Championing Health Literacy in Integrated Care

Addressing the Challenge Through Needs Assessment and Outcomes Management

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Bergen's Promise

Background

Bergen's Promise is the Care Management Organization for Bergen County, NJ. The organization serves youth ages 5-21, with serious emotional and behavioral health challenges, substance abuse issues and developmental disabilities. Youth with chronic co-occurring medical health issues are served through an enhanced medical care coordination and health education component called the Behavioral Health Home (BHH).

During the planning phase of BHH, Bergen's Promise recognized the importance of assessing the health literacy of youth and families in order to deliver better-tailored interventions. Based on the definition of health literacy as the degree to which individuals have the capacity to obtain, process, and understand basic health information, disease prevention and interventions, addressing low health literacy is essential in achieving the program's goal of empowering families to better manage youths' health and wellness needs.[1] Therefore, BHH incorporated health literacy screening using the Newest Vital Sign (NVS) tool at enrollment and graduation as a component of the program's continuous quality improvement plan.[2] This project summarizes the prevalence of low health literacy in the youth and families served by Bergen's Promise BHH based on baseline screening scores at enrollment.

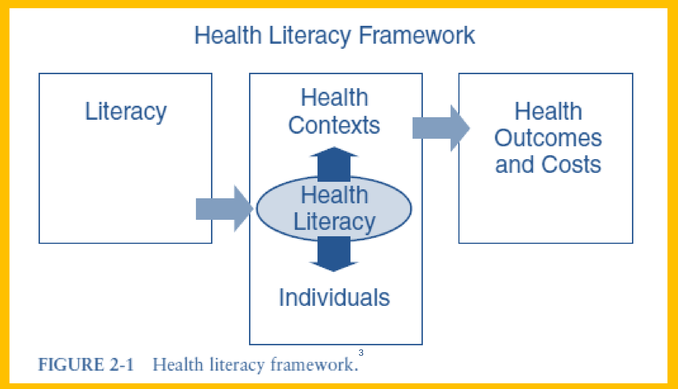
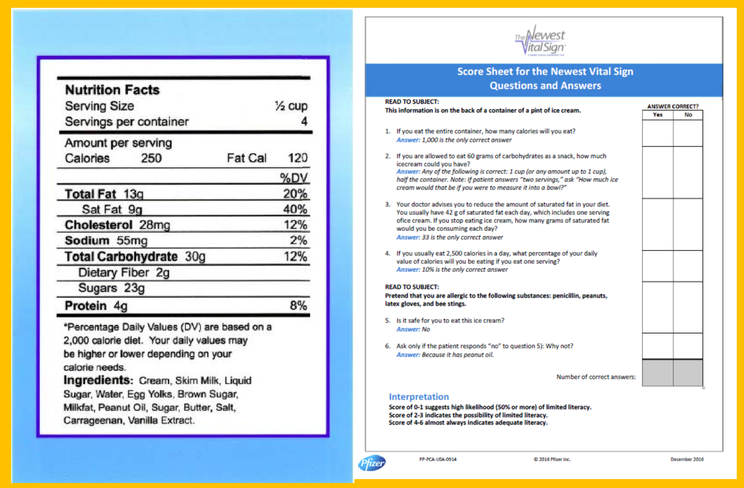


FIGURE 2-1 Health literacy framework.[3]

Methods

The sample population for this project was comprised of 88 youth and caregivers of youth receiving services from Bergen's Promise Behavioral Health Home (BHH). The NVS screening tool was administered with each family by a qualified Registered Nurse or Certified Health Education Specialist.

Baseline scores, collected between May 2015 and August 2017, were recorded in the youth's electronic health record. Screening scores were extracted and assessed, along with youth age, gender, and race/ethnicity to examine the prevalence of low health literacy in the BHH population.



Nutrition Facts

Serving Size	½ cup
Servings per container	4
Amount per serving	
Calories 250	Fat Cal 120
	%DV
Total Fat 13g	20%
Sat Fat 9g	40%
Cholesterol 28mg	12%
Sodium 55mg	2%
Total Carbohydrate 30g	12%
Dietary Fiber 2g	
Sugars 23g	
Protein 4g	8%

*Percentage Daily Values (DV) are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

Ingredients: Cream, Skim Milk, Liquid Sugar, Water, Egg Yolks, Brown Sugar, Milkfat, Peanut Oil, Sugar, Butter, Salt, Carrageenan, Vanilla Extract.

The Newest Vital Sign

Score Sheet for the Newest Vital Sign Questions and Answers

READ TO SUBJECT:
This information is on the back of a container of a pint of ice cream.

ANSWER CORRECT? Yes / No

1. If you eat the entire container, how many calories will you eat?
   Answer: 1,000 is the only correct answer
2. If you are allowed to eat 60 grams of carbohydrates as a snack, how much icecream could you have?
   Answer: Any of the following is correct: 1 cup (or any amount up to 1 cup), half the container. Note: If patient answers "two servings," ask "How much ice cream would that be if you were to measure it into a bowl?"
3. Your doctor advises you to reduce the amount of saturated fat in your diet. You usually have 42 g of saturated fat each day, which includes one serving ofice cream. If you stop eating ice cream, how many grams of saturated fat would you be consuming each day?
   Answer: 33 is the only correct answer
4. If you usually eat 2,500 calories in a day, what percentage of your daily value of calories will you be eating if you eat one serving?
   Answer: 10% is the only correct answer

READ TO SUBJECT:
Pretend that you are allergic to the following substances: penicillin, peanuts, latex gloves, and bee stings.

5. Is it safe for you to eat this ice cream?
   Answer: No
6. Ask only if the patient responds "no" to question 5): Why not?
   Answer: Because it has peanut oil.

Number of correct answers:

Interpretation
Score of 0-1 suggests high likelihood (50% or more) of limited literacy.
Score of 2-3 indicates the possibility of limited literacy.
Score of 4-6 almost always indicates adequate literacy.

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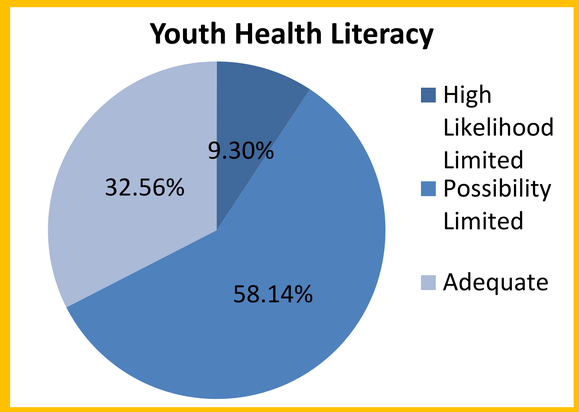
Descriptive statistics were utilized to summarize the population and score trends. Regression analysis was used to explore the association between NVS score and youth demographics.

Results

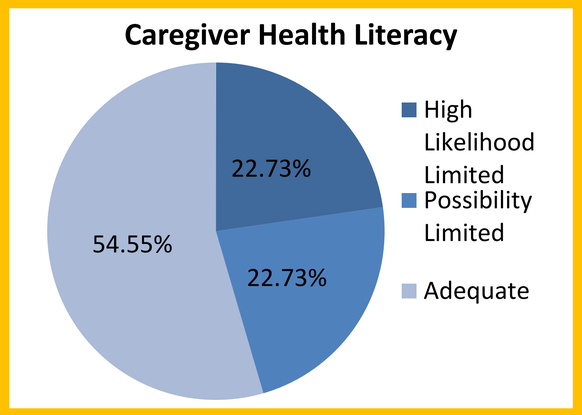
Youth screening results

- Mean NVS score of the 44 youth respondents was 3.14
- 9.30% of youth had a high likelihood of limited health literacy (scores 0-1)
- 58.14% had a possibility of limited health literacy (scores 2-3)
- 32.56% had adequate health literacy (scores 4-6)



Caregiver screening results

- Mean NVS score of the 44 caregiver respondents was 3.14
- 22.73% of caregivers had a high likelihood of limited health literacy (scores 0-1)
- 22.73% had a possibility of limited health literacy (scores 2-3)
- 54.55% had adequate health literacy (scores 4-6)



The regression analysis identified a statistically significant correlation between African American race and lower NVS scores (p=0.003 for youth, p=0.03 for caregivers).

Implications

Overall, this project demonstrated that approximately 45.5% of caregivers, and 67.4% of youth in the population of families working with Bergen's Promise Behavioral Health Home have low, or the possibility of low, health literacy. The results also indicated that low health literacy may disproportionately impact those who identify as African American. The prevalence of need in the caregiver population is comparable to that reported in previous studies; the need amongst youth is higher than previous findings.[4]

The results of the current needs assessment suggest that there is a significant need for education and resource allocation to help youth and families develop improved health literacy skills.

Bergen's Promise BHH is taking action to address this need. Registered Nurses and Certified Health Education Specialists provide skills education and tools to help families navigate the healthcare system. BHH staff consider guidelines for clear communication when creating health education resources for families.[5]

Bergen's Promise BHH also assesses health literacy as youth and families graduate from the program. As more data is compiled, results of these follow-up assessments will be compared to baseline data to explore whether the program is effectively addressing the identified need.

Based on the present findings, it is recommended that Bergen's Promise, along with similar agencies providing integrated care services, conduct health literacy screening with all youth and families served. This population has frequent encounters with both the behavioral and physical healthcare systems and will benefit from additional support to address low health literacy and promote improved health and wellness.

References

[1] U.S. Department of Health and Human Services. (2000). Healthy People 2010 (2nd ed.) [with Understanding and Improving Health (vol. 1) and Objectives for Improving Health (vol. 2)]. Washington, DC: U.S. Government Printing Office.

[2] Weiss, B. D., Mays, M. Z., Martz, W., Castro, K. M., DeWalt, D. A., Pignone, M. P., Mockbee, J., & Hale, F. A. (2005). Quick Assessment of Literacy in Primary Care: The Newest Vital Sign. Annals of Family Medicine, 3(6), 514–522. doi: 10.1370/afm.405

[3] Nielsen-Bohlman, L., Panzer, A. M., & Kindig, D. A. (Eds.). (2004). Health literacy: a prescription to end confusion (Rep.). Washington, DC: The National Academies Press.

[4] Paasche-Orlow, M.K., Parker, R.M., Gazmararian, J.A., Nielsen-Bohlman, L.T., & Rudd, R.R. (2005). The prevalence of limited health literacy. Journal of General Internal Medicine, 20(2), 175-84. doi: 10.1111/j.1525-1497.2005.40245.x

[5] United States, Centers for Disease Control and Prevention., Office of the Associate Director for Communication. (2014). CDC clear communication index: a tool for developing and assessing CDC public communication products-user guide.