

American Academy of Pediatrics

Practicing Safety

Evaluation

Throughout Year 4 the Practicing Safety team worked diligently to wrap-up data collection activities with the New Jersey and Pennsylvania sites. The Central Evaluation Team (CET) analyzed pre and post-intervention data for inclusion in articles and presentations, as well as for reflection on needed changes in the project. The data collected thus far is rich in information about not only what it takes to change physician behavior/practice change but also how practices can make a difference by sometimes incorporating just small changes. A summary of the results of the three types of data collected is below.

Staff and Parent Data

An analysis of staff responses to surveys conducted at baseline and at follow-up after the full Practicing Safety intervention in five New Jersey sites was conducted to determine if staff perceptions regarding practice environments and behaviors changed significantly from baseline to follow-up. Significant improvements were identified in staff perceptions of tension among people in the practice, staff reports regarding their practice's methods for identifying and managing patients' maternal depression, and staff reports of managing parental stress and substance abuse. Details of the analysis of staff data from the full Practicing Safety intervention can be found in Attachment A.

A similar analysis of staff responses conducted at baseline and at follow-up after the Practicing Safety-Lite intervention in the three Pennsylvania sites and one New Jersey site was conducted to determine if staff perceptions regarding practice environments and behaviors changed significantly from baseline to follow-up. Significant improvements were identified in staff perceptions of feeling overwhelmed by work demands, their beliefs in their ability to make changes in the practices, and their perceptions of the stressfulness of the practices. Details of the analysis of staff data from the lite Practicing Safety intervention can be found in Attachment B.

Finally, an analysis of parent perceptions regarding interactions with their healthcare providers and parental behaviors was conducted. In two key areas, parents reported a significant change from desiring more information about particular pediatric topics covered in the Practicing Safety modules prior to the Practicing Safety intervention to requiring less information about these same topics following the Practicing Safety intervention. Mirroring the results observed from the staff surveys, parents reported that health care providers at the Practicing Safety sites had asked them about their depression status significantly more often following the intervention than prior to it. Additionally, parents reported an increase in the frequency of reading books with their children following the Practicing Safety intervention, an area that was covered in the PS modules. Details of the analysis of the parent data can be found in Attachment C.

Chart Reviews Summary

Reviews of patients' medical charts were conducted before (baseline) and after (follow-up) the Practicing Safety intervention with all practice sites that participated in Practicing Safety full and

lite. Chart reviewers recorded information from patient charts that fell into seven categories: coping with crying, parent/child relationship, sleeping and feeding issues, toilet training, effective discipline, safety in other's care, and a general "other" category. The five practices that received the Practicing Safety full intervention showed improvement from baseline, prior to the intervention, to follow-up after the intervention with increased documentation of parent/child relationship anticipatory guidance discussions between clinicians and parents. Increases in discussion frequency were not detected in any of the other categories. It is hypothesized that this finding, similar to the findings from the parent data, reflect that although the RAP team clinicians typically adopted the interventions, their colleagues may not have. Thus, because charts included in the sample reflect the whole patient panel instead of an individual clinician's panel, effects of the intervention may be diluted within this sample.

As is the case in most chart review studies, the practices' medical chart forms varied considerably, and the format and level of detail on the chart forms determined the level of evidence of the intervention that could be captured. A specific protocol was designed to guide the data collection; however, because the chart review process required the participation of several different project team members as coders, there was some variability in how the data were collected. To further explore whether anticipatory guidance improved from baseline to follow-up post implementation, the team is currently analyzing the chart data by patient age to identify whether topics appropriate to the age of the child was discussed and to determine whether there was an increase from baseline to follow-up.

Toolkit data

A toolkit comprised of seven modules (Module 1: Coping with Crying; Module 2: Parenting; Module 3: Safety in Others' Care; Module 4: Family & the Environment; Module 5: Effective Discipline; Module 6: Sleeping and Feeding; and Module: 7 Toilet Training) focusing on anticipatory guidance topics that, if discussed by the pediatrician and implemented by the parent, can help to reduce child maltreatment. Each module included developmental information to help parents place their child's behavior in context, set reasonable expectations for the child, and increase the empathy and understanding of normal child behavior. The outcome evaluation demonstrated that practices were more accepting of and willing to incorporate specific topics and tools over others. See details of analysis in Attachment D.

Lessons Learned

There have been many lessons learned over the past year. For example, assessing a practice's capacity and readiness for change is critical to their success with implementing new projects, beyond current protocols, into their routine care. Preliminary data have shown that there are four major predictors of practice change: an office champion, user friendly and relevant tools and resources, a practice that exhibits a readiness to change, and external facilitation.

Understanding practice capacity needs and readiness for change, as assessed by the Multimethod Assessment Process (MAP) prior to the intervention, is critical to help ensure a practice's success with integrating new topics, assessments and screenings into routine care. The intervention needs to be tailored based on the assessed capacity, as the practices' individual characteristics enhanced the likelihood of success. Parent involvement, as team members in the planning and implementation of practice improvement, is also helpful and valuable but often difficult to maintain because of their own time commitments.

Buy-in from all levels of administration, staff and physicians in an organization and a commitment of time from both physicians and staff to participate is crucial. There need to be protocols in place or established, to ensure sustainability in the face of staff turnover. An office champion who exhibits both a commitment and a real interest and ability to improve practice is needed. The champion may be a clinician or office staff member.

Use of screening tools to assess child and family status are more effective than traditional physician/patient interactions of a few interview questions, not asked routinely but only when a parent identifies that there is a concern. It is difficult to engage practices to actively screen for socially sensitive topics such as parental substance abuse and parent domestic violence. It was only after clinicians gained confidence using screening tools and making referrals for less controversial topics, such as maternal depression, that they would even think about tackling these more sensitive issues. It will take time and possibly some additional external facilitation for practices to consider incorporating more controversial topics routinely into well-child care.

As noted above Practicing Safety was successful in two very important areas of anticipatory guidance, one maternal depression and two, parental/child reading behavior. The team found that other modules were less tangible and/or less widely accepted. An example is the implementation of the crying module. The module was accepted by the RAP teams and highly rated in the evaluation but there was less evidence that the crying module was disseminated throughout the entire practice.

Community resource guides provided much needed information; however, it is not enough. Pediatricians and office staff need be more familiar with the resources in their community thus enhancing their confidence when making the referral. Providing the opportunity for the primary care practices and community organizations/agencies to engage in discussion will enhance linkages and strengthen referral processes. It is thought that perhaps a community, or other geographically defined website for healthcare providers to help them connect families to needed resources may add value. In addition, a system for feedback back to the pediatrician must be developed.

It was unrealistic to expect data collection activities, such as parent surveys, to be conducted by participating practice staff. Practices did not have resources (staff and/or time) to complete this extra activity. It took the practices many months to collect the data thus delaying the project. External assistance in collecting data was extremely helpful to the sites and team.

Finally, initial expectations regarding spread of the intervention within practices to those members outside of the RAP team were idealistic. Although RAP team members successfully adopted the Practicing Safety components, only maternal depression assessment and encouragement to parents to read to their children were spread throughout the practices. Additional work is needed to determine how best to disseminate efforts both within practices and to other practices.

Attachment A

Practicing Safety Full – Staff Responses

An analysis of staff responses to surveys conducted at baseline and at follow-up after the full Practicing intervention in five New Jersey sites was conducted to determine if staff perceptions regarding practice environments and behaviors changed significantly from baseline to follow-up. Staff reported significant change on one practice environment factor – that of tension among people in the practice. After the Practicing Safety intervention, staff reported significantly less tension among practice people as compared to prior to the intervention (Figure 1). Staff reported that some of their practice’s methods for identifying and managing patients’ maternal depression had increased significantly from baseline to follow-up. Following the Practicing Safety intervention, staff reported that they used a Health Risk Assessment (HRA) protocol or questionnaire to identify patients who could benefit from counseling on maternal depression more often than before (Figure 2) and nurses or health educators were used for individual counseling on maternal depression more often than before (Figure 3). Although the changes were not statistically significant, the trend of staff responses to questions on referral of patients to community programs for maternal depression (Figure 4) and use of group-counseling activities within their practices for maternal depression (Figure 5) showed an increase at these practices. Additionally, staff reported that there were significantly increases in the use of nurses or health educators for individual counseling with patients for parental stress (Figure 6) and parental substance abuse (Figure 7). Besides these observed changes, the majority of staff’s perceptions regarding practice environments, behaviors, and relationships did not statistically improve. All results are based on chi-square analyses and were considered significant at an alpha < 0.05.

Figure 1: Staff reports of tension in practices

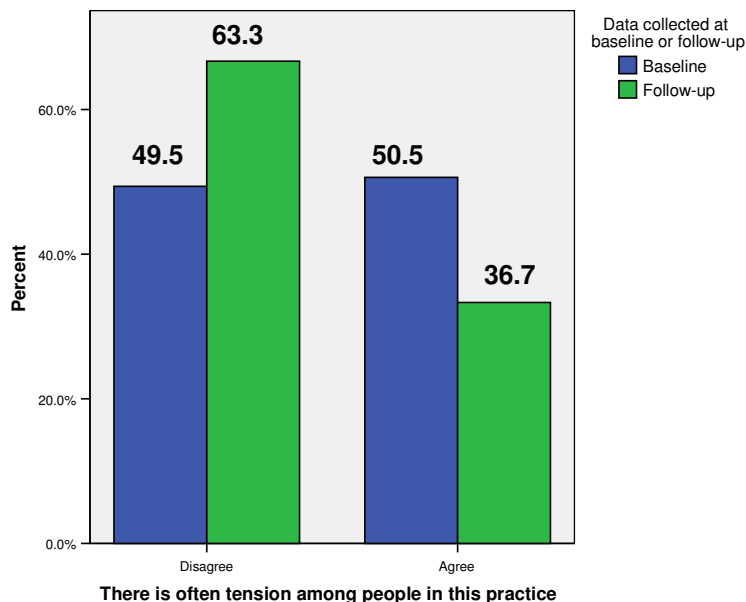


Figure 2: Use of HRA to identify patients who would benefit from maternal depression counseling

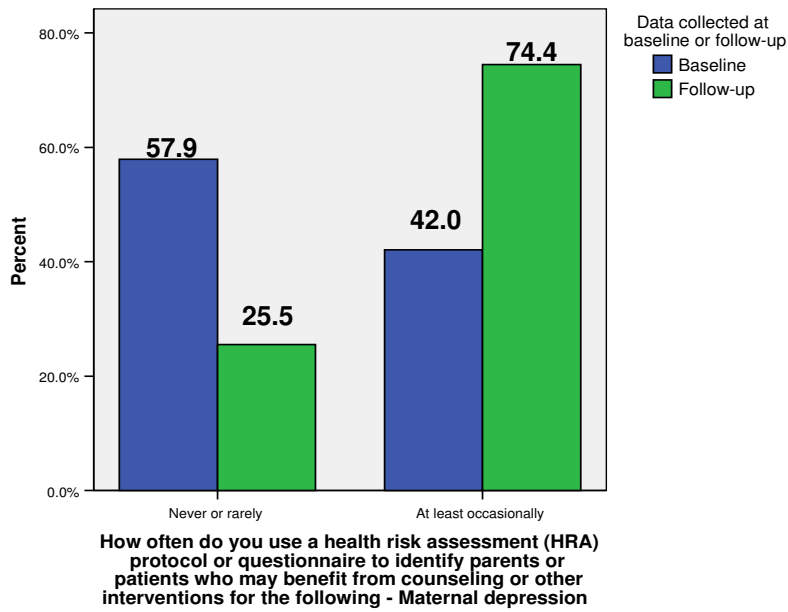


Figure 3: Use of nurses or health educators for individual counseling for maternal depression

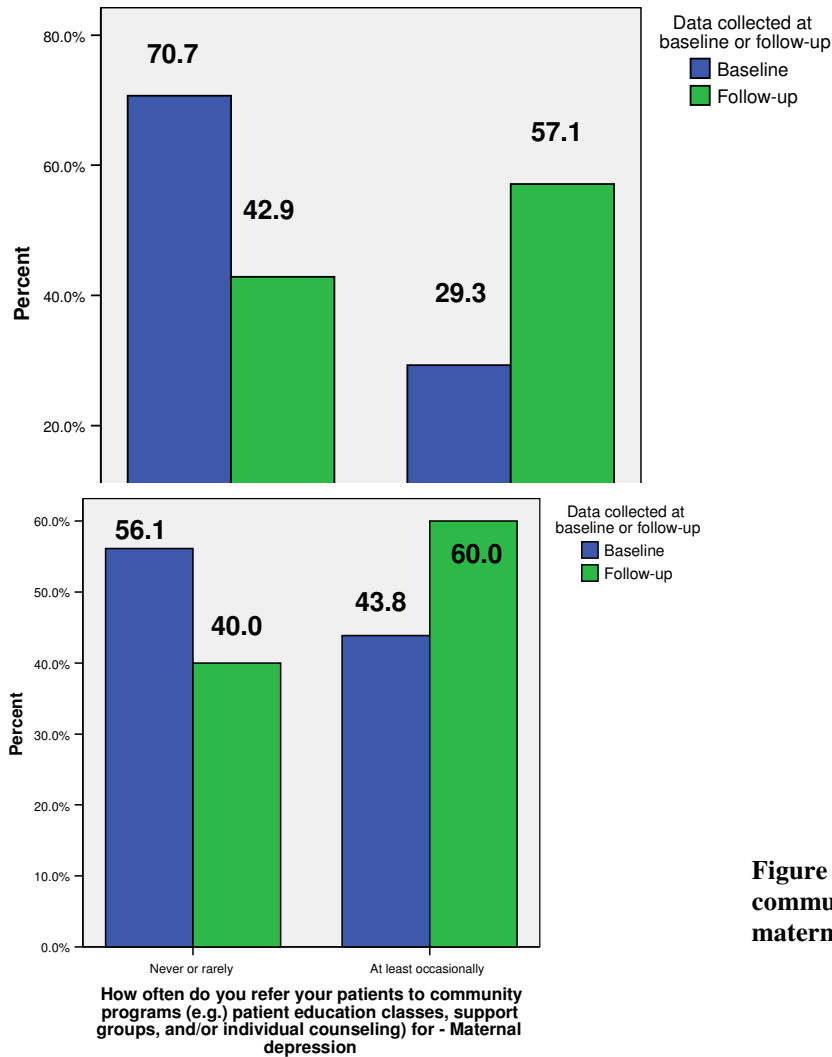


Figure 4: Patient referrals to community programs for maternal depression

Figure 5: Use of group-counseling activities within practice for maternal depression

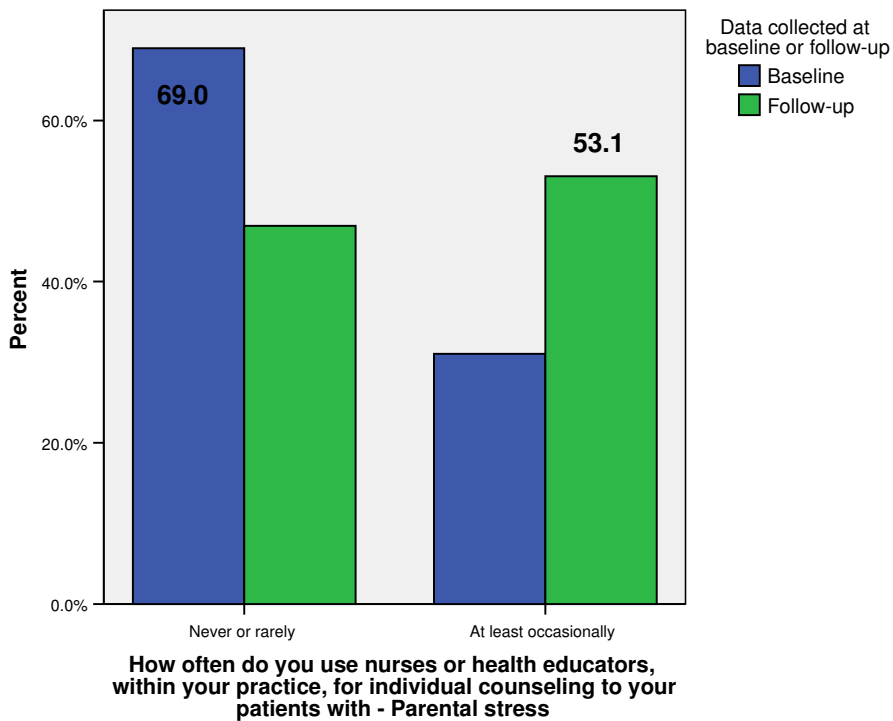
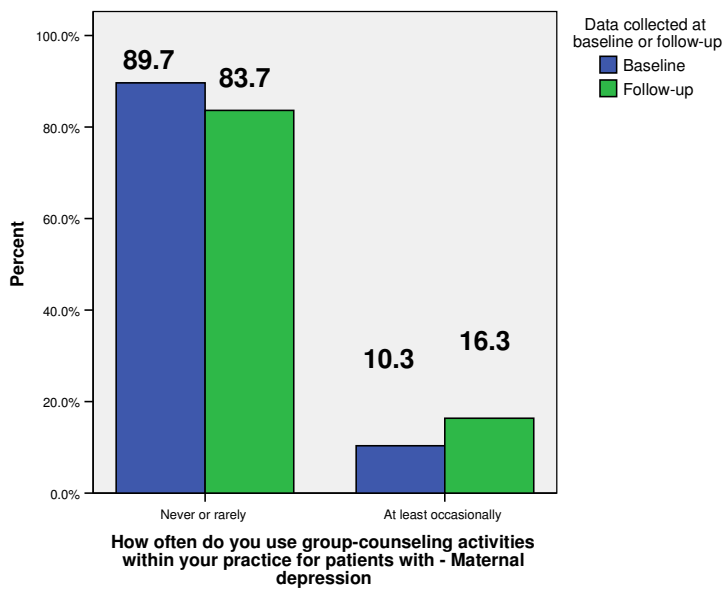
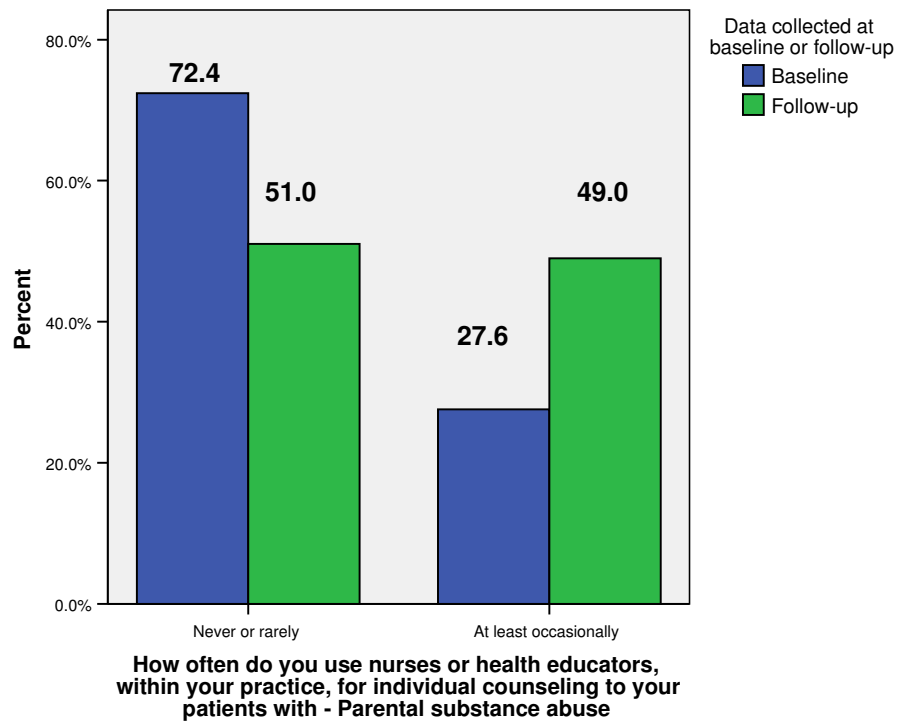


Figure 6: Use of nurses or health educators for counseling regarding parental stress

Figure 7: Use of nurses or health educators for counseling regarding parental substance abuse



Attachment B

Practicing Safety Lite – Staff Responses

An analysis of staff responses to surveys conducted at baseline and at follow-up after the Lite Practicing Safety intervention in three Pennsylvania sites was conducted to determine if staff perceptions regarding practice environments and behaviors changed significantly from baseline to follow-up. All change observed in these sites related to practice environment factors. After the Practicing Safety Lite intervention, staff reported feeling significantly less overwhelmed by their work demands as compared to prior to the intervention (Figure 1). Similarly, staff reported that clinicians felt significantly less overwhelmed by their work demands after the intervention (Figure 2). Following the Practicing Safety Lite intervention, staff reported a decrease in feeling that it was difficult to make changes in the practice due to business with seeing patients (Figure 3). Finally, staff reported that the practices were significantly less stressful after experiencing the Practicing Safety Lite intervention (Figure 4). Besides these observed changes in practice environment factors, the majority of staff's perceptions at the Practicing Safety Lite sites in Pennsylvania regarding other practice environment factors, behaviors, and relationships did not statistically improve. Additionally, no statistically significant changes in staff practices concerning direct patient care were observed. All results are based on chi-square analyses and were considered significant at an alpha < 0.05.

Figure 1: Staff reports of feeling overwhelmed by work demands

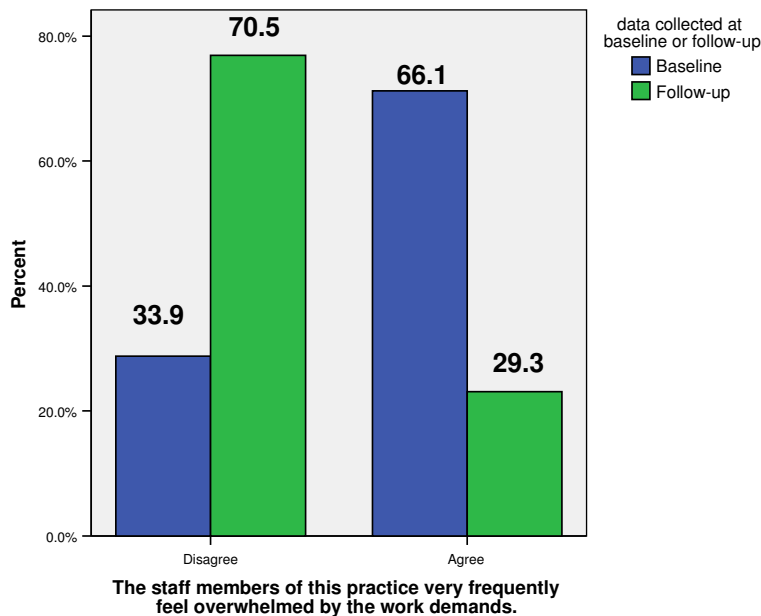


Figure 2: Staff reports of clinicians feeling overwhelmed by work demands

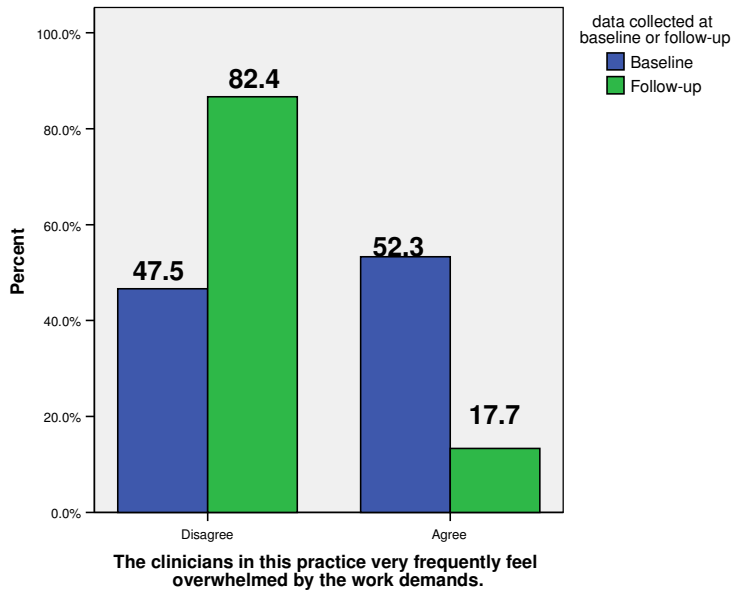


Figure 3: Staff reports of difficulty making changes in practice

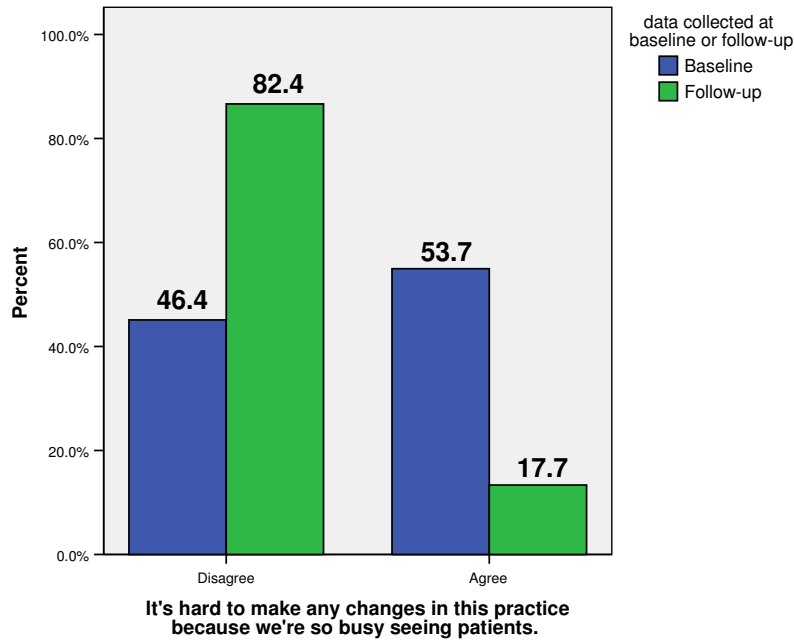
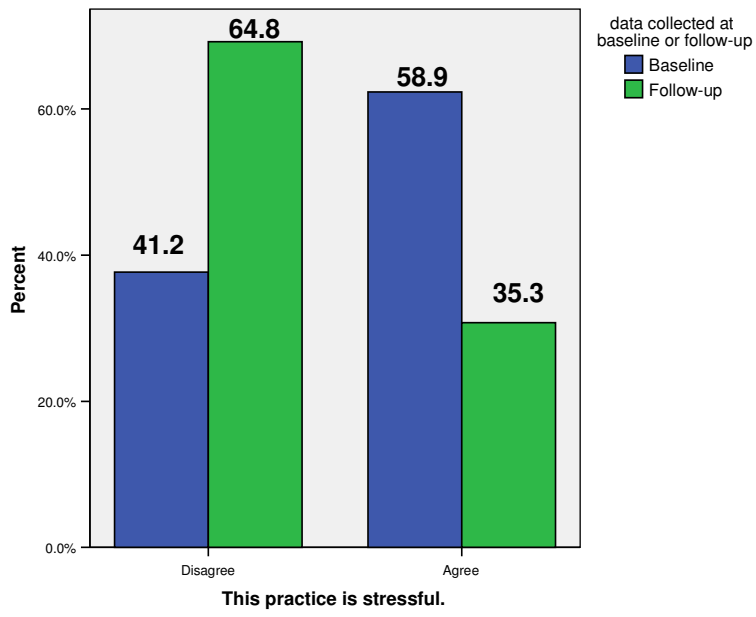


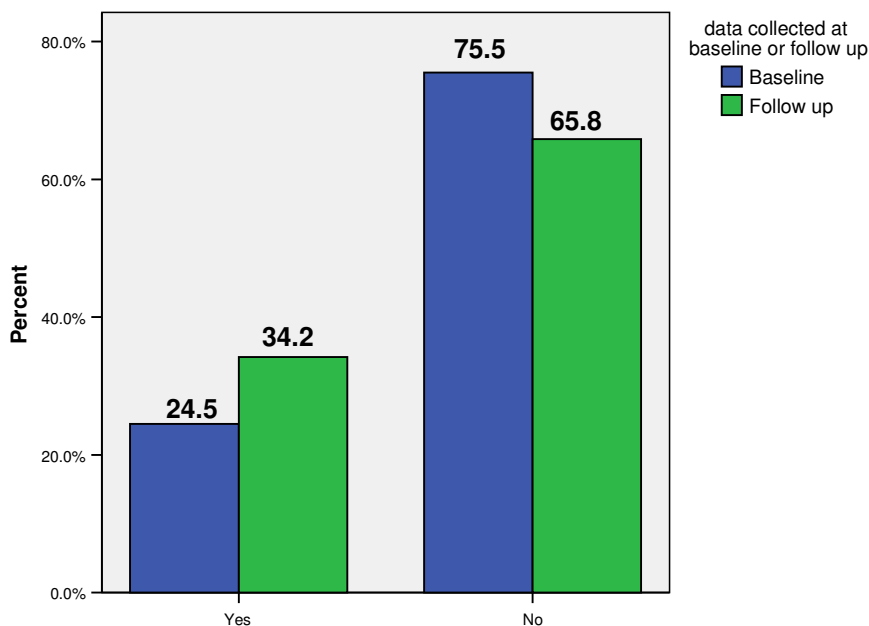
Figure 4: Staff reports of stressfulness of practice



Attachment C Practicing Safety Full – Parent Responses

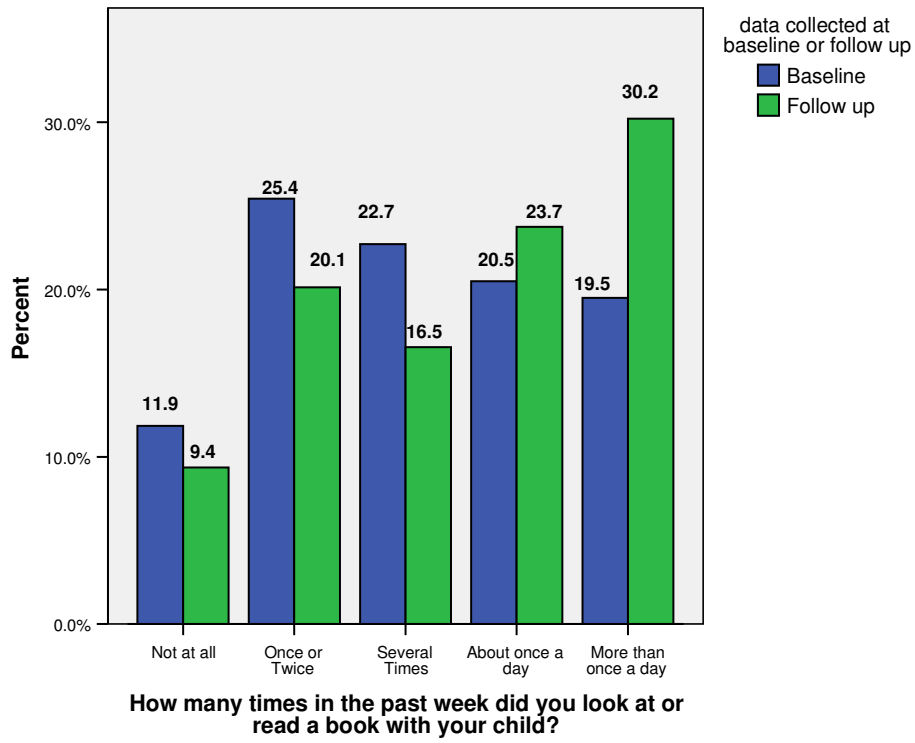
An analysis of parent responses to surveys conducted at baseline and at follow-up after the full Practicing Safety intervention in five New Jersey sites was conducted to determine if parent perceptions regarding interactions with their healthcare providers and parental behaviors changed significantly from baseline to follow-up. Parents reported a significant change from desiring more information about particular pediatric topics covered in the Practicing Safety modules prior to the Practicing Safety intervention to requiring less information about these same topics following the Practicing Safety intervention. This change is seen both among parents as an entire group as well as parents broken down by child age (10-18 months and 19-48 months). Parents reported that health care providers at the Practicing Safety sites had asked them about their depression status significantly more often than prior to the intervention (Figure 1). This analysis was based on a chi-square test and was considered significant at an alpha < 0.05. Additionally, parents reported an increase in the frequency of reading books with their children following the Practicing Safety intervention, an area that was covered in the Practicing Safety modules (Figure 2). This analysis was based on an independent t-test and was considered significant at an alpha < 0.05. This analysis was based on a chi-square test and was considered significant at an alpha < 0.05.

Figure 1: Parent reports of staffs' involvement regarding parent depression



In the last 12 months, have your child's doctors or office providers in this practice asked you: If you ever feel depressed, sad, or have crying spells

Figure 2: Parent reports of reading with their children

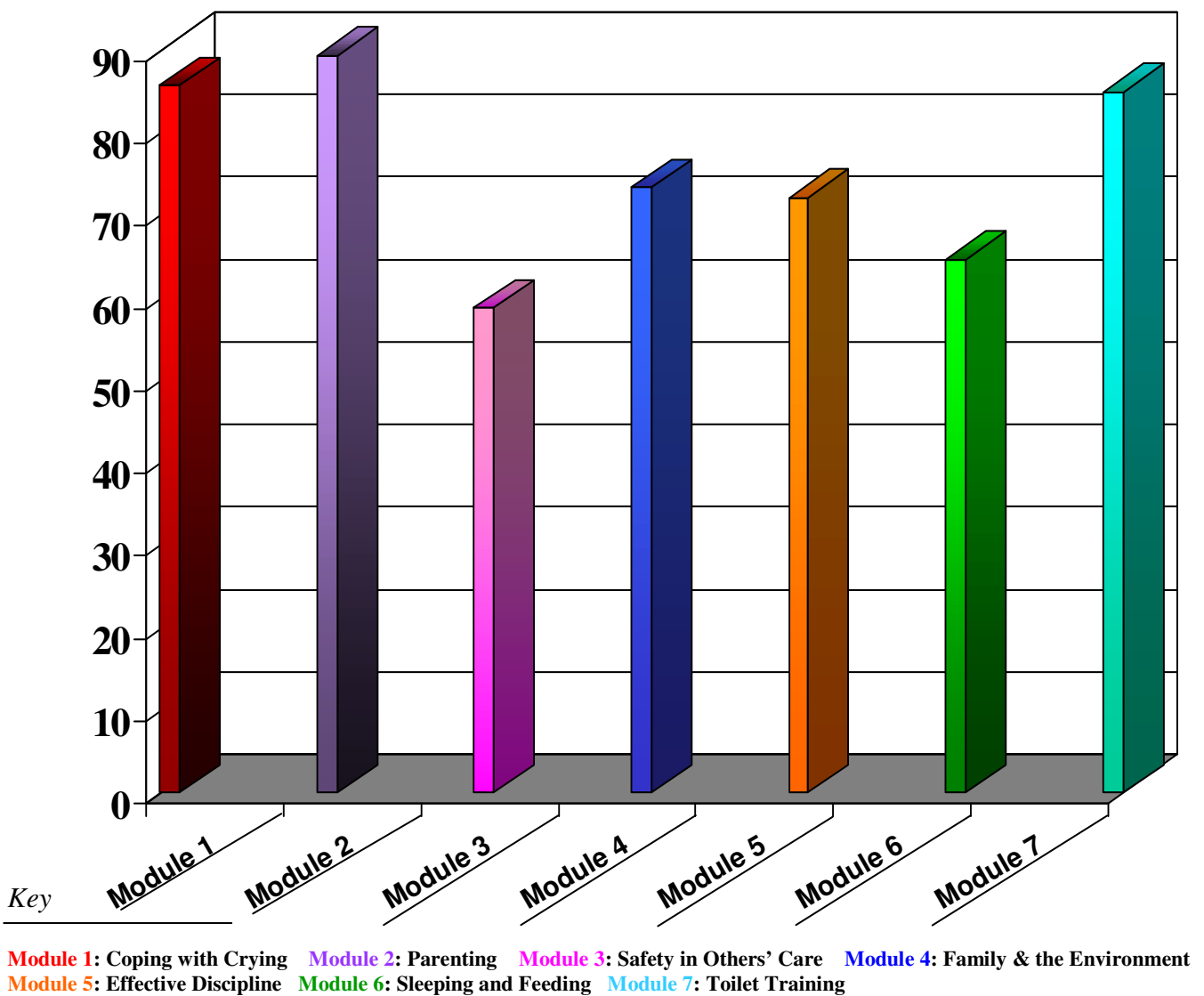


Attachment D
Practicing Safety Full Tool – Kit Evaluation Summary

Overall Results of New Jersey Sites

An analysis of staff responses to the tool-kit following the full Practicing Safety intervention in five New Jersey sites was conducted to determine if staff found the modules and tools to be useful. Staff reported a significant difference in response to the usefulness of modules 1 & 2 compared to modules 3-7. All modules were evaluated on a scale of 1 to 4, where 1 was not useful and 4 was very useful; a ‘never used’ option was also available. This was helpful information in deciding which topics would be introduced in our “Practicing Safety Lite” with the other practices.

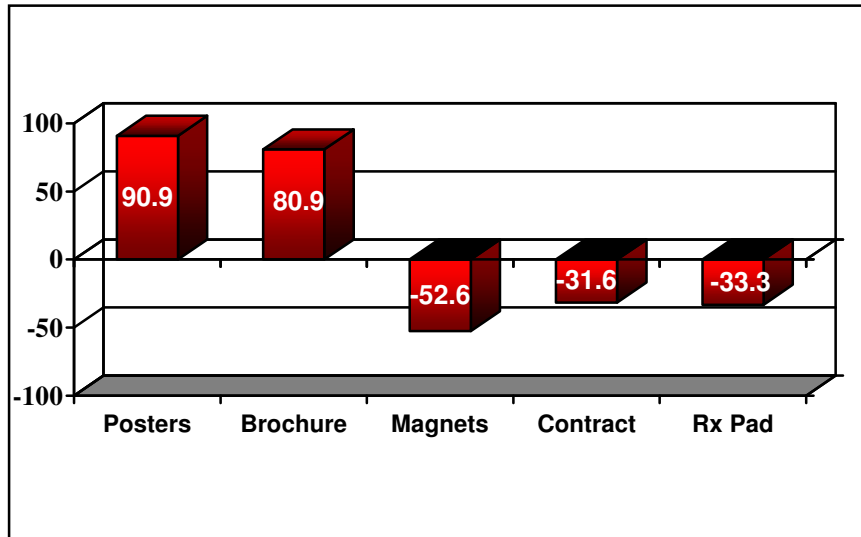
Overall usefulness of modules (Percentage of respondents who rated module as 3 or 4)



All tools from each module were evaluated on a scale of 1 to 4, where 1 was not useful and 4 was very useful; a ‘never used’ option was also available. The Coping with Crying module (Figure 1) shows that the percentage of respondents rated the crying posters and “Welcome to the World of Parenting” brochure

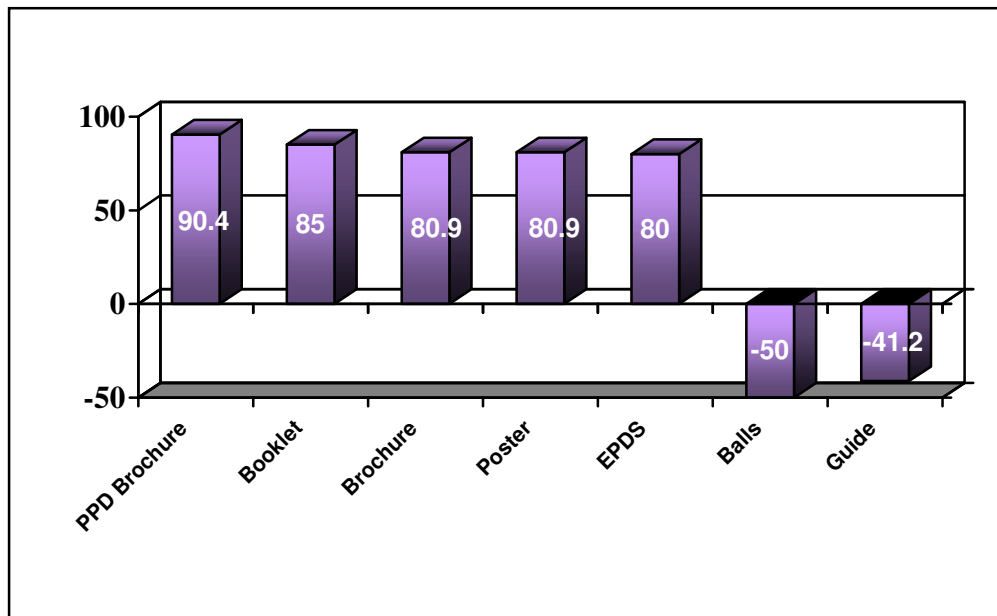
as most useful. The refrigerator magnet, contract for parents, and prescription pads were rated as never used.

Figure 1: Tool Evaluation by Module – “Coping with Crying”



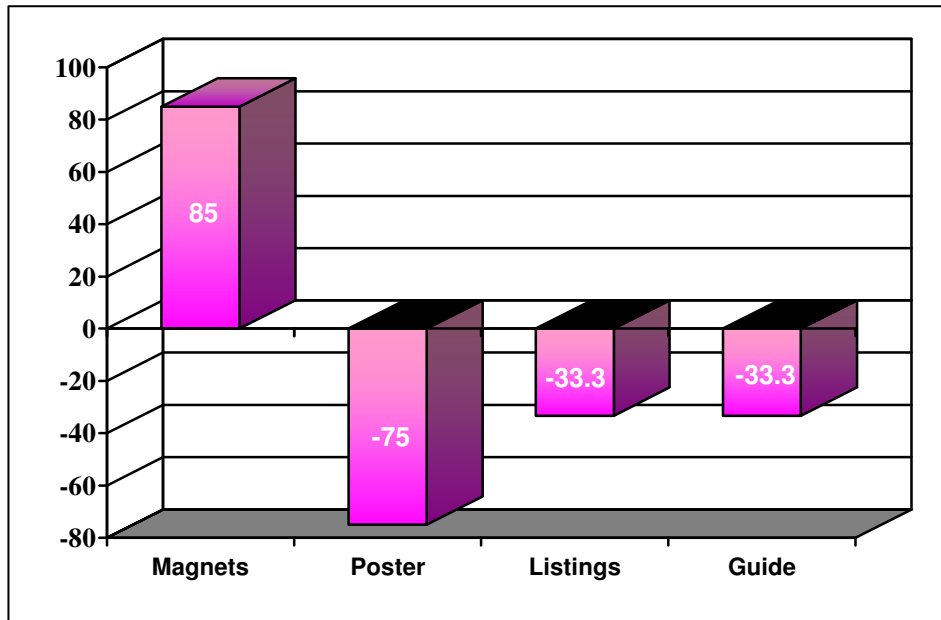
The Parenting module (Figure 2) shows that the percentage of respondents rated the “Post Partum Depression” brochure, “Bonding With Your Child” booklet, “Parenting your infant” brochure, “Hug, Hold, Comfort, Cuddle” poster and the “Edinburgh Postpartum Depression Screening” (EPDS) tool as most useful. The Stress balls and Physician’s Guide were rated as never used.

Figure 2: Tool Evaluation by Module – “Parenting”



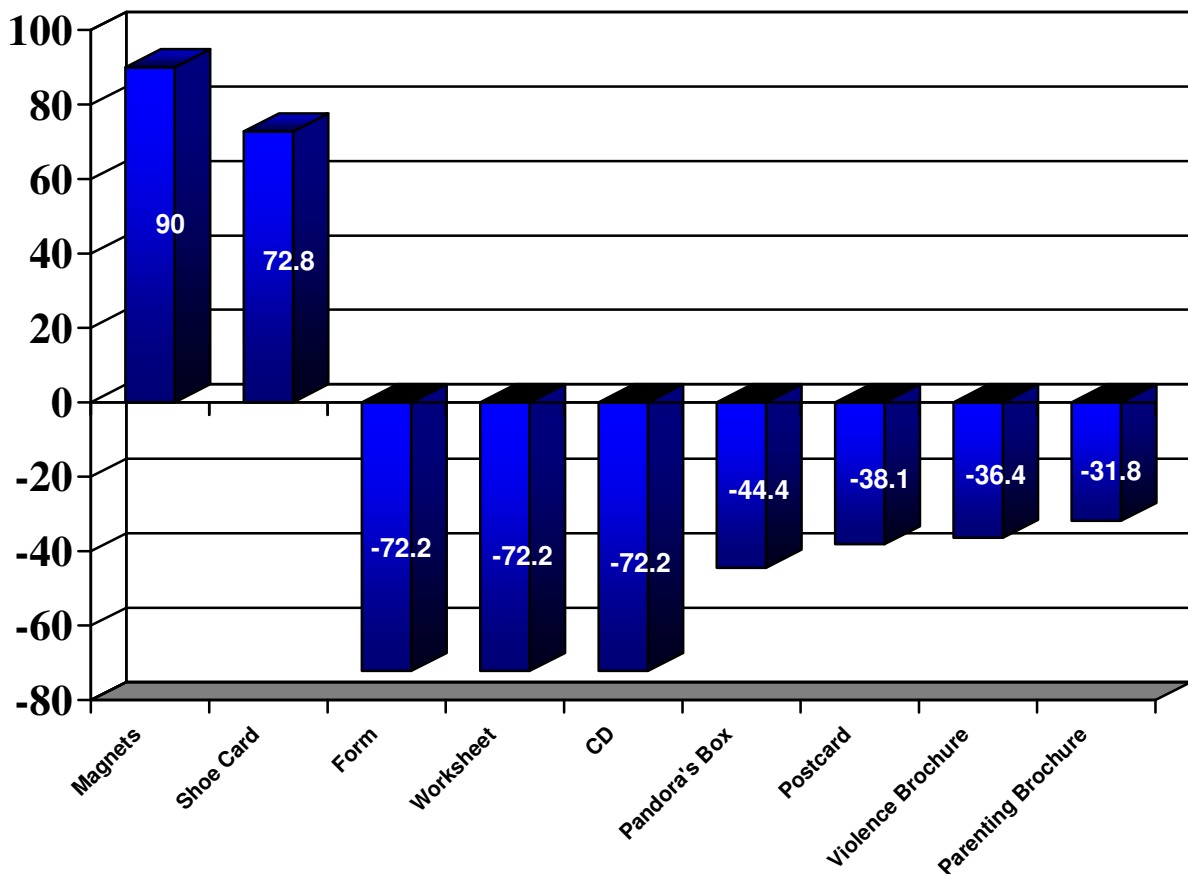
The Safety In Others’ Care module (Figure 3) shows that the percentage of respondents rated the Support Telephone Magnet as most useful and “The Choice You Make Today Will Last a Lifetime” poster, Local Child Care Connection Listings, and the “Parents Guide to Choosing Childcare” were rated as never used.

Figure 3: Tool Evaluation by Module – “Safety in Others’ Care”



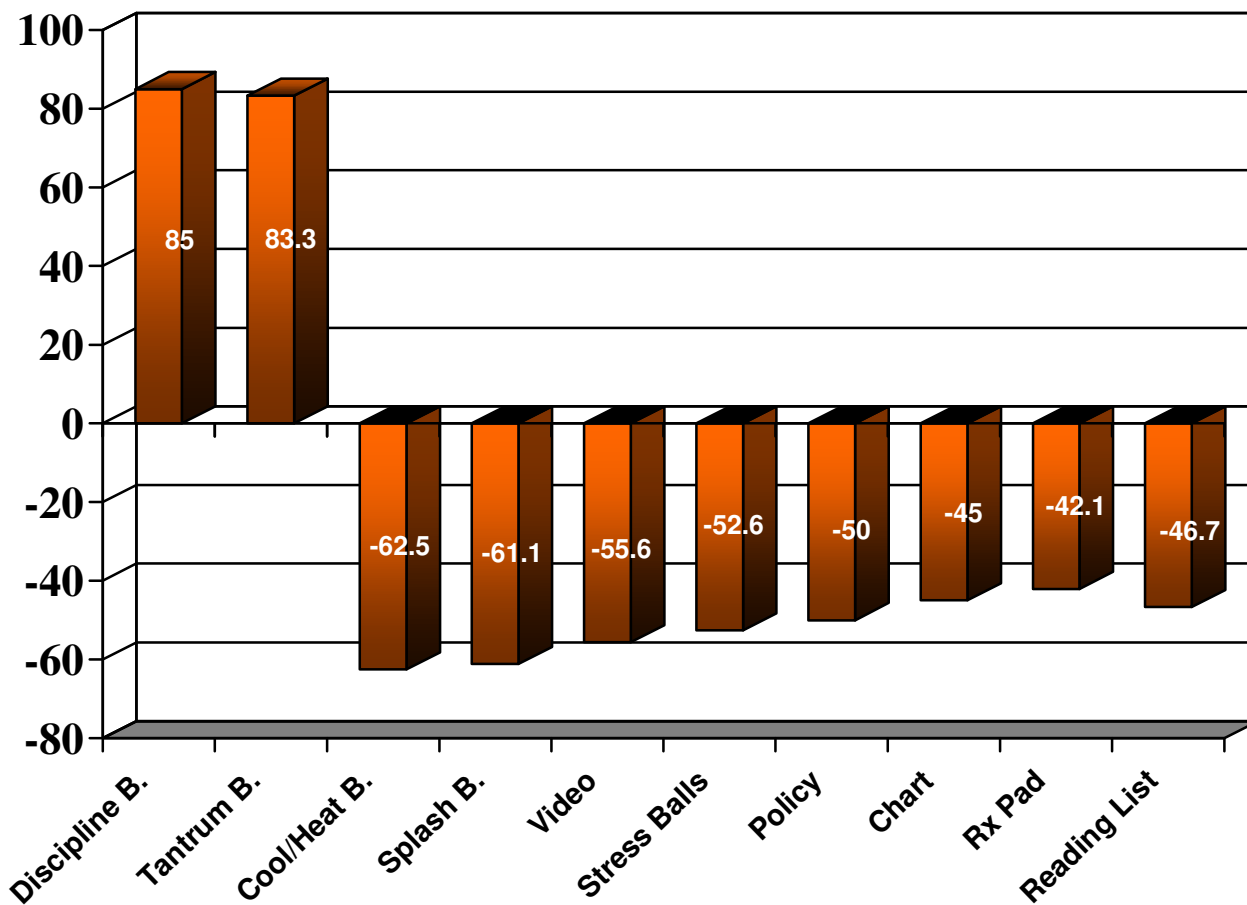
The Family & Environment module (Figure 4) shows that the percentage of respondents rated the Support Telephone Magnet and the “Domestic Violence” Shoe Card as most useful and the Periodic Intake Form, “Social Connections” worksheet, “It’s Time to Ask” CD, “Pandora’s Box,” You’re my Support” postcard, “When Children Witness Violence in the Home” brochure and the “Single Parenting” brochure were rated as never used.

Figure 4: Tool Evaluation by Module – “Family & the Environment”



The Effective Discipline module (Figure 5) shows that the percentage of respondents rated the “Teaching Good Behavior-Tips on Discipline” brochure and the “Temper Tantrums: A Normal Part of Growing Up” brochure as most useful. The “Cool Down Before Things Heat Up” brochure, “Splash Water on Your Face” brochure, “Discipline: Teaching Limits With Love” video, Practicing Safety Stress Balls, Effective Discipline Policy Statement and Speaking Points, Behavior Chart, Physicians Prescription pad, and the Suggested Reading List were rated as never used.

Figure 5: Tool Evaluation by Module – “Effective Discipline”



The Sleeping & Feeding Issues (Figure 6) shows that the percentage of respondents rated the “Sleep Problem in Children” brochure and the “Feeding Kids Isn’t Always Easy” brochure as most useful and the Growth Chart and “Kids Don’t Come With Instructions” magnet were rated as never used.

Figure 6: Tool Evaluation by Module – “Sleeping & Feeding Issues”

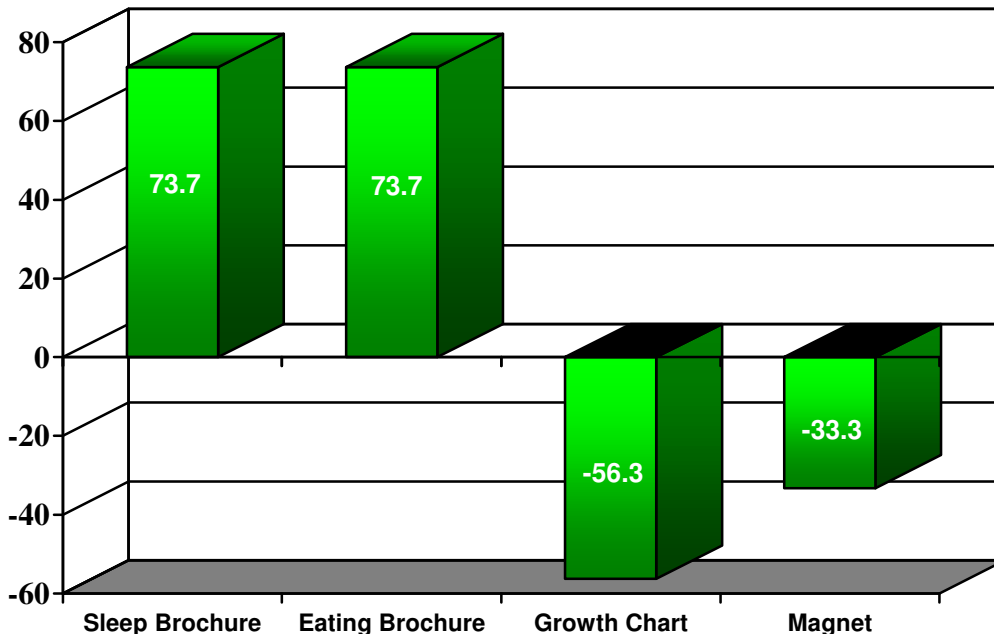
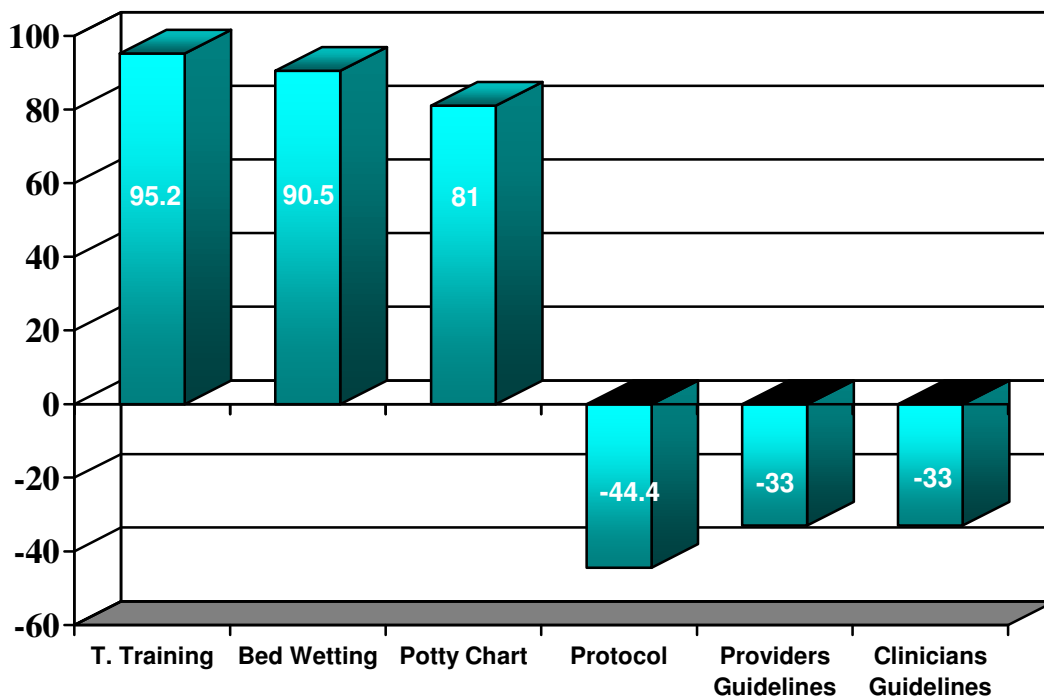


Figure 7: Tool Evaluation by Module – “Toilet Training”



The Toilet Training module (Figure 7) shows that the percentage of respondents rated the “Toilet Training” brochure, “Bed-wetting” brochure, and the “Potty Charts” as most useful and the Barton Schmitt Protocol, “Toileting Training Guidelines: Day Care Providers” and the “Toilet Training Guidelines: Clinicians” were rated as never used.