveness, measure outcomes, and promote additional research and evidence-based practice. Recognizing that guidelines could not be legitimately promulgated without identifying, assessing, and citing the evidence base for pediatric care, the PAC urged the Expert Panels to identify evidence-based research related to preventive services.

The Expert Panels invested time and energy not only to identify such evidence but also to interpret and apply it. Next, staff and consultants from the AAP Section on Epidemiology conducted literature reviews, and the panels used and referenced summary work done by others to judge evidence whenever possible. Finally, an Evidence Panel, composed of members of the section on Epidemiology, designed and conducted systematic research on the Bright Futures recommendations. All panels drew from expert sources, such as the Cochrane Collaboration,<sup>6</sup> the US Preventive Services Task Force,<sup>7</sup> professional organizations’ policy and committee work, the National Guideline Clearinghouse,<sup>8</sup> and *Healthy People 2010*.<sup>9</sup> In areas where research and practice are changing rapidly or are investigational, the Expert Panels referred to expert groups for the most up-to-date information. (See the [Rationale and Evidence chapter](#) for further details on this process.)

See the [Recommendations for Preventive Pediatrics Health Care in Appendix C](#).

### ***A Pledge to Work Collaboratively With Families and Communities***

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This edition of the *Bright Futures Guidelines* envisions that health supervision care will be carried out in a variety of settings and in collaboration with health care professionals from many disciplines, families, parents, and communities. New evidence, new community influences, and emerging societal changes dictate the form and content of necessary health care for children. All who care for children are challenged to construct new methodologies and systems for excellent care.<sup>10</sup> This edition of the *Bright Futures Guidelines* involves families and parents by recognizing the strengths that families and parents bring to the practice of health care for children and by identifying resources and educational materials specifically for families.

### ***A Recognition That the Health Supervision Must Keep Pace With Changes in Family, Community, and Society***

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In any health care arrangement, successful practices create a team composed of families, health care professionals, and community experts to learn about and obtain helpful resources. In so doing, they also identify gaps in services and supports for families. The team shares responsibility with, and provides support and training to, families and other caregivers, while also identifying and collaborating with community resources that can help meet family needs. This edition of the Guidelines places special emphasis on 3 areas of vital importance to caring for children and families.

- **Care for children and youth with special health care needs.** Children and youth with special health care needs, ranging from mild to very complex, comprise a large segment of the general child population. The MCHB defines this population as children

“...who have or are at increased risk for chronic physical, developmental, behavioral, or emotional conditions, and who require health and related services of a type or amount beyond that required generally.”<sup>11</sup> In 2000, the MCHB found that more than 9 million children in the United States have special health care needs.<sup>12</sup> National surveys find that between 13% and 23% of all children have a special health care need.<sup>13-15</sup> This means that 1 of every 5 households includes a child with a developmental delay, chronic health condition, or some form of disability.

Bright Futures uses 2 essential interventions throughout the Guidelines to promote wellness and to identify differences in development, physical health, and mental health for all children. They are (1) screening and ongoing assessment and (2) health supervision and anticipatory guidance. Both of these interventions rely on a partnership with the family.

Bright Futures also gives health care professionals (1) tools to screen for special health care needs, (2) a body of knowledge that is necessary to provide for the care of the children they have identified, including an awareness of critical community resources, and (3) encouragement to build partnerships with families. Bright Futures’ strength-based approach maximizes the abilities of all children as they participate in everyday life.

Health supervision and anticipatory guidance are often overlooked in caring for children and youth with special health care needs. Careful health supervision is important to prevent secondary disability. However, the impact of *specialness* or extensive health care needs should not overshadow the *child*. The child or youth with special health care

needs shares most health supervision requirements with her peers, including immunizations, nutrition and physical activity, screening for vision and hearing, school adjustment, and automobile or gun safety, among many other topics.

Family-centered care that promotes strong partnerships and honest communication among all parties (families, children, adolescents or youth, and health care professionals) is critical in caring for all children. It is especially important when caring for children and youth with special health care needs, who tend to require visits with health care professionals more frequently than other children and because most children with special health care needs now live normal life spans. The partnership between health care professionals and families increases in value over time, especially when families feel comfortable asking questions, providing insight and perspectives, and seeking advice.

- **Cultural competence.** Culture and ethnicity frame the patterns of beliefs, practices, and perceptions as to “health” and “illness”<sup>16</sup>; the roles of individuals within a family; the nature of the relationship between the health care professional, the child, and family members; health care-seeking behaviors; and the use of complementary and alternative care. Cultures form around language, gender, disability, sexual orientation, religion, or socioeconomic status. Even people who have been fully acculturated within mainstream society can maintain values, traditions, communication patterns, and child-rearing practices of their original culture. Immigrant families, in particular, face additional stressors, such as social isolation from family and traditional social networks, differences in cultural beliefs and values, voluntary versus involuntary immigration, cultural change

and adjustment, and the drive to achieve specific personal and family goals.

- **Complementary and alternative care.**

Collaboration with families in a clinical practice is a series of communications, agreements, and negotiations to ensure the best possible health care for children. In the Bright Futures vision of family-centered care, families must be empowered as care participants. Their unique ability to choose what is best for their children must be recognized. Families do all they can to protect their children from sickness or harm.

The Bright Futures health care professional must be aware of the disciplines or philosophies that are chosen by the child’s family, especially if the family chooses a therapy that is unfamiliar or a treatment belief system that the health care professional does not endorse or share. Families may seek second opinions or services in traditional pediatric medical and surgical care fields or may choose care from alternative or complementary care providers. *Alternative therapies* generally replace conventional treatments. *Complementary therapies* are used in addition to conventional treatments. Families generally seek *additional* care from other disciplines rather than *replacement* care.

Practitioners of traditional or allopathic medicine and complementary and alternative care are driven and guided by the mandate to do no harm and to do good. Just because a chosen therapy is out of the scope of standard care does not define it as harmful or without potential benefit. Therapies can be safe and effective, safe and ineffective, or unsafe. The AAP Committee on Children with Disabilities suggests that “to best serve the interests of children, it

is important to maintain a scientific perspective, to provide balanced advice about therapeutic options, to guard against bias, and to establish and maintain a trusting relationship with families.<sup>17</sup> Providers of standard care need not be threatened by such choices.

The use of complementary and alternative care is particularly common when a child has a chronic illness or condition, such as autism. Alternative treatments are increasingly described on the Internet, with no assurance of safety or efficacy. Parents often are reluctant to tell their health care professional about

such treatments, fearing disapproval. Health care professionals should ask parents directly, in a nonjudgmental manner, about the use of complementary and alternative care.<sup>18</sup>

Consultation with colleagues who are knowledgeable about complementary and alternative care might be necessary. Discussion with a complementary and alternative care therapist also may be useful, and conversations with the child's family will enhance the care of the child by all providers. Keeping such conversations family centered can only strengthen the therapeutic relationship with the family.

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# What Is Bright Futures?

## An Introduction to the third edition of *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*

Bright Futures is a set of principles, strategies, and tools that are theory based, evidence driven, and systems oriented that can be used to improve the health and well-being of all children through culturally appropriate interventions that address their current and emerging health promotion needs at the family, clinical practice, community, health system, and policy levels.

### Bright Futures is...

#### *...a set of principles, strategies, and tools...*

The Bright Futures principles acknowledge the value of each child, the importance of family, the connection to community, and that children and youth with special health care needs are children first. These principles assist the health care professional in delivering, and the practice in supporting, the highest quality health care for children and their families.

Strategies drive practices and health care professionals to succeed in achieving professional excellence. Bright Futures can assist pediatric health care professionals in raising the bar of quality health care for all our children, through a thoughtfully derived process that will allow them to do their jobs well.

This book is the core of the Bright Futures tools for practice. It is not intended to be a textbook, but a compendium of guidelines, expert opinion, and recommendations for health supervision visits. Other available Bright Futures tools include the *Bright Futures in Practice* series, which provides in-depth discussions of Nutrition, Oral Health, Physical Activity, and Mental Health. A *Bright Futures Toolkit* will be designed, as a companion to this book, to assist health care professionals

in planning and carrying out health supervision visits. It contains numerous charts, forms, screening instruments, and other tools that increase practice efficiency and efficacy.

#### *...that are theory based, evidence driven...*

The rationale for a clinical decision can balance evidence from research, clinical practice guidelines, professional recommendations, or decision support systems with expert opinion, experience, habit, intuition, preferences, or values. Clinical or counseling decisions and recommendations also can be based on legislation (eg, seat belts), common sense not likely to be studied experimentally (eg, sunburn prevention), or relational evidence (eg, television watching and violent behavior). Most importantly, clinical and counseling decisions are responsive to family needs and desires or patient-centered decision making. It follows that much of the content of a health supervision visit is the theoretical application of scientific principles in the service of child and family health.

Certainly, strong evidence for the effectiveness of a clinical intervention is one of the most persuasive arguments for making it a part of child health supervision. On the other hand, if careful studies have shown an intervention to be ineffective or even harmful,

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few would argue for its inclusion. Identifying and assessing evidence for effectiveness was a central element, and a key challenge, of the work involved in developing this edition's health supervision recommendations. The multifaceted approach we used is described in greater detail in the Rationale and Evidence chapter.

### *...and systems oriented...*

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In the footsteps of Green and Palfrey<sup>1</sup> (the developers of the earlier editions of the *Bright Futures Guidelines*), we created principles, strategies, and tools as part of a Bright Futures system of care. That system goes beyond the schema of individual health supervision visits and encompasses an approach that includes continuous improvements in the delivery system that result in better outcomes for children and families. Knowing what to do is important; knowing how to do it is essential.

A systems-oriented approach in a Bright Futures practice means moving beyond the "status quo" to become a practice where redesign and positive change are embodied every day. Methods for disseminating and applying Bright Futures knowledge in the practice environment must be accomplished with an understanding of the health care system and environment.

### *...that can be used to improve the health and well-being of all children...*

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The care described by Bright Futures contributes to positive health outcomes through health promotion and anticipatory guidance, disease prevention, and early detection of disease. Preventive services address these child health outcomes and provide guidance to parents and children, including children and youth with special health care needs.

These health outcomes, which represent physical and emotional well-being and optimal functioning at home, in school, and in the community, include:

- Attaining a healthy weight and body mass index, and normal blood pressure, vision, and hearing
- Pursuing healthy behaviors related to nutrition, physical activity, safety, sexuality, and substance use
- Accomplishing the developmental tasks of childhood and adolescence related to social connections, competence, autonomy, empathy, and coping skills
- Having a loving, responsible family that is supported by a safe community
- For children with special health care needs or chronic health problems, achieving self-management skills and the freedom from real or perceived barriers to reaching their potential

### *...through culturally appropriate interventions...*

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Culture is a system of shared values and beliefs and learned patterns of behavior that are not defined simply by ethnicity or race. A culture may form around sexual orientation, religion, language, gender, disability, or socioeconomic status. Cultural values are beliefs, behaviors, and ideas that a group of people share and expect to be observed in their dealings with others. These values inform interpersonal interactions and communication, influencing critical aspects of the provider-patient relationship, such as body language, touch, communication style and eye contact, modesty, responses to pain, and a willingness to disclose mental or emotional distress.

Cultural competence (the set of values, behaviors, attitudes, and practices within a system, organization, and program or among individuals that enables them to work effectively cross-culturally) is intricately linked to the concept and practice of "family-centered care." Family-centered care in Bright Futures honors the strengths, cultures, traditions, and expertise that everyone brings to a respectful family-professional partnership. With this approach to care, families feel they can make

decisions, with providers at different levels, in the care of their own children and as advocates for systems and policies that support children and youth with special health care needs. Cultural competence requires building relationships with community cultural brokers who can provide an understanding of community norms and links to other families and organizations, such as churches or social clubs.

### *...that address their current and emerging health promotion needs...*

Among the health issues in current child health practice, 2 issues stand out as major concerns for families, health care professionals, health planners, and the community—promoting healthy weight and promoting mental health. Healthy People 2010<sup>2</sup> targets these issues with a number of recommended interventions and goals, and they are highlighted as **Significant Challenges to Child and Adolescent Health** throughout this edition of the *Bright Futures Guidelines*.

Most authorities agree that lifestyle choices strongly influence weight status and that effective interventions are family based and begin in infancy. The choice to breastfeed, the appropriate introduction of solid foods, and family meal planning and participation lay the groundwork for a child's lifelong eating habits. Parents also influence lifelong habits of physical activity and physical inactivity. Through Bright Future's guidance on careful monitoring, interventions, and anticipatory guidance about nutrition, activity level, and other family lifestyle choices, health care professionals can play an important role in promoting healthy weight for all children and adolescents.

A 1999 Surgeon General's report described mental health in childhood and adolescence as the achievement of expected developmental, cognitive, social, and emotional milestones and of secure attachments, satisfying social relationships, and effective coping skills.<sup>3</sup> Citing the Methodology for Epidemiology of

Mental Disorders in Children and Adolescents (MECA) Study, the Surgeon General's report also estimated that almost 21% of children aged 9 to 17 years had a diagnosable mental or addictive disorder that was associated with at least minimum impairment.

Bright Futures provides multiple opportunities for promoting healthy weight and family mental health in the regular and periodic health supervision visits. Child health care professionals champion a strength-based approach, helping families identify their assets that enhance their ability to care for their child and guide their child's development.

### *... at the family level...*

The composition and context of the typical or traditional family has changed significantly over the past 2 decades. Fewer children now reside in a household with their biological mother and father and with only one parent working outside the home. Today, the term "family" is used to describe a unit that may comprise a married nuclear family; cohabiting family; single-parent family, blended family, or stepfamily; grandparent-headed household; single-gender parents; commuter or long-distance family; foster family; or larger community family with several individuals who share the caregiving and parenting responsibilities. Each of these family constellations presents unique challenges to child rearing for parents as well as children.

Families are critical partners in the care of children.<sup>4</sup> A successful system of care for children is family centered and embraces the medical home and the dental home concepts. In a Bright Futures partnership, health care professionals expect that families come to the partnership with strengths. They acknowledge and reinforce those strengths and help build others. They also recognize that all (health care professionals, families, and children) grow, learn, and develop over time and with experience, information, training, and support. This approach also includes

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encouraging opportunities for youth that have been demonstrated to correlate with positive health behavior choices. For some families, these assets are strongly ingrained and reinforced by cultural or faith-based beliefs. They are equally important in all socioeconomic groups. Most families can maximize these assets if they are aware of their importance.

In the *Bright Futures Pocket Guide*,<sup>5</sup> Green and colleagues note the importance of fostering communication and building effective partnerships among the child, the family, the health care professional, and communities. They enumerate 6 steps for building these partnerships:

1. Model and encourage open, supportive communication with the child and family.
2. Identify health issues through active listening and “fact finding.”
3. Affirm strengths of child and family.
4. Identify shared goals.
5. Develop a joint plan of action based on stated goals.
6. Follow up to sustain the partnership.

Collaboration with families in a clinical practice is a series of communications, agreements, and negotiations to ensure the best possible health care for the child. In the Bright Futures vision of family-centered care, families must be empowered as care participants. Their unique ability to choose what is best for their children must be recognized.

### ***...the clinical practice level...***

To further define the diversity of practice in the care of children, it is important to consider the community of care that is available to the family. The clinical practice is central to providing health supervision. Practices may be small or large, private or hospital affiliated, or in the public sector. A rural solo practice, suburban private practice of one or several

physicians and nurse practitioners, children’s service within a multidisciplinary clinic, school-based health center, dental office, community health center, and public health clinic are all examples of practices that provide preventive services to children. Each model consists of health care professionals with committed and experienced office or clinic staff to provide care for children and their families.

To adequately address the health needs, including oral health and emotional and social needs, of a child and family, child health care professionals always will serve as care coordinators. Health care professionals, working closely with the family, will develop a centralized patient care plan and seek consultations from medical, nursing, or dental colleagues, mental health care professionals, nutritionists, and others in the community, on behalf of their patients, and will facilitate appropriate referrals when necessary. Care coordination also involves a knowledge of community services and support systems that might be recommended to families. At the heart of the Bright Futures approach to practice is the notion that every child deserves a medical and dental home.

A medical home is defined as primary care that is accessible, continuous, comprehensive, family centered, coordinated, compassionate, and culturally effective.<sup>6</sup> In a medical home, a child health care professional works in partnership with the family and patient to ensure that all the medical and nonmedical needs of the patient are met. Through this partnership, the health care professional can help the family and patient access and coordinate specialty care, educational services, out-of-home care, family support, and other public and private community services that are important to the overall health of the child and family.

Nowhere is the medical home concept more important than in the care of children and youth with special health care needs. For families and health care professionals alike, the implications of caring for a child or youth

**At the heart of the Bright Futures approach to practice is the notion that every child deserves a medical and dental home.**

with special health care needs can be profound.

The dental home<sup>7</sup> provides risk assessment and an individualized preventive dental health program, anticipatory guidance, a plan for emergency dental trauma, comprehensive dental care, and referrals to other specialists. (For more information on this topic, see the Promoting Oral Health theme.)

### ***... and the community, health system, and policy levels.***

One of the unique and core values of Bright Futures is the commitment to advocacy and action in promoting health and preventing disease, not only within the medical home but also in partnership with other health and education professionals and others in the community. This core value rests on a clear understanding of the important role that the community plays in influencing children's health, both positively and negatively. Communities in which children, youth, and families feel safe and valued, and have access to positive activities and relationships, provide the essential base on which the health care professional can build to support healthy behaviors for families at the health supervision visits. Understanding the community in which the practice or clinic is located can help the health care professional learn the strengths of that community and how to use and build on those strengths. Data on community threats and assets provide an important tool that providers can use to prioritize action on specific health concerns.

The Bright Futures comprehensive approach to health care also encompasses continuous improvements in the overall health care delivery system that result in enhanced prevention services, improved outcomes for children and families, and the potential for cost savings.

Bright Futures embodies the concept of synergy between health care professionals,

who provide health promotion and preventive services to individual children and families, and public health professionals, who develop policies and implement programs to address the health of populations of children at the community, state, and national levels. Bright Futures has the opportunity to serve as a critical link between the health of individual children and families and public policy health goals. Healthy People 2010,<sup>2</sup> for example, is a comprehensive set of disease prevention and health promotion objectives for the nation over the first decade of the 21st century. Its major goals are to increase the quality and number of years of healthy life and to eliminate health disparities. In its Leading Health Indicators, Healthy People 2010 enumerates the 10 most important health issues for the nation:

- Physical activity
- Overweight and obesity
- Tobacco use
- Substance abuse
- Responsible sexual behavior
- Mental health
- Injury prevention
- Environmental quality
- Immunizations
- Access to care

Many of the themes for the Bright Futures Visits were chosen from these leading health indicators to synchronize the efforts of office-based or clinic-based health supervision and public health efforts. This partnership role is explicitly mentioned in the American Academy of Pediatrics (AAP) policy statement on the pediatrician's role in community pediatrics, which recommends that pediatricians "...should work collaboratively with public health departments and colleagues in related professions to identify and decrease barriers to the health and well-being of children in the communities they serve. In many cases, vitally needed services already exist in the community. Pediatricians can play an

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extremely important role in coordinating and focusing services to realize maximum benefit for all children.”<sup>8</sup> This is true for all health care professionals who provide clinical primary care for infants, children, and adolescents.

### Who Can Use Bright Futures?

The themes and visits described in Bright Futures are designed to be readily applied to the work of child health care professionals and practice staff who directly provide primary care, and the parents and youth who participate in these visits. One of the greatest strengths of Bright Futures is that its content and approach resonate with, and are found useful by, a wide variety of professionals and families who work to promote child health. A recent evaluation of Bright Futures found that, although the guidelines themselves are written in a format to be particularly useful for health care professionals who work in clinical settings, they have been adopted and adapted by public health professionals as the basis for population-based programs and policies, by policy makers as a standard for child health care, by parent groups, and by educators who train the next generation of health care professionals in a variety of fields.<sup>9</sup>

The health care of well or sick children is practiced by a broad range of professionals who take responsibility for a child’s health care in a clinical encounter. These health care professionals can be pediatricians, family medicine physicians, pediatric and family nurse practitioners, nurses, dentists, nutritionists, physical and occupational therapists, social workers, mental health care providers, physician assistants, and others. Bright Futures does not stop there, however. These principles and recommendations have been designed with many partners in mind because these professionals do not practice in a vacuum. They work collaboratively with other health care professionals and support personnel as part of the overall health care system.

A quick look at the key themes that provide cross-cutting perspectives on all the content of Bright Futures will reveal how collaborative work contributes to the goals. The discussions for each age group will be helpful to all health care professionals and families who support and care for children and youth.

### How Is Bright Futures Organized?

The richness of this third edition of the *Bright Futures Guidelines* reflects the combined wisdom of the child and adolescent health care professionals and families on the Bright Futures Infancy, Early Childhood, Middle Childhood, and Adolescence Expert Panels. Each Panel and many expert reviewers carefully considered the health supervision needs of an age group and developmental stage. Their work is represented in several formats in the Guidelines:

- The first major section of the Guidelines is the **Health Promotion Themes**. These thematic discussions highlight issues that are important to families and health care professionals across all the developmental stages.

These Health Promotion Themes are designed for the practitioner or student who desires an in-depth, state-of-the-art discussion of a certain child health topic with evidence regarding effectiveness. These comprehensive discussions also can help families understand the context of their child’s health and support their child’s and family’s health. Information from the 4 Expert Panels about these themes as they relate to specific developmental stages from birth to early adulthood was blended into each Health Promotion Theme discussion.

- The second major section of the Guidelines is the **Visits**. In this section, practitioners will find the core of child health supervision activities, described as Bright Futures Visits (Box 1).

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Bright Futures Health Supervision Visits, from the Prenatal Visit to the Late Adolescent Visit, are presented in accordance with the AAP Periodicity Schedule,<sup>10</sup> which is the standard for preventive care for infants, children, and adolescents and is used by professional organizations, federal programs, and third-party payers.

Each visit within the 4 ages and stages of development begins with an introductory section that highlights key concepts of each age.

The visits sections are designed to be implemented as state-of-the-art practice in the care of children and youth. The visits describe the essential content of the child and family visit and interaction with the child and adolescent health care professional and the health care system in which the service is provided.

This clinical approach and content can be readily adapted for use in other situations where the health and development of children at various ages and stages is addressed. This might include home visiting programs or helping the parents of children in Head Start

or other child care or early education programs understand their children's health and developmental needs. Colleagues in public health or health policy will find the community- and family-based approach embedded in the child and adolescent health supervision guidance. Educators and students of medicine, nursing, dentistry, public health, nutrition, and others will find the *Bright Futures Guidelines* and the supporting sample questions and anticipatory guidance useful in understanding the complexity and context of health supervision visits and in appreciating the warmth of the patient contact that the Bright Futures approach ensures.

### Implementing Bright Futures

Carrying out Bright Futures means making full use of all the Bright Futures materials. For child health care professionals who wish to improve their skills, Bright Futures has developed a range of educational materials that complement the Guidelines. For example, the case-based *Pediatrics in Practice: A Health Promotion Curriculum for Child Health Professionals*<sup>11</sup> has 6 modules that address the

See Recommendations for Preventive Pediatric Health Care in Appendix C.

### BOX 1

#### A Bright Futures Visit

A Bright Futures Visit is an age-specific health supervision visit that uses techniques described in this edition of the *Bright Futures Guidelines*, although modifications to fit the specific needs and circumstances of communities and practices are encouraged. The Bright Futures Visit is more family driven, and is designed to allow practitioners to improve their desired standard of care. This family-centered emphasis is demonstrated through several features:

- Solicitation of parental and child concerns.
- Surveillance and screening.
- Assessment of strengths.
- Discussion of certain visit priorities for improved child and adolescent health and family function over time. Sample questions and anticipatory guidance for each priority are provided as starting points for discussion. These questions and anticipatory guidance points can be modified or enhanced by each health care professional using Bright Futures.

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core components of Bright Futures: health, partnership, communication, health promotion, time management, and education and advocacy. The *Bright Futures in Practice* manuals provide detailed guidance on selected topics, including mental health, nutrition, oral health, and physical activity.

As previously mentioned, a *Bright Futures Toolkit* will be designed as a companion to this book to allow the health care professionals who wish to improve their practices or services to efficiently and comprehensively carry out new practices and practice change strategies. The tools will be compatible with suggested templates for the electronic health record (EHR); however, using the Toolkit will not require an EHR. Potential tools and resources will be identified and will contain elements designed to ensure that the valuable visit time will be sufficient to address the family's questions and agenda, the child's needs, and the prioritized anticipatory guidance recommended by the Bright Futures Expert Panels. Elements of the Toolkit may include:

- A Bright Futures Visit Questionnaire, which a parent or patient completes before the practitioner begins the visit.
- Screening tools, which allow health care professionals to screen children and youth for certain conditions at specific visits.
- A Bright Futures Visit Chart Documentation Form, which corresponds to the *Bright Futures Guidelines* tasks for that visit and the information that is gleaned from the parent questionnaire.
- The Bright Futures Preventive Services Prompt Sheet, which affords an at-a-glance compilation of work that is done over multiple visits to ensure completeness and increase efficiency.

- Parent/Child Anticipatory Guidance Materials, which reinforce and supplement the information discussed at the visit. These materials guide the health care professional in that they contain general principles and instructions for how the health care professional can communicate information with families.
- Practice Management Tools, to facilitate practice operations and administration. Information on scheduling, including recall and reminder systems, documentation of immunizations, coding options, and other practice management activities, are essential to the success of Bright Futures health supervision within the practice or clinic.
- Community Resources, providing a template to link Bright Futures practices and clinics to referral sources. As every community is unique, creating a practice Community Resources Guide allows the child health care provider to identify community assets for families, build partnerships with other community services, and facilitate referrals when needed.

### Using Bright Futures to Improve the Quality of Care

This edition of the *Bright Futures Guidelines* presents an expanded implementation approach that builds on change strategies for office systems. This approach allows child health care professionals who deliver care that is consistent with Bright Futures to engage their office staff, families, public health colleagues, and even community agencies in quality improvement activities that will result in better care.<sup>13-17</sup>

A project that focused on implementation strategies for health supervision visits for children from birth to age 5 years examined the

impact on office practices and care delivered using the Bright Futures approach and philosophy. The project addressed 6 critical and measurable characteristics (AAP, unpublished data):

- Delivery of preventive services
- Use of structured developmental screening
- Use of strength-based approaches and a mechanism to elicit and address parent and youth concerns
- Establishment of community linkages that facilitate effective referrals and access to needed community services for families and collaboration with other child advocates
- Use of a recall and reminder system
- Use of a practice mechanism to identify children with special health care needs and ensure that they receive preventive services

The program found that using the Bright Futures approach involved all the office staff in improvements that were important to patient care and demonstrable on chart audit. Many of the changes did not involve additional work but rather a more coordinated approach. Practices learned actionable changes from each other as they progressed.

In addition to the focus on systematic improvement, using Bright Futures has other potential benefits as well. Health care professionals may use the data they gather to satisfy future recertification requirements. In addition, as health insurers link reimbursement to documentation of the delivery of quality preventive services, child health care professionals will have ready access to the data that demonstrate the high caliber of their work.

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# An Introduction to the Bright Futures Health Promotion Themes

**A**s the content and structure of the age-specific sections evolved, it became increasingly clear that a number of themes were emerging repeatedly across the developmental stages. These themes are of key importance to families and health care professionals in their common mission to promote the health and well-being of children from birth through adolescence.

As a result, the *Bright Futures Guidelines* developers decided to extract these discussions from the Visits section and create a new Health Promotion Themes section. This decision accomplishes 2 objectives. Not only does it streamline the Visits sections and reduce redundancy, but it serves to highlight these key themes and provide an opportunity for focused discussion.

These Health Promotion Themes discussions are designed for the health care professional or student who desires an in-depth, state-of-the-art discussion of a certain child health topic with evidence regarding effectiveness of health promotion interventions at specific developmental stages from birth to early adulthood. These comprehensive discussions also can help families understand the context of their child's health and support their child's and family's health.

Ten issues are covered in the following section of the *Bright Futures Guidelines*, including the 2 identified as **Significant Challenges to Child and Adolescent Health**: Promoting Healthy Weight and Promoting Mental Health. The Health Promotion Themes are:

- Promoting Family Support
- Promoting Child Development
- Promoting Mental Health
- Promoting Healthy Weight
- Promoting Healthy Nutrition
- Promoting Physical Activity
- Promoting Oral Health
- Promoting Healthy Sexual Development and Sexuality
- Promoting Safety and Injury Prevention
- Promoting Community Relationships and Resources

