Healthier Living for Children and Families: Supporting Healthcare Providers and Families in Efforts to Improve Physical Activity and Nutrition Behaviors of Children

Submitted to:

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Executive Summary/Policy Summary

Several important points should be highlighted from this study. As a point of context, research indicates that primary care physicians play an important role in reinforcing preventive health practices although their counseling on physical activity and nutrition is often inconsistent, especially when obesity is not detected as a concern. This may be particularly true of primary care physician contacts with children.

Our study indicates that parents and families need and want more information about how to integrate healthy eating and activity levels into their lifestyles. Although they recognize that physicians may not be able to meet these needs completely, parents appear to be interested in receiving more support in this area from health care providers as well as schools and community organizations.

Physicians and parents recognize the sensitivity of discussing obesity with children in today's society, and may feel ill equipped to do so. Both parents and healthcare providers may be less aware of the need to talk to non-obese children about how they eat and the amount of activity in which they engage, although research confirms the validity of these health risks and the need to address them with all children.

This study revealed that parents as well as providers can be energized to address these issues creatively and enthusiastically, if given a certain amount of support from external parties. It is hoped that the information contained in this report, set in the context of other work currently being done at the state and national levels, will contribute in a meaningful way to that energetic and creative process of improvement.

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Background

Childhood obesity rates are on the rise locally (Texas Department of Health, Behavioral Risk Factor Surveillance System, 1990-2000) and nationally and have been identified as a serious public health issue. (United States Department of Health and Human Services, 1996) Data have not been collected among school-aged children in Texas for a state-specific estimate. However, in 1999-2000 there are over 4 million children enrolled in Texas schools. A national estimate of 20% applied to Texas would then extrapolate to approximately 800,445 overweight children across the State.

The potential for primary care providers to improve the health of clients through risk reduction counseling is high. According to the exhaustive scientific review conducted by the United States Preventive Services Task Force (USPSTF), "Primary prevention as it relates to such risk factors as smoking, physical inactivity, poor nutrition ….holds greater promise for improving overall health than many secondary preventive measures such as routine screening for early disease (USPSTF, 1996, p. xxx). When medical practices have in place a system, such as Put Prevention into Practice, (United States Department of Health & Human Services, 1994) which promotes the identification of risk factors, appropriate responsive counseling, and effective tracking and feedback, both the provision of these services and documentation thereof can improve significantly (Smith, 1999).

Primary care physicians have a connection with America's families. Approximately 78% of Americans see a physician each year, with an average of three office visits every year (Benson & Marano, 1994). Primary care clinicians have as a focus "sustained partnership with patients and practicing in the context of family and community," (Committee on the Future of Primary Care, 1996, p. 31) which purposefully leverages the visit of a single patient to positively affect the health of the whole family.

A literature review and descriptive study conducted by the Center for the Advancement of Health found a wide field of support for behavioral counseling by clinicians. "An increasing body of evidence indicates that brief, minimal-contact interventions can effectively improve nutrition" (2000, p. 12). Salient elements of effective physical activity interventions in the primary care setting included assessment of current activity, collaborative goal setting, problem solving about barriers, and identification of supporting activities. In their review of effective methods of behavioral risk reduction, they found "the primary care provider's role is brief but critical" (Center for the Advancement of Health, 2000, p. 25).

As part of a grant funded by the Centers for Disease Control through the Texas Department of Health, a research project was conducted seeking to identify ways in which primary health care providers can facilitate prevention, identification and treatment of childhood obesity. The PPIP Healthcare Research and Training Group at the University of Texas at Austin (UT Consultants) conducted this study.

Integral to the research design was gathering data from parents regarding their approach to facilitating healthy eating and activity behaviors for their children, the level of support they receive from physicians, communities and schools, perceived barriers, and what would support them in promoting desired behaviors. Clinicians were also interviewed regarding current practices, barriers and success stories around childhood obesity.

Methods

In Phase One of the project, UT Consultants conducted structured interviews of 62 parents[1] using a questionnaire (See Appendix A). Parents were recruited from six primary care practices in Central Texas. Participants included English and Spanish speaking parents. Nine to 13 parents from each practice were interviewed. Practices included private pediatric practices and public and private clinics serving children. Some practices relied heavily on clientele insured through the Medicaid program, the Austin/Travis County Medical Insurance Program and the Children's Health Insurance Program, while others served primarily privately-insured patients.

Participants were recruited to be interviewed by clinic personnel and scheduled for interviews or recruited in waiting areas. Upon obtaining consent, interviews were audio-taped, then transcribed. Using NUD*IST software, UT Consultants coded and analyzed data to identify common themes. Thirty clinicians were also interviewed using a questionnaire (See Appendix B) and the data were analyzed using the same methods.

Phase Two of the project involved providing briefings to participating clinicians regarding the results of the data collection and analysis. Based on these briefings, as well as clinician's existing opinions about how to address childhood obesity issues, improvement projects were selected for implementation. UT Consultants provided consultation on project selection, and the action research process used in implementing and evaluating the projects. UT Consultants also gathered and shared information about local and national resources to support the projects. Awards of up to $1,000 were also made to each participating clinic[2], to assist them with purchases which would support improvement projects or facilitate their working with children and families regarding nutrition, physical activity and obesity related issues. As of August 2002, six projects were underway.

[1] 59 parents met the expanded criteria for inclusion (e.g. having children aged 5-12); Three additional parents were interviewed with children either older or younger than the established age range.

[2] One participating practice declined to develop an improvement project Support funds were granted to a provider affiliated with one of the original 6 practices, who was interested in launching a community education project separate from the project undertaken by the practice site with which she was affiliated.

Synopsis of the Results

This study was qualitative in nature and the data describe the perceptions of a small number of specific individuals. Therefore, although the emerging themes are valuable in that they contribute to the greater dialogue about childhood obesity in Texas and elsewhere, generalizations from these data cannot be made to any larger population of clinics, parents or providers.

Themes Emerging from the Data

The parents in this study considered themselves to be key role models for children's eating and activity behavior. They consistently expressed the belief that children imitate what they see and will learn poor eating and activity habits from parents if parents exhibit these in their own behavior. Many parents also believed they had an important role as providers of the "right" foods and teachers of nutrition and healthy habits. Finally, some parents saw themselves as negotiators in prompting children to try new foods or activities.

"You have to be the example. If you eat healthy, your kids are going to eat healthy. If you eat junk food, your kids are going to eat junk food. If you sit on your bottom and watch TV all day, the kids are going to do that, so you have to be a role model for them."

"I think you have to teach them, you know, if you want it to stick with them for life. You can't just say, 'no, you can't have that candy bar, you have to eat this.' You have to explain why…"

In their remarks, parents often emphasized nutrition over physical activity. Many parents expressed specific views about good nutrition and their children's eating habits, but were less specific about what constituted adequate physical activity. A significant theme that emerged from the data was parents' belief that activity should be fun and unstructured, preferably performed outdoors as play. Parents infrequently reported doing activities with their children.

"I'm talking more about fun exercises like riding their bike, jumping rope or running around."

Parents differed in their perceptions of what is available through schools and within the community regarding support for good nutrition and physical activity. Our study suggests that variations could relate to socio-economic status as well as to variations in actual community resources; however, it was beyond the scope of our study to reach conclusions regarding these two areas. Where community resources were reported as known to parents but not used, distance (access) and cost were cited as some of the reasons for underutilization. The WIC program (Women, Infants, and Children) was cited as a community resource that was utilized and accessible to some parents.

"Austin has just so much, and you can rent anything you want to try any sport..."

"If there's a mother and children's program or whatever, they cost. I can't pay for it."

There were also differences in the kinds of support desired by parents from health care providers and others. While some parents desired greater support, others had difficulty thinking of ways in which doctors or schools could support them further. Examples of support desired, for those who wished for more support, are listed below.

Support from Physicians

Parents expressed a desire for more information and education. Specific examples included:

- Nutrition or cooking classes
- Parenting classes
- Practical information on how to achieve better nutrition, weight loss, and more activity
- Tips on how to eat healthy meals when families can't prepare meals at home

"Any information that would have to do with today, today and the way we live our lives and how everyone is. No one has time to really cook and take the time to provide healthy meals… What are some other choices?"

- Referrals to classes or seminars to learn more about special conditions that might be related to obesity (such as asthma, diabetes)
- Newsletters
- General information about local resources for exercise or nutrition education available in reception or waiting areas
- Parent education about how to discuss weight and health issues with children (i.e. how to talk about the issue without diminishing self-esteem)

"…if we put the effort or make up programs to inform people, hey, if your child has [a] kind of illness … we've got classes for that or you can go to this place for treatment … I think that would really make a difference."

Some parents' remarks reflected a need for more personalized attention from providers.

- More individualized recommendations about nutrition
- Updated nutritional information as their children get older
- More responsiveness to parental concerns about a child's weight

"They give you the brochures on what's good food and what's bad food…and whatever. I want a little bit more than brochures. I want something to be personal. You know, a brochure is not. It's easy to give to anybody."

Some parents expressed a desire for greater emotional support. Examples include:

- Greater empathy and non-judgment about overweight from providers
- Sponsorship of parent support groups

Some parents asked for specific service changes:

- Screenings for anemia
- Ability to schedule appointments on shorter notice
- More time with the doctor during the appointment

Support from Schools and Communities

Perceptions were mixed about what was available and desirable from schools and communities. Some parents felt schools offered good meals and lots of activities. Other parents as well as providers mentioned they would like:

"The healthy diet? There really is not, because I have spoken with the school about my daughter …they don't have anything and that's pretty sad because they do need to have a program for the kids, teach them, you know because that would be a big help."

"My daughter eats pizza every day. My son eats chicken nuggets every day… You know now they have a choice and I'm sorry but my kids don't pick the right choice."

"I think the schools changing their lunch menu would help a lot because they spend more time there."

- Healthier school lunch choices
- A way to guide or influence children in making good food choices at school
- More frequent physical activity in the school day
- More physical activity programs after school, especially for younger children
- More education about nutrition in schools
- More education about health in schools

"They should have more activities for the children to play…where he goes to school they have this huge back area where they could have sports for the kids and I brought it up. Apparently [the school has] no funding for it."

From within the community, the following suggestions came from parents:

"*Any type of facility that takes children camping would be nice too because they have them hiking and …doing exercise and …swimming..."*

- Community health screening programs for kids
- Weight management programs (to which kids can be referred)
- More programs sponsored by adults that provide activities for kids (camping, hiking, etc.)
- Educational programs

Barriers Cited by Parents and Health Care Professionals

Parents cited barriers to facilitating healthy eating and exercise behaviors for their children. These included:

"Me, for instance, I'm a single parent. My son's dad passed away and it's just me and it's difficult to be involved in his sports, his physical activity…"

- Lack of time to exercise or to take their kids to physical activities (i.e. team sports)
- Lack of time to shop, cook, prepare meals
- Not feeling safe or comfortable using or sending children unattended to community facilities
- Lack of control over feeding and modeling behavior of other caretakers when children are not with the primary parent (i.e. relatives, estranged spouse, babysitters)

"That's about the only real meal I can control at home during the week. I have no idea what they're eating in school for breakfast and at lunch."

Providers cited more barriers to helping parents make healthy lifestyle changes for themselves and their children. These included:

- Lack of reimbursement for related services

"…but if it's an issue to bring a child back…only for the risk factor of obesity, that's not covered on their insurance."

- Lack of education of parents related to nutrition and physical activity
- Lack of parental compliance with physician instructions on healthy behaviors
- Lack of provider time for "social services" and counseling
- Parental choices, such as feeding children oversized portions and utilizing fast foods
- Cultural differences
- Language differences
- Poor living conditions/poverty
- Lack of coordination of community level efforts

"Everybody is…busy, and there's just a whole lot of fast food being bought. I think people have gotten used to incredibly big serving sizes."

"I think parents are unnerved by the fact that they tell you their self-worth is affected by what you say to them about weight… so I think they're afraid to say anything…"

- Denial of weight or health issues by parents (attributed to differences in perceptions about what is healthy and/or to parent's similar weight problems)
- Difficulty in approaching these sensitive topics (weight, lifestyle habits) with children, teens and parents; parents may feel guilt or shame and have difficulty discussing the issues with a provider

Success Factors cited by Providers:

"The parents' are there too, but usually I try to talk to the child and ask them what do they like to do and that kind of thing, so that it's not just some generic recommendation."

- Assessment of readiness for change
- Direct counseling of children from physicians
- Involvement of the whole family (including all caretakers if possible) in planning changes
- Timely follow up by providers and follow through on progress of child and family
- Willingness to take incremental approach
- Prompting due to diagnosis of serious health problem or disease
- Perseverance in finding a key change or explanation that makes a difference

"So we started working with their meal time behaviors…and little by little making changes. Like one week we would work on what kind of snacks do you have in your house. By the end of the year…the whole family ate differently; even when they'd go out, they'd choose differently…. They started turning off the TV, playing games, doing other things, and she said that their whole family relationship changed."

Improvement Projects Underway

Project One: A newsletter is being created for distribution to clients of a pediatric practice and others in the community. The newsletter will have a focus on nutrition, activity and weight management. The newsletter will have "columns" from school and community sources, from parents and from healthcare professionals. Surveys will be used to assess the newsletter's success in improving awareness and increasing knowledge regarding the target subject matter as well as meeting stated needs of users for specific types of information and resource referrals. Activity and nutrition-related prizes (such as jump ropes and cookbooks) will be awarded for participation in the survey.

Project Two: Several projects were selected by this site. The clinic has developed, and will pilot, an assessment tool to determine family behaviors regarding eating and physical activity. Clinic staff plans to evaluate the assessment tool after it has been in use for a few months, and make necessary adjustments. The clinic is also creating an activity area for children in order to provide on-site education and counseling related to nutrition and physical activity for children and families. The activity area will offer educational materials such as videos and literature, as well as "fun" items such as stickers, to raise awareness.

Project Three: The participating health care professional (registered dietitian) will provide education sessions to 5 local pediatricians or primary care providers who work with children. A questionnaire is being administered to each participant to determine the level of current services and knowledge of nutrition and treatment of childhood obesity. Post-testing will be conducted to evaluate the impact of the training seminars provided by the dietitian.

Project Four: Prompted by specific concerns expressed in parent interviews, practitioners are researching and writing an "Obesity Booklet" for children that will address diet, nutrition, sedentary lifestyle and exercise, as well as incorporate information about related issues such as the emotional components of overeating, eating disorders, body image, and parental support.

Project Five: Cooking classes are being offered to parents and children utilizing this clinic. These cooking classes are geared toward utilization of low cost, locally grown produce, and are designed for a bilingual (Spanish/English) clientele. The clinic is also engaging in a program to raise awareness about the importance of physical activity, using Physical Activity Pyramids as counseling tools.

Project Six: After reviewing available curriculum for sale, a context-specific curriculum is being developed. The clinic's dietitian will then lead monthly group sessions for patient families. The objective will be to improve the quality and consistency of education about nutrition and exercise provided to clinic families whose children (aged 5-13) are identified as at-risk for overweight during well-child checks. Evaluation of the project will include tracking the number of referrals to and participants in the program and obtaining evaluations from program participants.

Items purchased through the grant to support improvement projects are listed in Appendix C.

Reflections on the Process

Providers who participated in the project were asked questions about their experience (See Appendix D). Several reported that the project has caused them to focus on healthy eating and activity, and healthy weight issues more than they had previously. Others reported that the project afforded them new tools to reach children and families. The providers also reported that both the financial and organizational (consulting) support were important in facilitating their participation and in the production of outcomes.

Upon reflection, UT Consultants found that practices recruited for the study expressed different levels of desired involvement initially and demonstrated different levels of involvement during the study. However, all appeared to be influenced by the data collected as well as the interaction with consultants in defining projects and desired outcomes**.** This suggests that the empirical data and process facilitation by parties external to clinical operations played an important role in the development of improvement projects by clinicians. Moreover, while the financial support appears to have encouraged initial participation, the support in terms of data collection, feedback, and problem solving may have been most critical in maintaining participation through the point of project identification and initiation. Therefore, future recommendations should take into account consultative or research support which may be needed by primary care practitioners to assist them in adopting recommendations for improvement.

"This was a great project because we got direct feedback from parents on important health issues. Doing the project has gotten the physicians to discuss, as a group, how to manage overweight children."

I learned a lot about my patients' needs, experiences, and future needs! … I am more aware of the respect and gravity which patients and parents give me, [and of] how our opinion matters…On a day to day basis, we [now] review general health and healthy lifestyles and try to 'nip problems in the bud.'"

"*Generally, I think the providers are more aware of making sure growth charts are done and the issue of nutrition/exercise is broached if a child is in the overweight or at-risk category…. Based on the interviews, I'm making more of an effort to speak to children as well as parents*."

"The money was an important selling point for the clinic as an institution. Everyone's schedules are so busy; it is extremely helpful to have some concrete gain for the clinic to justify everyone spending the time… I also think receiving materials/funds for a project rather than directly receiving money was good. Directly receiving money in exchange for patient participation might present some ethical problems for the clinic."

Conclusions and Potential Recommendations for the Task Force

1. **Parents and doctors in our study agreed that more education is needed.** Potential strategies to address this desire include:
    a. Development of curriculum for parents on relevant nutrition, physical activity and parenting topics. Parental input and participation can enhance relevance.
    b. Development of multiple strategies to deliver information which gives parents and providers choices in terms of cost, location, time commitment, literacy levels, language diversity, staff expertise, and staff availability.

2. **Providers and parents in our study were concerned about handling issues of weight and obesity in a sensitive manner and wanted to avoid injury to a child's self-esteem.** Development of training for physicians on providing counseling to patients and family members that considers self esteem issues, along with clinical issues related to healthy eating, physical activity levels and weight concerns.

3. **Due to the perceptions of both parents and providers that parental behavior strongly influences children's behavior, addressing parents' lifestyles may be as important as addressing lifestyles of children.** Interventions for parents could be designed which build on their roles as their children's models for healthy eating and physical activity. Efforts would be directed toward changing family behavior along with children's behavior. Family prescriptions or plans may be appropriate.

4. **Incorporation of the Stages of Change Model for behavior change, the Motivational Interviewing style of counseling, and related principles and techniques, may provide a valuable framework for working with healthcare providers, parents and children to implement items 3 and 4 above.**

5. **Information on resources available in the community to promote healthy eating and activity for kids or adults was not known or utilized by many parents in the study.** Providers can take a role in collecting and disseminating information. They can also make specific referrals to patients and parents for appropriate community resources.

6. **Some parents perceive that schools should offer greater support to children and parents regarding healthy eating and exercise.** For example, strategies and programs can be developed to assist parents in guiding children's lunch choices. Schools can also incorporate into the curriculum more about health, nutrition and fitness for students. Finally, schools could promote developmentally appropriate in-school and after-school activities for children of all ages.

7. **Preventive services related to eating and activity behavior for children may not be reimbursed for many health insurance carriers.** Community level efforts representing parents and healthcare providers can be coordinated to advocate for reimbursement of services that prevent obesity and related health problems among children and families. These services should include counseling, screening and follow up care.

8. **Many providers do not routinely assess children regarding their eating habits and activity levels unless children are obese.** This may be especially true for older children and children not enrolled in special programs with preventive service requirements such as Texas Health Steps. Professional standards should be developed and promulgated that ensure providers consistently assess eating and activity habits for all children ("normal" and below weight, as well as overweight).

9. **Practices may need outside help to effectively initiate and sustain improvement projects.** Models to provide support, such as the consulting model, should be considered to assist practitioners in implementing new programs and services. Support could include financial incentives, data collection and analysis, and problem solving assistance.

10. **Additional valuable insights may be gained from analyzing the results of the six projects in progress.** Follow up work can be done to evaluate the impact of action research projects and opportunities for diffusion of effective programs. For example, a conference of participants in the original study could be convened to share successes and lessons learned and to develop recommendations and strategies based on providers' experiences.

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Appendix A

Questions for Parents

1. What kinds of physical activity do your children engage in that might affect their health?

2. What kinds of eating habits do your children engage in that might affect their health?

3. Do you believe your child's body weight affects your child's health?

4. Do you believe eating habits and physical activity affect children's body weight? If so, how? If not, why not?

5. What do you consider most important to healthy eating for children? What do you consider most important in terms of physical activity for children? (i.e. amount? types? frequency?)

6. What role do you believe parents play in influencing healthy eating and physical activity for their children?

7. What resources does your community have that facilitate healthy diets and promote physical activity for your children?

8. Has your children's school provided resources regarding healthy eating habits and physical activity for you?

9. What role has your healthcare provider played in providing services to promote healthy eating habits and physical activity to you for your children or directly to your children?

10. In regards to eating habits and physical activity for children, what would you like your healthcare provider to continue doing? To do differently? To stop doing?

Appendix B

Questions for Providers

1. What information do you and/or your clinic currently provide regarding physical activity and nutrition for children or their families?

2. What services do you specifically provide related to identifying childhood obesity?

3. What services do you specifically provide to promote healthy eating, physical activity or weight management for children?

4. What are the barriers and benefits that you perceive in addressing childhood obesity?

5. Would you share a story of a successful experience related to counseling adults and/or children regarding physical activity and nutrition?

Appendix C

Purchases Made To Support Action Research Project

A variety of purchases were made to support clinics and practices in implementing improvement initiatives. These included educational materials, printing supplies, equipment and services to be used to create and duplicate educational materials, toys and prizes for participation in specific activities, classroom instruction, and cookbooks. The list below provides specific information on purchases made. Some items were purchased in quantity and were purchased for several clinics or practices.

Equipment
Printer
Scanner
Television
VCR

Supplies
Printshop Program
Ink cartridges

Literature
Brochures "Better Health and Fitness through Physical Activity"
Kid's and Adults' Activity Pyramids (Tablets & Posters) in English and Spanish

Videos
"Fit for a King" video
"Give Yourself Five" video
"Daily Food Choices for Healthy Living" video
"Bright Futures in Practice: Nutrition and Physical Activity" video

Educational Kits And Programs
"No Battles, Better Eating for Kids" educational kits
"Trim Kids: the proven 12 week plan"
NASCO food replicas and related materials for instruction
Educational products from "Toys R Us" and "Teacher Heaven"
Fight Fat Kit by NASCO

Services
Kinko's gift certificates
Happy Kitchen/Sustainable Foods Center bilingual cooking classes
Printing Services from Ginny's Printing and Copying

Prizes or Toys
Bilingual Cookbooks
Sports incentives from Target
Incentives from "Toys R Us"

Appendix D

Questions for Participants on the Process

1. Would you please describe your experience with this project?

   (Optional prompts)
   a. Has anything changed in your practice or clinic?
   b. Has anything changed for you personally?
   c. Has anything changed between you and your patients?
   d. How important was the money?

2. What do you expect to change as a result of this project?

3. Was the support you received adequate? (i.e. In terms of the money? In terms of the consulting?)