"B-4" _Before You Go to the Doctor_ What to do When Your Child Gets Sick is a train-the-trainer program led by Community Health Improvement Partners (CHIP) and based on the book, "What to do When Your Child Gets Sick," written by Gloria Mayer, R.N. and Ann Kuklierus, R.N, and modeled after a study from the UCLA/Johnson & Johnson Health Care Institute. The intent of the program was to train staff at community based agencies in San Diego County on how to teach parents to use the book in order to: (1) reduce non-emergent use of the emergency department; (2) reduce the number of days children miss school (or daycare) and parents miss work due to a child's illness and; (3) increase utilization of the book.

It was originally anticipated that CHIP would publish a report with outcomes from the B-4 Program, including reduced use in non-emergent visits to hospital emergency departments, reduced number of days parents missed work due to children’s illness, and reduced number of days children missed school/daycare due to illness. However, our program evaluation yielded a small sample size and limited analysis.

This document outlines the B-4 program design and recommendations for future implementation of the B-4 Program.

**II. B-4 Program Design and Outcomes:**

An Advisory Committee comprised of representatives from the Welcome Baby Program, UCSD Medical Center, UCSD Infant Special Care Follow-up Program, County of San Diego San Diego Kids Health Assurance Network (SD-KHAN), Kaiser Permanente and Community Health Improvement Partners, and a Curriculum Developer and Trainer began meeting in September 2007 to design the B-4 program.

Unlike other programs of this type, it was CHIP’s intent to provide these trainings to community based organizations at no cost. To accomplish this, CHIP used elements from several similar programs (United Way of Central West Virginia, a consortium of agencies in Kansas, and a teachers training manual developed by the authors of the WTDWYCGS book), secured funding from the First 5 Commission of San Diego and Grossmont Healthcare District, and assistance from an expert consultant (with experience in curriculum development and facilitating trainings).

CHIP trained staff from 21 community agencies to become B-4 “Master Trainers” (community agencies were chosen that were already hosting parent training sessions). Master Trainers received training materials, resources, incentives and regular updates throughout the course of the program. Parents were invited by the Master Trainers to attend a two-hour training on how to care for their ill or injured children. Parents were trained on how to use the “What to do When Your Child Gets Sick” book.
and basic skills, such as taking a child’s temperature accurately, administering medications appropriately, child safety, and childproofing the home.

The Program was evaluated through pre and post tests administered at each training, and three month follow-up surveys (the B-4 Program was granted UCSD Institutional Review Board (IRB) approval to collect personal information in order to conduct these surveys). Participants were asked questions related to health knowledge and behaviors, health care confidence, number of days of school/work missed, and use of the Emergency Department.

When the original plan to administer follow up calls fell through, a trained bilingual consultant was hired to administer the surveys. Participants were contacted through phone and email; at least three attempts were made to reach each participant.

Between September 2008 and January 2010, a total of 538 parents participated in the B-4 trainings. Of these parents, 138 (26%) were trained prior to IRB approval, and CHIP was therefore unable to include them in our three month follow-up evaluation activities. Of the 400 trained during the IRB Study period, 203 (51%) indicated they would be willing to participate in the follow up evaluation. However, only 191 (48%) provided sufficient contact information. Of these 191 parents, 109 could not be followed up with (69 parents could not be reached, 22 declined to participate, and 18 provided inaccurate contact information). The remaining 82 parents completed surveys via telephone or e-mail; however 6 parents did not provide enough information to link their follow up data with pre/post data. In addition, the consultant reported that some participants seemed reluctant to provide personal information to an unknown, male evaluation consultant. We were able to collect pre, post and three month follow-up evaluations from a total of 76 parents (14%).

Of the 76 parents, 58 reported lower rates of absenteeism; children were sick an average of 0.3 days and missed school 0.1 days; and parents had missed zero work days. While the three month evaluations reflected the anticipated program outcomes; the results should be interpreted with caution as we were only able to collect follow up information from 14% of the trained parents.
III. Recommendations

The small follow up sample size and associated study limitations encouraged us to examine best practices from the studies used to develop the B-4 Program (UCLA/Johnson & Johnson Health Care Institute Program, United Way of Central West Virginia and consortium of agencies in Kansas\(^1\)) to incorporate into the B-4 Program for future implementation.

Methods and procedures from the UCLA/Johnson & Johnson Health Care Institute Program include:

- The program was designed following the “diffusion of innovation theory”, which states that people adopt new information through their trusted networks\(^2\);
- Teaching recruitment, marketing, motivating, incentivizing and team-building strategies to community organizations in the Master Training Sessions;
- A portion of Master trainings are allocated for Master Trainers to create a Health Improvement Project (HIP) to encourage agencies to establish goals, objectives, outcomes and sustainability plans for the program.
- Includes hands-on education on how to correctly measure medication, use a digital thermometer and correct hand-washing techniques, among other things.
- Family Resource Advocates (FRA’s) administer: (1) a monthly pre-training parent interview for three months before the initial training and; (2) a monthly one-one-one follow up interview with parents for six months after the training session to reinforce the concepts taught in trainings and survey parents healthcare behaviors.
- Parents were offered incentives (e.g. transportation, on-site childcare and meals, health related produces and copies of the “What to do When Your Child Gets Sick” book to motivate their participation in the program.
- Incorporating a “graduation” and plaque for parents upon completion of the program. The graduation and plaque event is noted as a way to continue to instill confidence in parents.

Methods and procedures from the United Way of Central West Virginia Program include\(^3\):

- Parents received the book and training as a part of an on-going relationship with Parents as Teachers (PAT’s) home visitors.

---

\(^1\) In the fall of 2005, seven Kansas Head Start programs participated in a pilot of the UCLA Health Care Institute (HCI). The seven pilot programs were: Community Action (Topeka), Community Children’s Center (Lawrence), EOF Head Start (Kansas City), Olathe Head Start (Olathe), Project EAGLE (Kansas City), SEk-CAP Head Start (covering Allen County) and Sheldon Head Start (Topeka).


B-4: Boo-boos, Belly-aches and Bumps
Before you go to the doctor
What to do when your child gets sick
Train the trainer program

LESSONS LEARNED

- Interventions included a visit in the home by PAT’s to administer in-depth interviews before the training and monthly follow-ups for five months post training.
- Parents that participated in the survey were required to complete at least five home visits.
- Did not attempt to quantify cost savings.

Methods and procedures from the consortium of agencies in Kansas include:

- Addressed strategic project planning, marketing, staff motivation and practice parent trainings.
- Several of the programs offered transportation and child care; all programs offered incentives (ranging from computers, a washer/dryer, first aid kits for all families, and various raffle prizes).
- Parents completed pre and post-training questionnaires and at least one home visit to assess program effectiveness.
- Agency staff observed trainings and offered assistance to trainers by indicating which parents had literacy issues or needed additional assistance.
- English and Spanish trainings were held in separate groups
- At the time of the research, Kansas Head Start were beginning plans to partner with Kansas Health Institute to compare actual Medicaid data prior to and after the training.

IV. B4 Program Considerations:

Based on the best practices identified in the model studies and feedback from the B-4 Program Advisory Committee and CHIP Steering Committee, we recommend that the following be considered for future applications of the B-4 Program:

- Use different mechanisms to collect follow-up information, including capitalizing on established relationships and utilizing training agencies to follow up with families in person;
- Exploring the use of focus groups to collect follow-up information and;
- Designing follow-up protocol/aspects of the program specifically for each community (e.g. culturally appropriate, utilize community assets, (consider using promatoras/cultural experts) ;
- Limiting survey size and tracking participant health behavior for longer periods in order to gather a more in-depth analysis of the effectiveness of the program (including behavior change, use of Emergency Department and school/work absenteeism)
- Consider marketing components when designing the program.
- Modify curriculum for: CHIP Website; video trainings; one-on-one/small group trainings; and in conjunction with promatoras, social service work (e.g. Medi-Cal eligibility workers)

B-4: Boo-boos, Belly-aches and Bumps

Before you go to the doctor
What to do when your child gets sick
Train the trainer program

Lessons Learned

- Consider hosting annual/semi-annual refresher courses for community partners (would also need to determine funding for these courses).
- Shorten the surveys (including the follow-up survey)
- Include specific information on healthcare access (including how to use the healthcare system) and health literacy.

V. Next Steps:

The B-4 Program was popular among parents and successful in improving health care knowledge; we feel there is merit in continuing the program in an alternate format and/or through other community groups.

We are currently considering options for continuing the program, including investigating additional funding opportunities to provide support to Master Trainers/ participating organizations, exploring options for implementing B-4 through similar community based programs and determining if CHIP is the best organization to lead this project.

Please contact Beth Ruland, CHIP Program Coordinator, at bruland@hasdic.org for further information on the B-4 Program and future implementation plans.