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Acknowledgements

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INNOVATION HIGHLIGHT

Using Physician Champions to Extend the Reach of the Let's Go! 5-2-1-0 Obesity Prevention Program in Clinical Practice

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| Introduction: | There are limited large-scale interventions that address childhood obesity. Let's Go! is a Maine-based obesity prevention program that deploys a consistent message across multiple community settings to encourage children and families to make healthy choices. This report describes implementation of Let's Go! in primary care offices. |
| Methods: | Physician champions were recruited based on their previous involvement with Let's Go! and to ensure statewide geographic coverage. Champions received standardized training and became local leaders in obesity prevention and treatment. At baseline, 13 champions engaged 99 practices, and 71 practices were engaged for all 4 years (2012–2015). Data were analyzed on 46 of the 71 practices that completed surveys during all 4 years, representing 226 clinicians. |
| Results: | Achievement in three basic criteria increased from 39% in 2012 to 87% in 2015 ($p < .001$). Criteria included displaying program posters, documenting body mass index, and discussing healthy behaviors at well-child visits. |
| Discussion: | The Let's Go! strategy of engaging and supporting primary care practices resulted in widespread, standardized adoption of recommendations to prevent and treat childhood obesity. |
| Conclusion: | Physician champions have been effective in advancing childhood obesity interventions in Maine. This model could be applied to other public health problems requiring broad-based action. |
| Keywords: | children, obesity, prevention, primary care, physician |

Childhood obesity is a serious healthcare challenge that demands effective strategies for prevention and treatment.¹ Few long-term programs have been developed for an entire state that seek to broadly change health culture by working in multiple sectors of society simultaneously.² One such program is Let's Go!, led by The Barbara Bush Children's Hospital at Maine Medical Center in Portland, Maine. This program employs a statewide

community-based approach to improve eating and activity behaviors that impact weight.³

The Let's Go! model involves working with local partners to implement environmental and policy changes that increase opportunities for healthy eating and active living in multiple settings, including schools, child-care programs, out-of-school programs, and healthcare practices. The model also deploys a consistent message, 5-2-1-0, to encourage children and families to make healthy choices. The 5-2-1-0 mnemonic represents four evidence-based recommendations for daily healthy eating and active living: eat five (5) or more

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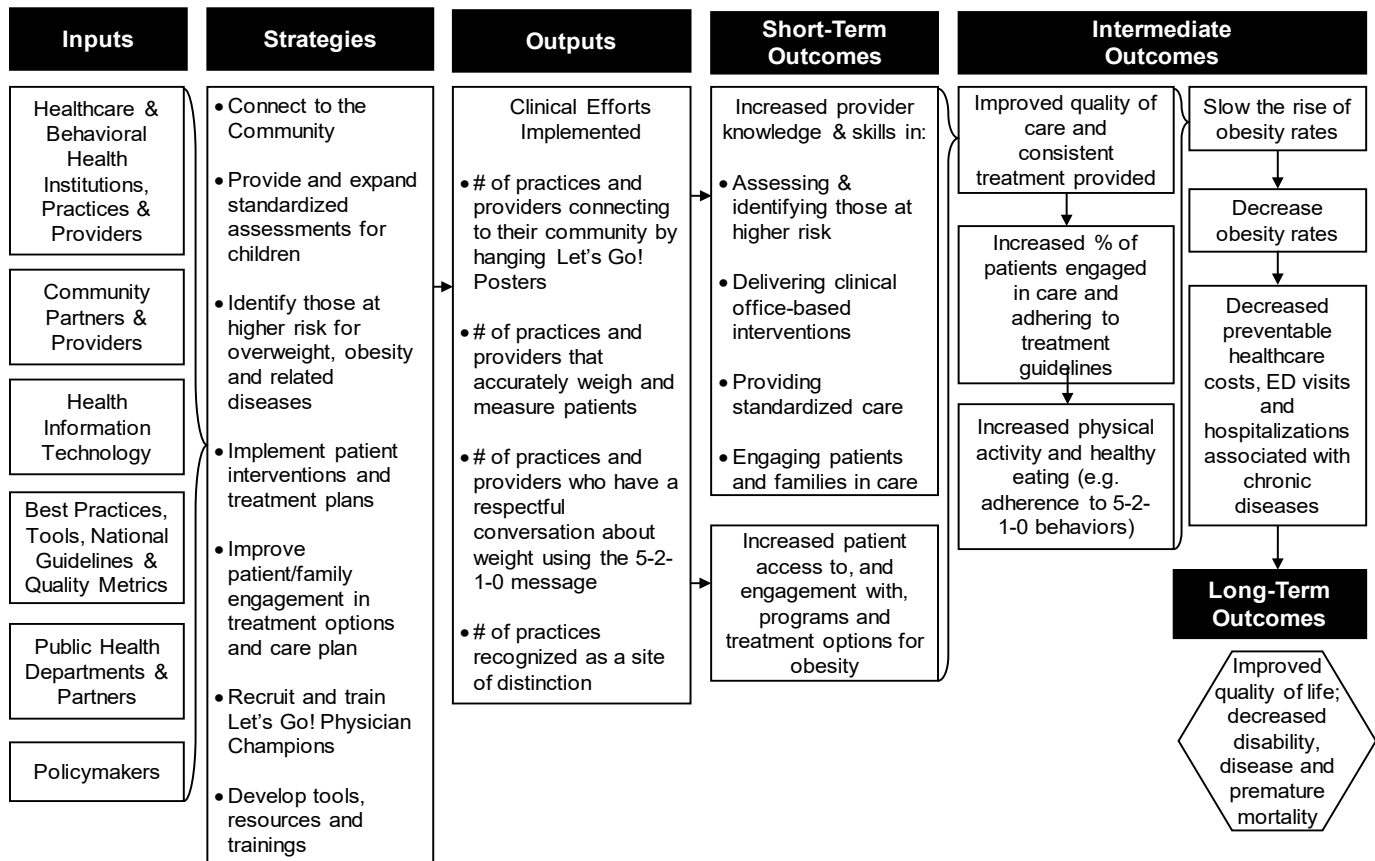


Figure 1: Let's Go! strategies in healthcare settings for decreasing childhood obesity.

servings of fruits and vegetables, limit recreational screen time to two (2) hours or less, engage in one (1) hour or more of physical activity, and drink zero (0) sugary beverages.^{4, 5}

As the program gained traction in the communities it served, Let's Go! extended the messaging and methods to as many primary care practices as possible while maintaining quality and efficacy. As a method to implement Let's Go! strategies in healthcare settings, we built on the well-established approach of using "champions" as agents of institutional change^{6,7} by defining the Let's Go! physician champion. This report describes a method for implementing Let's Go! strategies in healthcare settings using physician champions as one component of system change (Figure 1).

METHODS

The primary role of the physician champion was to assist healthcare practices in becoming recognized Let's Go! Sites of Distinction. This recognition is achieved by adopting three basic criteria: connecting to Let's Go! community efforts by displaying 5-2-1-0 posters, documenting body mass index (BMI), and

initiating a respectful conversation about healthy behaviors at well-child visits. The latter criterion was achieved with the Let's Go! 5-2-1-0 Healthy Habits Questionnaire, developed from evidenced-based recommendations embedded in 5-2-1-0 and motivational interviewing concepts involving patient reflection and self-guided goal setting. The questionnaire was intended to prompt discussion between child, parent, and provider about healthy behaviors. Two advanced criteria were encouraged and included seeing patients with elevated BMI in planned follow-up visits outlined by the American Academy of Pediatrics and Let's Go!⁸ (Table 1).

Physicians were recruited to be champions if they followed pediatric patients and had previously been involved with Let's Go!. Consideration was given to ensure there was geographic coverage throughout the state. Thirteen champions were recruited at the beginning of the project. A total of four hours of training was conducted in-person and by webinar with the goal of competency in using the Let's Go! healthcare toolkit and achieving recognition as a Site of Distinction. Training included an introduction to motivational interviewing, a strategy showing promise for reducing BMI in children.⁹ Champions

were expected to commit four hours monthly and received a stipend of \$1,000 annually to support their investment of time. Responsibilities included identifying up to ten practices in their region to work with Let's Go! and scheduling at least one outreach visit annually of one hour to at least five practices. Larger practices and those with a high percentage of Medicaid patients were prioritized. Site visits focused on education and technical assistance to achieve the three criteria. Champions were encouraged to work with Let's Go! community partners and provide leadership to hospitals interested in obesity prevention.

Let's Go! administered surveys each year (2012–2015) to assess implementation of the recommended strategies and satisfaction with the program. Practices reported on where the poster was displayed, the proportion of providers who documented BMI and used the Healthy Habits Questionnaire, and provider experience with Let's Go!. Study protocols were approved by the Maine Medical Center Institutional Review Board.

RESULTS

At baseline, 99 practices registered. Over the study period, 71 practices continued for all 4 years, 16 opted-out, 10 closed, and 2 merged with existing

practices. The study included 46 practices that completed all 4 surveys. The 46 practices reached 226 clinicians and over 90 000 patients across 7 of 9 Maine Public Health Districts, 12 of 16 Maine counties, and varying regions of rurality (36% to 100% rural). The study included family practices (50%), pediatric practices (39%), federally qualified health centers (7%), and multidisciplinary clinics (4%).

We used repeated measures with paired samples to analyze survey data and McNemar Chi-square test to evaluate effects of the intervention. We found statistically significant increases in the proportion of practices that achieved three basic criteria and one advanced criterion (Table 1). To determine physician satisfaction, practices rated their overall experience with Let's Go!. The proportion of practices providing the highest rating ("excellent") of their experience with Let's Go! increased significantly from 41% in 2012 to 83% in 2015 ($p < 0.001$).

DISCUSSION

Childhood obesity is a complex medico-social epidemic that strains the nation's healthcare and community resources. During our four-year reporting period, there was widespread, standardized adoption of strategies for healthcare practices to

Table 1. Practices Implementing Let's Go! Strategies ($N = 46$)

| | % Yes | | | |
|---|-------|------|------|------|
| | 2012 | 2013 | 2014 | 2015 |
| Basic Criteria | | | | |
| Let's Go! poster is displayed in waiting area and all exam rooms where pediatric patients are seen [†] | 46 | 80 | 89 | 98 |
| At well-child visits, all providers routinely have BMI determined for patients age 2 years and older [*] | 85 | 98 | 100 | 96 |
| At well-child visits, all providers routinely counsel on healthy eating and active living using the 5-2-1-0 Healthy Habits Questionnaire [†] | 67 | 87 | 87 | 89 |
| All three basic criteria ^{††} | 39 | 74 | 78 | 87 |
| Advanced Criteria | | | | |
| All providers routinely have discussion with patients/families about the result of the patient's BMI measurement at well-child visits [†] | 72 | 83 | 89 | 91 |
| All providers routinely use planned follow-up visits for more intensive treatment of patients with BMI > 85th percentile | 48 | 52 | 59 | 65 |

Change was considered significant when $p < .05$: * = 2012 to 2013, † = 2012 to 2015.

address childhood obesity. This work capitalized on the acute need for better solutions to obesity prevention and treatment within the healthcare community. Further, we had an advantage in our state of working with practices primed for engagement. Public health programs, including the Maine Youth Overweight Collaborative, laid a foundation of interest in and awareness of childhood obesity that mandated more rigorous solutions.⁴ Physician champions nourished the growth of the three basic criteria in offices by supporting initial implementation and directing sustainability of these efforts over time.

Empowering physician champions to support practices was essential. Support services included technical assistance and troubleshooting during implementation. Most practices had some challenges that prompted engagement from the champion. For example, there was concern about adding the Healthy Habits Questionnaire to the burden of already lengthy patient surveys. We worked with practices to streamline office flow, avoid redundancy, and, in some cases, integrate the Healthy Habits Questionnaire into the electronic health record. Some providers and staff were resistant to implementing change. Reasons ranged from conflicting beliefs and opinions about weight to concerns about value and time management. Champions were trained to manage these challenges, including encouraging offices to work as small teams before making changes practice-wide. Offices were encouraged to work collaboratively by integrating clinical and administrative staff. Busy providers more readily adopted the Healthy Habits Questionnaire when it was presented in a patient-centered way by administrative staff, rather than given to families without introduction in the milieu of other paperwork.

The second emphasis for physician champions was sustainability. Engagement required a long-term, practice-wide change with continued support from Let's Go!. It also required physician champions to visit practices in person at least once per year and maintain periodic communication. Some practices needed only one visit with minimal phone and electronic communication. Other practices requested as many as four site visits and monthly phone calls if they were having difficulty implementing change. When practices engaged with champions, they became members of a

learning community anchored at Let's Go!, which provided resources and education free of charge. Educational opportunities included bimonthly webinars on public health and medical topics, updates on obesity prevention and treatment delivered through social media, quarterly group calls, and a yearly Let's Go! National Childhood Obesity Conference. Finally, central leadership promoted sustainability that emphasized a culture of community. Let's Go! used a strategy with practices akin to motivational interviewing with patients and families: listening more and talking less. As a result, practices were better able to move forward in a direction meaningful to their patients, their staff, and the communities they served.

There are several limitations to our study. Data were obtained by self-reporting, and an observational assessment to verify reported outcomes was not performed. It is also difficult to determine how much change in use of BMI reported in this study can be directly attributed to Let's Go! efforts. Some practices may have increased adherence to using BMI because of adoption of electronic medical records. However, pediatricians with better access to community and adjunct resources are more likely to use BMI percentile.¹⁰ Also, use of respectful language around obesity was measured indirectly through implementation of the Healthy Habits Questionnaire, and direct observation of provider encounters was not performed.

Another challenge was obtaining completed surveys from practices. Although our survey response rate was 92% by the last year, our target was 100%. Some practices continued to use Let's Go! materials and strategies, but they did not complete their annual survey. There were no clear trends in nonresponding practices based on the type of practice or geographic location. Achieving recognition and awarding a certificate for public display in the practice was an incentive, but this effect on participation was not directly measured, nor was the efficacy of in-person visits compared to webinars or printed educational materials. Lastly, new practices enrolled during the four-year timeframe were not included due to the lack of a baseline assessment. Changing practice interventions aimed at addressing childhood obesity is challenging. This study showed that large-scale changes can occur by using physician champion models as one component of system change.

CONCLUSIONS

Using physician champions is an effective way to disseminate strategies for childhood obesity prevention and treatment in primary care. Our project demonstrates how connecting to community, measuring BMI, and engaging families in respectful conversations about health can be achieved at low cost across a statewide pediatric population in a way that is meaningful and satisfying to practitioners. Future efforts will include continued dissemination of the program across the state and development of more specific and intensive childhood obesity management and treatment strategies for primary care. The physician champion model could be applied to other crucial areas of need in public health, such as immunizations, oral health, or developmental screening.

Conflicts of Interest: None.

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