A Step-by-Step Guide











Scans

Using the
Healthy Hospital
Food,
Beverage,
and Physical
Activity
Environment



Contents

Introduction	3
Getting Approval	4
Next Steps: What do you do with the information from the scans?	4
Food and Beverage Environment Scan: Cafeteria	7
Food and Beverage Environment Scan: Vending Machines	12
Physical Activity Environment Scan	14
Appendix A: Healthier Cafeteria Criteria	17
Appendix B: Healthier Salad Bar Criteria	19
Appendix C: Healthier Vending Criteria	20
Frequently Asked Questions	21
Resources	23
Acknowledgements	25
References	26

Introduction

Hospitals are employers and providers of health care; thus, they have a role to play in establishing model environments that encourage healthier eating and physical activity. Hospitals have considerable potential to influence health-promoting behaviors among their employees, patients, visitors, and residents of surrounding communities. The reach of hospitals is substantial. Every year, hospitals across the United States serve more than 6.3 million employees and 481 million outpatients and visitors who may use the cafeterias and vending machines.^{1–3}

his guide to conducting hospital environment assessments complements procurement guidelines and resources previously released by the Centers for Disease Control and Prevention (CDC).4-6 This guide promotes healthier food, beverage, and physical activity environments in hospitals for employees and visitors by describing a step-by-step process for conducting environment assessments by using a paper-and-pencil scan. Environment assessments can help determine the availability of healthier options, as well as determine a baseline from which changes can be tracked over time with repeated assessments. The food, beverage, and physical activity environment assessment scans that accompany this guide are located here. In addition, the document <u>Creating Healthier Hospital</u> Food, Beverage, and Physical Activity Environments outlines critical steps in changing environments, including assessments, strategies, and evaluation.⁷

Human resources, nutrition service, and public health staff can use this guide, the accompanying environment assessment scans, and the change package to determine how a hospital can better support healthier food, beverage, and physical activity choices. Other champions for wellness among hospital staff and those wishing to partner with hospitals to improve local environments may also find this tool kit useful.



Structure

The food and beverage portion of this guide builds on the Nutrition Environment Measures Survey (NEMS) Restaurant and Stores surveys and the NEMS-Vending survey.^{8–10} This guide accompanies the food and beverage environment scan, which can help assess the options for healthier food and beverages within hospitals. The food and beverage environment scan examines the use of strategies to promote healthier food and beverage choices for employees, outpatients, and visitors. For example, the placement of water or fruits near the point-of-purchase, or at eye-level in stalls or refrigerated units is identified as a means of promoting those foods as

easy and healthier choices. The food and beverage environment scan includes worksheets to assess:

- Cafeterias
- Vending machines

This guide also accompanies a physical activity environment scan that builds on the Checklist of Health Promotion Environments at Worksites (CHEW).¹¹ This scan can help assess the options for physical activity within hospital environments, as well as interventions to promote activity, such as through signage and promotions, and includes worksheets to assess:

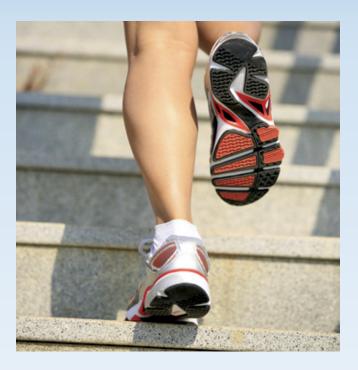
- Stairs
- Walking trails
- Fitness centers
- Classes and programs

The food, beverage, and physical activity venues can be scanned independently or in combination with one another.

The food and beverage environment scan includes some sample standards of healthier food and beverage criteria, which are provided in Appendices A (Healthier Cafeteria Criteria), B (Healthier Salad Bar Criteria), and C (Healthier Vending Criteria). These criteria are examples, and users can select different criteria, as needed, for their specific venues. Examples of other criteria are listed in the Resources section.

Getting Approval

Before conducting an environment scan, you should discuss the purpose and objectives of the work you will do with your team and all stakeholders, including hospital leadership. Environment scans generally do not gather identifiable data that can be related to individuals. However, you should address any identifiable data issues with the relevant leadership of all involved stakeholders. Specifically, ensure that the leadership in the hospital you are working with supports your work.



Next Steps: What do you do with the information from the scans?

Once you have conducted the environment scans and collected your data, you can use that information to develop strategies to promote healthier choices. These strategies include the use of media, access, pricing, and promotion.¹² For each of these strategies, a rationale for their use is presented with an example below. Other strategies, such as the 4 P's of Marketing, are similar and have been used, for example, to promote healthier vending choices.¹³ Further resources are available that outline additional steps in changing environments, including assessments, change strategies, and evaluation.⁷ Combining these strategies can be effective at promoting healthier choices.¹⁴

Media and Communications

Rationale: Effective and prominent use of media and communication modes can guide individuals about healthier food, beverage, and physical activity choices. The use of media may influence an individual's awareness of healthier foods and beverages and the rationale for why changes

are being made. This may, in turn, increase an individual's selection of healthier choices.

Examples: Use the hospital intranet or Web site to advertise the availability of healthier options in the cafeteria and to motivate individuals to make healthier choices. Similarly, Web campaigns encouraging the use of stairwells for physical activity may influence an individual's decision to use the stairs rather than an elevator.

Access

Rationale: Strategically increasing access to healthier choices may make it easier for individuals to select healthier foods and beverages and engage in physical activity.

Examples: Increase the selection of healthier items, such as healthier snacks and meals and fruits and vegetables, in your cafeteria to make those options as accessible and prominent as possible. Similarly, offer a variety of options, such as walking trails and groups and fitness classes, to make physical activity an easier choice.

Price

Rationale: Selling healthier food and beverage items at a similar or lower price than less healthy options can be an effective incentive for healthy eating. Similar reasoning may apply to providing low-cost or free physical activity options.

Examples: Provide healthier meals or snacks in the cafeteria at lower prices than less healthy options. Provide on-site fitness opportunities or partially subsidize off-site club membership for employees.

Promotion, Point-of-Decision, Point-of-Purchase, and Placement

Rationale: Supplying consumers with nutritional information about healthier options at the point-of-decision can influence decisions. Providing healthier



options at the point-of-purchase may also make them more likely to be chosen. The manner in which healthier choices are promoted and placed may play an important role in individual decisions.

Examples: Provide calorie labeling on all food and beverage items where they can be understood and easily seen at the points of decision and purchase. At the point-of-purchase, make healthier options, such as snacks, more visible and easily available. Place healthier items, such as water, at eye level. Similarly, place signs for stairwells and walking trails in positions that can influence the decision to use those options.

Social Supports and Services

Rationale: Providing social networks or support groups may facilitate an individual's effort to engage in and sustain healthier choices and behaviors. Furthermore, in the hospital work site setting, insurance benefit structures and plans may facilitate this type of support.

Examples: Employee benefits may offer discounts at on-site farmers markets or on-site walking clubs. Facilitate the development of support groups to promote healthier food and beverage choices and physical activity, such as walking clubs.

Environment SCans

Preparatory considerations

If the person conducting the environment scan is not a hospital employee then permission should be obtained from the management to inspect the building and the grounds. Establishing a hospital contact can help gather information. It may be useful to establish contacts in the nutrition services because there may be specific information required from nutrition or food service workers about questions, such as the price of food items. Ideally, two or more people should complete the scan for a more objective view. Individuals using the scan are encouraged to use the comment fields to collect additional relevant information. This information may be important when reviewing any conflicting answers among data collectors. Depending on the venue, it may take from 30 minutes to an hour to complete the assessment.

The team and relevant stakeholders should agree on the choice of venues or buildings to assess (e.g., determining which cafeteria or stairwell to scan). For example, if there is a strong interest in improving vending machine choices, you may choose to assess all of the vending machines in the hospital. Another group may be interested in choosing sites that reflect areas where improving physical activity options could have a high impact. This is usually the main hospital building and neighboring grounds, including walking trails and fitness centers. Many of these determinations can be made in assistance with the appropriate hospital representative.

The next few pages will provide guidance about using the environmental scan tools and offer

answers to questions that may arise. It is important to read through these pages carefully so that the scan can be completed as accurately as possible.

Cover Page

(1) If your organization is only assessing one hospital, you can simply write the name of the hospital on the top of the form and skip the hospital ID coding.

(2) If your organization is assessing more than one hospital, you may want to identify each hospital by using some type of coding function. Below are some possible codes that you could use for this purpose. You can also use this information for benchmarking or comparing hospitals.

Use the information that was gathered in preparation to fill out the 'Hospital ID' on the cover page of the scan. This ID is created by entering the following:

- The 2-letter state abbreviation in the first two boxes.
- The location code in the 3rd box (0 = urban, 1 = rural, 2 = suburban).
- The type of hospital code in the 4th box Type: 0
 = Tertiary; 1 = General; 2 = Specialty-Children's;
 3 = Specialty-Geriatric; 4 = Specialty-Surgical;
 5 = Psychiatric; 6 = Women's health-OB/
 GYN; 7 = Community; 8 Federal; 9 = Other (Specify: e.g., rehabilitation, trauma).
- The number of employees (not including residents or students) code in the
 5th box (0 = <1,000; 1 = 1,000-3,000; 2 = 3,000-5,000; 3 = >5,000).

- The number of beds code in the 6th box (0 = 1-100; 2 = 101-300; 3 = 301-500; 4 = >500).
- An abbreviation of the hospital name.

For example, for a hospital in state XY, in a suburban setting, specializing in geriatrics, with 2,000 employees and 300 beds, and whose abbreviated name is AB, would be coded as XY-2-3-1-2-AB. If you are using this identifier, enter this Hospital ID on each page. There is space provided to provide comments or actual numbers of employees and beds.

If you are not using the identifier system above, you may simply write the hospital name on the top of each page of the scan.

- (3) Create a rater ID for each person(s) conducting the scan. These can be any set of numbers or letters that can be maintained to identify different raters. Enter this number into the rater ID boxes on each page.
- (4) Enter the date (MM/DD/YY) on each page.
- (5) Enter the start time of the scan. When the entire scan is completed, enter the end time.

The times you enter will be the overall start and end times, (i.e., the start time will be the beginning of the scan, and the end time will be that of the last venue you finish). If you are only scanning a single venue, (e.g., the cafeteria), then your times will correspond to the scan times of that single venue. This information may be helpful in evaluating the environmental scan and planning for future scans by providing estimates of time required to complete the scans.

- (6) Sites visited. Check off which venues will be visited as part of the scan.
- (7) Once you have completed entering information, check the Completed Page box. Checking this box on successive pages, when appropriate, may help you track your completion of the scan.



Food and Beverage Environment Scan: Cafeteria

Information Page (p4)

(1) Enter the start time of the cafeteria scan. When completed, enter the end time.

If you are only assessing the cafeteria, these times will correspond to those entered on the cover page.

- (2) Enter the number of cash registers.
- (3) Use the Data Sources section to capture information on the following:
- **a.** Is nutrition information, such as calories per serving, provided on a large display or menu board?
- b. Is there a system to identify healthier items in the cafeteria? This includes the use of icons, color codes, or marketing ('heart-healthy picks'). Specific nutritional criteria may also be used.
- **c.** Is there a printed brochure? (e.g., at the entrance to the cafeteria, on tables or elsewhere). Brochures can be hanging brochures, table tents, or printed materials that can be taken by consumers.
- **d.** Does the brochure include nutritional information (e.g., calories/serving)?
- e. Is there a brochure or information on the Internet or intranet? You may need the assistance of a hospital employee or wellness staff to gather this information.
- **f.** In the comment sections, note important observations. For example, if healthier items are

identified with a specific system (like heart-healthy), but without a description of the nutritional criteria behind the system, you can comment on this.

(4) Indicate in the box provided for Hours of Operation the regular opening and closing times for typical weekdays and typical weekend days. In the space provided for comments, report on any significant information, such as times that the cafeteria is not available or closed.



Facilitators and Barriers (p5)

Identify any and all signs, displays, table tents, or other ways by which the cafeteria environment identifies healthier food and beverage items.

- (1) For Question 1, include any healthier food and beverage promotions. Comment on any specific messaging (e.g., heart-healthy or light). These promotions may be general (i.e., the items promoted *do not* have to meet the criteria in Appendix A).
- (2) Determine if any less healthy food choices, such as fries, pies, or double cheeseburgers, are advertised, or if there is any encouragement of overeating (e.g., super sizing, all you can eat).
- (3) The Feature of the Day meal is defined as a meal plate that must include a protein, a fruit or vegetable, and a grain serving. This could be the same as a Main Entrée or Dish. If this is a difficult item to assess, you should plan with your team how you will select the Feature of the Day. For example, you may choose to assess the cafeteria's main hot entrée line. Include comments as to how you chose your selection and why.

- (4) Identify any other pricing or promotion strategies for healthier food and beverages not already identified (e.g., farmers markets, coupons). You may need the assistance of a hospital employee or wellness staff to gather this information.
- (5) Open comment field: Determine and comment on whether there is evidence of wellness promotion in the cafeteria. For example, flyers for weight loss programs on the bulletin board, or wellness brochures or pictures in the cafeteria related to wellness.

Grab and Go (p6)

For the Grab and Go section, assess high-volume food and drink stalls or coolers. You may determine the availability of individual items, their prices, and whether they are located near the *point-of-purchase* (POP). In this section, as elsewhere, the POP is defined as being within 5 feet of the cashier line.

For each item, a default healthier choice has been provided by using specific criteria. Include the name of an alternate healthier choice that meets those criteria only if the default is unavailable. You do not have to list all the healthier varieties; you can note the total number of healthier brands.

You will also note the total number of varieties or options for each category of item (healthier and less healthy). You may use this information to determine the proportion of shelf space devoted to healthier items (defined as the number of slots or shelves devoted to a healthier item divided by the total number of slots or shelves that include the healthier item and a comparable less healthy item). In some instances you will also note the serving size provided.

In this section, as in others, round up or down to the nearest whole number when documenting portion sizes; (you may comment on the actual size in the comment section). You should comment on portion sizes that are available; (i.e., if serving portion size is advertised but not stocked, do not record this item—use the comment section to document information for the unavailable option).

Include stalls and displays near the entrance of the cafeteria, the main area of the cafeteria, or the POP. Choose the stalls that are more likely to be used by patrons in the cafeteria; the hospital nutrition services contact you established earlier may be able to help you determine this. If you are not a hospital employee and need help finding these areas, then ask your hospital employee contact for guidance. For some items, such as the price of a particular item, you may have to ask nutrition services personnel or a cashier for information.

If a shelf is empty, then mark the corresponding items as unavailable, and provide additional comments in the provided section.

Fruits and Vegetables

- 1. Note the availability, price per item, POP location, and total number of varieties of fruits and vegetables. You may have to ask the cashier for the price of some items. If there are multiple kinds of fruits and vegetables, then enter the most common price.
- 2. For mixed items, such as fruits and nuts, determine if they meet the criteria in Appendix A. Some items, such as vegetables with cheese dip or special sauce, may not meet criteria. If the nutritional criteria are not met, then do not count it in the number of varieties. If you cannot determine if the nutritional information includes the added sauce or flavoring (even after asking for information), then you should not include it in the total number of varieties, and provide a comment. In addition, comment if items are not priced the same. On the scan, indicate the most common price.
- 3. Include any additional information related to fruits and vegetables in the comments section.

Cereal

- 1. For the cereal-related questions, healthier cereal items are defined as having less than 7 grams of sugar per serving. The healthier cereal proportion is defined as the number of slots or shelves devoted to the healthier item divided by the total number of slots or shelves (i.e., the healthier item plus all other cereal items).
- 2. For example, you may use plain Cheerios as the default healthier cereal choice. If Cheerios is unavailable, and there is a different healthier choice, include its name under the "Alternate name" heading.
- 3. Use a flavored Cheerios as the regular cereal option (>7 g sugar/serving), or the corresponding alternate (include name).
- 4. Note the availability, serving size, and location (i.e., POP or otherwise). In addition, note the total number of varieties of all healthier cereal options. You can provide comments on the actual serving size in the space provided.

Chips

- 1. For baked chips, use less than 3 grams of fat per serving as the healthier item criteria. For example, Baked Lays Potato Chips may be a default healthier option. If this is not available, note any alternate healthier baked chip choice that is used as the default.
- 2. The corresponding regular chip (>3 g fat/serving) is Lays Potato Chip Classic, or the respective alternate (include name).
- 3. Proceed with your assessment in a similar fashion to that for the cereal section.

Milk

1. For the milk section, use pint-sized (16 oz), unflavored non-fat milk (skim) as the default healthier option. If non-fat is not sold, use 1% milk as the default choice. If pint-sized milk servings are unavailable, make a note of this, and proceed to the next largest available size.

- 2. The regular milk option will be either 2% or whole milk.
- 3. Determine whether or not the milk options are above the waist level of the reviewer or not. Proceed with the price of each item, its availability, and proportion of skim—1% compared with total milk space.

Soda

- 1. Use Diet Coke as the default healthier soda option. Note any alternate diet soda choice that is used instead of the default; if this is the case, choose only one alternate choice as the default. Review the shelves to determine the most common size. Please note the serving size and provide comments in the space provided.
- 2. The corresponding regular soda is regular Coke, or the respective alternate (include name).
- 3. Determine whether options are displayed above the reviewer's waist level. Proceed with determining the price of each item, location, the total number of varieties, and the proportion of diet soda space relative to total soda space.
- 4. Do not include an assessment of sports or energy drinks in this section.

Juice and Other Beverages

1. Use 100% juice as the default option. If not available, then note the name of the less than 100% regular juice drink that is provided in the comment section. If 100% vegetable juice is available, then that can be used as the default, as well, but note it in the appropriate comment section. In addition, include 100% fruit and vegetable juices when determining the proportion of 100% juice offered relative to the total juice drink space, and make notes in the comments section. The default serving size for 100% juice is 6 oz; the default for fruit drinks is 15 oz. You should comment on any other serving size that is offered as the default. Determine the availability, price, and placement above waist level for each item.

2. You may wish to collect optional information on other types of drinks, including unsweetened tea, sweetened tea, flavored drinks, and sports drinks. A criterion for healthier options for these drinks may be less than 50 calories per 15 oz container.

Fountain Drinks and Water

- 1. Proceed to the fountain drink station, and determine the number of healthier options, as well as the total number of all options for soda, juice, and tea. If an item is not available, then check N/A, and provide comments. If other drink items are provided next to the fountain drink station, such as coffee without added sugar or cream, then you may include those under the category of *Other*.
- 2. Indicate whether free refills of fountain sugar drinks or sweetened tea are available.
- 3. Indicate if free drinking water is available, either at the fountain drink station, an independent water dispenser, or as a separate water fountain or jet. Note that some water stations may be located immediately outside the food purchase area, for example, in the dining area of the cafeteria.
- 4. Is there a charge for obtaining cups or glasses for free drinking water? If yes, then comment on the price, and whether there is a price if customers bring their own cups or bottles. This may require the assistance of a hospital employee or nutrition services staff. You may also comment on whether the hospital offers a recycling or re-use program for water bottles.
- 5. Comment on whether the free drinking water stations, if applicable, were operational at the time of your observation.

Menu Review (p11)

For the menu review section, include the grill, hot bar, salad bar, and any appropriate areas other than the grab-and-go sections that align with your objectives. For all items, determine the availability, total number of choices, and number of healthier options, (as determined by criteria in Appendix

A or other similar criteria), and add any relevant comments. If nutrition information is not available, then work with cafeteria staff to determine nutrition information. Choose a time of day that is relevant to the purposes of your scan; for example, conducting a scan during 11:30 am to 1 pm may capture a time that can affect a large number of costumers.

Because there may be multiple menu options, you should decide with your team ahead of time which menus you will review. For example, your assessment may include one hot entrée line and the salad and burger/sandwich bars. If there are multiple team members conducting assessments, then it is important that they use the same assessment plan to help maintain internal validity. As your work progresses, you may choose to evaluate other menus within the cafeteria that meet your overall objectives.

As stated before, the healthier options in the menu review should meet criteria in Appendix A, or other criteria that your team has selected. If you cannot find the required nutritional information on a particular item, then count it as *undetermined*, and include it in the total count while providing a comment.

If nutritional information is provided, but the food or beverage item serving sizes are not specified, (i.e., the nutritional information is for a single serving size, but the prepared item may be more than one serving size), then ask for assistance. If you are still in doubt, then do not count that item as healthier; (you may use the comment section accordingly).

- (1) The Main Dish/Entrée is defined as a meal plate that includes protein, fruit or vegetable, and a grain serving.
- (2) For the grill station, count each type of burger separately. For example, for a grill station with beef burgers, chicken burgers, and veggie burgers, you would count three different burgers regardless of the types of toppings or dressings. For the default

burger, you should count only those burgers that meet nutritional criteria (Appendix A) and that come without less healthy toppings, (such as salted products or extra cheese).

- (3) When counting vegetables and whole grain starches, (such as brown rice, whole wheat pasta), only count those that are cooked without added cheese, butter, or other heavy oils or sauces.
- (4) Determine the number of soups that are *not* cream-based.
- (5) Determine the availability of a salad bar, and indicate whether healthier salad bar options are labeled by using the 'Go, Slow and Whoa' system in Appendix B or another system (note in comments). In addition, indicate the number of healthier options that are available. Then count the total number of healthier salad dressings, (i.e., low-fat or fat-free dressings).

Menu Pricing

Use the menu definitions provided here to determine the price of healthier options relative to comparable food options. For example, you may rate the price of a healthier main entrée to a regular entrée. You can provide comments, as relevant, to serving size or other aspects.

Point-of-Decision and Point-of-Purchase (p13)

Use this section to determine if nutritional information is provided at the point-of-decision (POD) (e.g., on the menu board or at a food stall) POP (within 5 feet of the cashier).

(1) If specific nutrition information is not present, or it does not meet the criteria in any of the appendices, make note of this. You may make note of what type of nutritional information is provided (e.g., calorie, sodium, or trans-fat content per serving).

- (2) Select the appropriate response option to indicate if nutritional information is posted for all healthier items, some healthier and less healthy items, or all items regardless of whether they meet nutritional criteria or not.
- (3) Determine if less healthy items are located at the POP and the approximate number (e.g., the number of shelves devoted to less healthy chip choices, slots given to regular soda).
- (4) Indicate the methods of counting used in the comments section.



Food and Beverage Environment Scan: Vending Machines

To assess vending machines, consult with your team and, if indicated, your hospital employee contact to determine which cluster of machines you will scan. In general, you should choose a cluster that includes both food and beverage vending machines and that provides services for a large number of employees, visitors, and patients. This may be on the main lobby level, or just outside the cafeteria. Alternatively, you may wish to assess vending machines on patient floors. Make a note of where you conduct your vending machine scan and why. If it is allowed, then you may choose to take pictures of the vending machines to help tally options and double check answers later. You may also want to assess the most heavily used machines on the basis of sales data.

Information Page (p14)

- (1) Indicate the location of the vending machines you are scanning. If you are not conducting a vending scan, or there are no machines available, select N/A.
- (2) Enter the start and end times of your vending machine scan.
- (3) Indicate if healthier items are identified in the machines.
- (4) Identify if any system is used to identify healthier items in the machines. These healthier items may or may not meet the nutrition criteria listed in Appendix C. Include information in comments.

Food Vending Machine(s) (p15)

Begin this portion of the scan by identifying the number of food vending machines in the cluster. You may refer to the *Healthier Vending Criteria* in Appendix C for specific criteria, or use the criteria used by the facility you are surveying.

- (1) Determine if specific items in the vending machine(s) are identified as healthier. These may include specific nutrition criteria. When in doubt, ask for assistance from nutrition services, or classify an item as less healthy, and provide a comment. For example, a regular chips item may be placed in a slot labeled as meeting healthier vending criteria, but if you suspect it has been misplaced, ask for assistance, or classify it as less healthy.
- (2) Determine the presence of signs or displays of foods that encourage less healthy choices. For example, a bag of regular chips or candy would indicate a less healthy choice. In addition, comment if such signs, displays, or images are in the vicinity of the vending machine(s), but not on them. When in doubt, classify a sign, display, or image as *undetermined*, and provide a comment.

- (3) Determine whether there are displays or images that depict a healthier food choice (e.g., fruits, vegetables, bag of baked chips). Comment if such displays or images are in the vicinity of the vending machine(s), but not on them. When in doubt, classify a sign, display, or image as *undetermined* under Question 3, and provide a comment.
- (4) Determine if there are any signs in the vicinity of the vending machine(s) that promote healthier food choices as part of a wellness or benefit program.
- (5) Use Appendix C to count the number of food items that fall into each category. If nutritional criteria are not available, ask a nutrition services representative for assistance in gathering that information. You could also list the items and research the nutrition information online. Taking a picture of the vending machine may help you in assessing the items. Alternatively, if the vending machine items are classified by using any of the systems listed in the *Resources* section, you may use that system for determining counts. Non-nutritive items include items such as candy and chewing gum.
- (6) Determine if baked chips are available that meet the *Healthier Vending* criteria. Provide the serving size in ounces (oz) or grams (g), and the price. Do the same for a comparable bag of regular chips. If there are no items, select N/A.
- (7) Determine if nutritional information is posted on or near the vending machine(s), and be sure to include here whether that information is provided for all items, only healthier items, some less healthy and healthier items, or not at all. Furthermore, identify what nutritional information is provided (e.g., calories, trans-fat, or sodium content/serving). If nutritional information is available elsewhere, provide that information. For example, if the items are classified by using a particular rating system, then you may indicate you gathered the information from a brochure or the Internet.

Beverage Vending Machine(s) (p17)

Identifying the number of beverage vending machines. You may refer to the Healthier Vending Criteria in Appendix C.

- (1) Determine if specific items in the vending machine(s) are identified as healthier. These may include specific criteria.
- (2) Determine the presence of signs or displays of beverages that encourage less healthy choices; an example would be an image of a less than 100% juice drink. When in doubt, classify a sign, display, or image as less healthy and provide a comment. In addition, comment if such signs, displays, or images are in the vicinity of the vending machine(s), but not on them.
- (3) Determine whether there are displays or images that depict a healthier beverage choice (e.g., water, unsweetened diet soda, 1% milk, 100% fruit or vegetable juice). Comment if such displays or images are in the vicinity of the vending machine(s), but not on them. When in doubt, classify a sign, display, or image as less healthy, and provide a comment.
- (4) Determine if there are any signs that promote healthier beverage choices as part of the wellness or benefit program.
- (5) Use Appendix C to quantify the number of beverage items that are healthier. In addition, count separately the number of *healthier* beverage slots that are empty or sold out. Do the same for the total number of beverage slots, regardless of criteria.
- (6) Provide a detailed count of the number of slots or buttons dedicated to each beverage type. In addition, list the serving size amount in ounces and the price. If not available, please select N/A, and provide a comment.

If 100% vegetable juices are available, include their quantity, proportion, price, and serving size, or other relevant information in the comment section.

Sports drinks are flavored beverages predominantly marketed as a means of hydration and contain carbohydrates, minerals, and electrolytes, (product examples include Gatorade * or Powerade*). Energy drinks usually contain non-nutritive stimulants (e.g., caffeine or guarana) and differing amounts of carbohydrates and minerals, (product examples include Java Monster* and Red Bull*). Sports drinks and energy drinks should not be used interchangeably.

(7) Determine if nutritional information is posted on or near the vending machine(s). Be sure to include here whether that information is provided for all beverages or otherwise. Furthermore, identify what nutritional information is provided (e.g., calories, trans-fat, or sodium content/serving). If nutritional information is available elsewhere, provide that information. For example, if the items are classified by using a particular rating system, then you may indicate you gathered the information from a brochure or the Internet.

Physical Activity Environment Scan

The questions in the physical activity environment scan are meant to capture aspects of the built environment that promote physical activity among employees and visitors. This assessment is divided into sections covering (1) stairs, (2) grounds and physical activity areas, (3) transportation and parking, (4) walkability, and (5) a wellness program. In each of these instances, you may choose to identify stairs, walking trails, or other areas of the grounds that may influence physical activity behavior in a large number of employees or visitors.

Fill out the Cover Page (p3) according to the instructions above.



Buildings and Grounds Assessment (p4)

Stairs

For each of the stairs questions, check 'Yes' or 'No' if it describes the site you are visiting. For example, if a staircase is openly visible (i.e., not located in a stairwell, or behind doors), then mark 'Yes.'

- Identify facilitators and barriers to stair usage. For example, if stairwell doors are visible from the main entrance, then this can facilitate stairwell usage. Conversely, if stairwell doors are marked as *restricted*, then this may be a barrier and detract from stairwell usage.
- When identifying signs that promote stairs or stairwell usage, you should identify those signs that influence employees or visitors at the point of decision, (i.e., these signs should be located at or near the stairs). Sometimes these signs may be located at elevator banks to encourage stair usage.

Grounds and Physical Activity Centers
For the grounds assessment questions, focus
on open space or grassy areas that are large
enough to use for physical activities, such as
sports, walking, or lead to places where one could

engage in those activities. These activities may be part of organized programs, or completely voluntary on the part of employees or visitors.

- If needed, ask a hospital employee guide or contact for further guidance, if needed. If the grounds are shared by multiple hospitals or buildings (e.g., a laboratory center, a library), choose the section of the grounds that the employees and visitors of the hospital you are visiting are most likely to use.
- Identify, if possible, marked paths that guide employees or visitors to walking trails or areas for physical activity.
- Determine whether the walking paths and open areas are safe. That is, look for any concerns, such as construction areas or high traffic zones that might be barriers to physical activity.
- You will likely make your observations in daylight. However, try to determine if the grounds have the capacity to be well-lit (i.e., functional lights are well-placed). If this cannot be determined, check N/A.

If there is a fitness center, answer sections 2b. If not, skip to 2c. If you are not a hospital employee or do not have access to the fitness center, you may need to contact a hospital employee who does.

- Note the hours of operation of the fitness center, and take note of any other information in the comments section. For example, if visitors from the community or patient referral programs are eligible, then include this information.
- Note the total number of cardio machines (e.g., treadmills, ellipticals, bikes). In addition, note the condition of the machines and the overall environment.
- Next, evaluate the shower and changing room facilities. Determine their availability, and select the appropriate answer.
- For 2c, comment on signage and promotions that promote physical activity for employees or visitors. Examine the bulletin boards as you go around the hospital. You may need

- guidance from a hospital employee to locate these. At each bulletin board, examine postings for notices that encourage physical activity or advertise group classes. Do not assess signs related to movement safety at work, only those that are related to promotion of physical activity.
- In addition, determine if there are other promotions, (e.g., e-mail lists or intranet information for employees, or special flyers for outpatients that might not be captured by bulletin boards. If you are not a hospital employee, you might request this information from your contact.

Transportation and Parking (p7)

- Determine if there are bike racks available and the total number of bike slots. These are usually near the main hospital entrance, parking lot entrances, or other high-volume entries.
- Indicate the number of bikes parked in the racks by using the descriptions provided.
- Proceed from the parking lot, and determine the walking distance from there to the nearest hospital entrance. Are there signs that promote parking further away and thereby increasing the walking distance for physical activity? Indicate these findings in the scan. In the Comments section, include any unique features that increase walking.
- Is the hospital located near public transit, such as bus or subway stops or bicycle trails? Are there promotions encouraging employees or patients to use public transit and then to walk the intervening distance?
- Are there other promotions, including listservs, intranet, or mailings to encourage biking or walking to the hospital? You may need to talk with a human resources representative to determine this.



Walkability Assessment (p8)

- You may wish to obtain or create, if necessary, a map of the campus or area around the hospital, including any walking trails or likely pedestrian destinations, such as parking lots, nearby restaurants, shops, parks. If you are not a hospital employee, you may be able to obtain such maps from your hospital contact or the human resources personnel.
- Either by observation of walking trails or inference, decide the most useful or likely pedestrian route(s) between each location of interest on your map. You may select one or more of these routes for your assessment. Once again, if several team members are conducting the assessment, then make sure you discuss your plans ahead of time.
- You may decide to take notes on any map you obtain, as well as on your scan. Use the walkability section to rank each feature, (i.e., pedestrian facilities, pedestrian conflicts, such as where pedestrians come in contact

- with vehicles whe n crossing the road), crosswalks, walking path maintenance (e.g., if there are obstacles to walking on the path), path size, buffers, and aesthetics by using the description provided in the scan.
- If you have chosen more than one walking path or trail to assess, repeat the above step for each segment of your map.

 In the Comments section, provide any observations about the walkability or connectivity to the neighboring community. Connectivity relates to how readily and easily the campus and community are interlinked. This may include purely recreational options, such as a walking trail or pedestrian destinations (e.g., stores and public transit).

Wellness Program (p10)

Determine how the wellness program promotes employee or visitor and patient physical activity. To gather a full description, you may need to briefly interview hospital human resources or wellness staff. Be sure to include strategies to promote activity, including incentives and important policies (e.g., walking meetings, paid physical activity time, free pedometers). Answer questions with yes, no, or if unable to determine, don't know. Enter any additional comments in the comment field.

Appendix A Healthier Cafeteria Criteria

These criteria are meant to classify food and beverage items as healthier for the cafeteria. For each food or beverage item, or meal course, specific recommendations for nutritional content, including total calories, calories from fats and sugars, and sodium per serving, are provided. Your facility may wish to review other criteria to use. Please see the reference section for additional resources.

ltem	Nutrional Content
Main entrée	Identified as healthful item on menu or package OR ≤800 calories ≤10% of calories from saturated fat Trans fat = 0 g Sodium <900 mg
Burgers/ Sandwiches	Identified as healthful item on menu or package OR ≤650 calories ≤10% of calories from saturated fat Trans fat = 0 g Sodium <900 mg
Side item	Identified as healthful item on menu or package OR (side items may also be reviewed under the fruit or vegetable sections) (e.g., green beans, applesauce) ≤250 calories per item ≤10% calories from saturated fat Trans fat = 0 g Sodium <480 mg
Featured Meal of the Day (combination of protein, fruit/vegetable, and whole grain)	dentified as healthful item on menu or package OR <800 calories/meal ≤10% calories from saturated fat Trans fat = 0 g Sodium <900 mg
Salad entrée	Salad contains ≤2 high-fat ingredients (i.e., items contain ≥50% calories from fat, excluding nuts and avocados) and must have low-fat, fat-free dressings. Dark green vegetables include mustard, turnip, collard greens, romaine, spinach, and broccoli. (Iceberg lettuce does not meet this criteria.), OR if there's nutrition information: ≤800 calories ≤10% of calories from saturated fat

ltem	Nutrional Content
Soup	Identified as healthful item on menu or container OR ≤225 calories per 8 oz ≤10% calories from saturated fat Trans fat = 0 g Sodium <800 mg
Fruit	All fresh fruits or canned fruit in water or 100% juice (includes unsweetened applesauce)
Vegetables	All fresh, steamed, or cooked without additional sauce Sodium ≤230 mg/serving
Snack/Dessert	If items are packaged— Bread: 100% whole wheat/whole grain <230 mg sodium Cereal: ≤10 grams of sugar/serving >3 g fiber <200 calories per serving ≤35% calories from total sugars ≤10% calories from saturated fat Trans fat = 0 g Sodium <400 mg (Includes low-calorie gelatin/pudding cups)
Beverage	Diet soda, water, 100% fruit juice, unflavored skim or 1% milk, low-calorie beverages (≤40 calories per serving)

Appendix B Healthier Salad Bar Criteria

The following classification uses a red-yellowgreen system to determine if salad bar items are healthier or not. These criteria are similar to those of the Iowa Department of Health NEMS-V Healthy Salad Bar Initiative.⁹

Rating	Salad Bar Item
Green Go	Green leafy vegetables Spinach
	Iceberg lettuce Whole or sliced fruit
	Whole or sliced vegetables
	Canned vegetables or beans packed without added salt
Yellow Slow	Canned vegetables with added salt
	Canned beans with added salt Olives
	Nuts (plain or with spices)
	Seeds (plain)
	Avocado or guacamole
	Lean meat
	Meat alternative
	Hard-boiled eggs
	Low-fat or fat-free dressing Dried or dehydrated fruit
	Dried of deflydrated fruit
Red Whoa	Lunch meat
	Bacon
	Sausage
	Sour cream
	Cheese Croutons or crispy noodles
	Regular dressing
	Any other item that does not meet Green or Yellow criteria

Appendix C Healthier Vending Criteria

The following classification uses a red-yellow-green system to determine food and beverage items in vending machines that are healthier or not. These criteria are similar to those of snack items listed in

Appendix A. In addition, the Nutrition Environment Measures-Vending tool (Iowa Department of Health)⁹ and the Snackwise[®] Nutrition Rating System¹³ have been adapted for the purposes of this scan.

Rating	Snacks/Foods	Beverages
Green Go	Fruits, dried or fresh (no added sugar or syrup) Vegetable, not fried (no added sauces) Whole nuts or seeds (no added salt or sugar) that meet Green calorie and fat criteria ≤200 calories per portion as packaged <10% of total calories from saturated fat 0 g of trans fat ≤35% of calories from total sugars Yogurt: <30 g of total sugars/8 oz. serving <230 mg sodium (Na)/serving Meals ≤480 mg sodium/serving	Water 100% fruit or vegetable juice Skim milk (unflavored) 1% milk (unflavored) <40 calories/serving low- calorie beverages Diet soda
Yellow Slow	Fruit or vegetable, not fried that does not meet Green criteria, but meets Yellow criteria ≤250 calories per portion as packaged <15% of total calories from saturated fat 0 g of trans fat ≤35% or less of calories from total sugars <600 mg sodium (Na)/serving	2% milk (unflavored) <50 calories/serving beverage
Red Whoa	Does not meet the criteria listed above	Whole milk Regular soda All other beverages that do not meet criteria listed above
Other/Non-nutritive	Gum or candy	N/A

Frequently Asked Ouestions

How have other hospitals used these assessment scans?

These scans are based on scientific studies and tools that have been tested and used in a wide variety of settings. The hospital assessments themselves have also undergone reliability testing.¹⁷ A small group of hospitals from across the United States conducted ease-of-use and feasibility testing. These hospitals found the scans useful in engaging their leadership (e.g., using presentations or 1-page summaries) and for changing their environments.

We are a Children's Hospital. Should we be considering eye level or waist level to be the child's level or the adult's level?

Because it is generally the adults who purchase the items for the child, using the adult eye or waist level is reasonable.

Our cafeteria has several stations, including a hot station, a grill station, a deli station, and a salad station. How do we decide which station we should review for the scan?

You can decide to survey one area or all of the areas. You may wish to have one reviewer assess the hot station and the other reviewer assess the grill station. Be sure to note the information in the comments section. It may be most important to survey the area with the largest use.

If we are scanning the Deli Bar, how do we calculate healthier options? We have chicken and roast beef, which are okay, until the person adds cheese and mayonnaise?

Only non-red meats (i.e., turkey and chicken) and vegetarian options should be counted as healthier. Furthermore, non-fried turkey or chicken should be counted as healthier. Meats mixed with mayonnaise (e.g., chicken salad) should not be counted as healthier. Count each option separately, and then determine the proportion of healthier options. For example, if the deli station has turkey, chicken, roast beef, veggie, and ham sandwiches, the total proportion of healthier options would be 3/5, regardless of the types of toppings that are available. For further information, please visit please visit NEMS.

How can I assess the food items in the vending machines to see what category they fall into, since I can't see the label on the back of the package?

Some people have used their cell phone cameras to take pictures of the items, then looked them up on the internet.

My hospital has multiple cafeterias. Which one should I survey?

One option is to choose the cafeteria with the highest customer volume. Another option would be to survey the cafeteria that might have more ability to change. The hope is that after you have surveyed your hospital's cafeteria, you may want to work together with the stakeholders to determine a plan of action to make changes; so it is often more advisable to work with the facilities that you can affect more

I need more help in understanding what would be healthier options in the Grab and Go section?

In the Grab and Go section close to the registers, healthier options could include low-fat granola bars, small bags of seeds or nuts, baked chips, dried fruit or nut mixes, and apple sauce.

What do I do if my partner reviewer and I had very different responses to some of the survey questions?

This is why it is so important to include comments. Additional information provided in the comment section can usually help you determine where any confusion might have been. It may be helpful for both reviewers to go back and check the item in question and reach a consensus.

Does this scan tool assess whether my facility is following the HHS/GSA Food Service Guidelines?

This tool does not directly measure the HHS/GSA Food Service Guidelines. However, the tool is consistent with the guidelines.

My hospital has completed the assessment, now what? What are the next steps?

One important part of using the environmental assessment is to have a discussion with your stakeholders and partners about what your plans are to use the data. Some hospitals have presented the results of the assessment as a presentation or 1-page informational sheet to the hospital leadership as a

call to action to make changes. Some hospitals have gotten together to work with the cafeteria staff to determine ways to improve the offerings. On page 5 of this document, you will find a listing of strategies you can employ to make improvements by using the information from your scan.

I am having trouble understanding how my hospital currently promotes physical activity before my team can even begin to make recommendations on how to improve practices. Where should I begin?

If you haven't already, you should contact a representative from your hospital. This may be a human resources representative or an employee champion. These individuals may be able to give you insight into what is currently available or ideas for what might be improved for employees or visitors.

Our stairwells are accessible, but are unattractive. What could the hospital do to improve the appearance and encourage use of the stairs?

Some facilities have painted the stairwells, added carpet, and sometimes pictures and music. You could create Plexiglas frames and use artwork from employees or their children to brighten the walls. Adding signs promoting stair use at elevators can also be a way to encourage use of the stairs. See the Resources section for some examples.

For the physical assessment, how many different trails or walkways should be reviewed for walkability?

This is a good question to ask your partners. You may want to start with the trails or walkways that are most commonly used.

Resources

Creating Healthier Hospital Food, Beverage, and Physical Activity Environments: Forming Teams, Engaging Stakeholders, Conducting Assessments and Evaluations

This document describes a step-by-step process to hospital environment change from stakeholder engagement to environment assessment and evaluation. Available here.

Healthy Hospital Choices

This document summarizes the proceedings and results of an expert panel convened by CDC in August 2010 on hospital environment change, and is available here.

Healthy Hospital Practice-to-Practice Series (P2P)

This P2P Series presents case studies of hospitals improving their environments to better support the health of their employees and embody the mission of their organization, and is available here.

Concessions and Cafeterias: Healthy Food in the Federal Workplace

In 2010, HHS and GSA began a collaboration to create the Health and Sustainability Guidelines for Federal Concessions and Vending Operations. The goal of the guidelines is to assist contractors in increasing healthy food and beverage choices and sustainable practices at federal work sites.

By applying the 2010 Dietary Guidelines for Americans to food service operations, these guidelines demonstrate HHS' and GSA's commitment to promoting a healthy workforce. Resources are available here.

The Network for a Healthy California-Worksite Program: Ordering Farm Fresh Produce for Worksites

This tool describes how to use community supported agriculture or private companies to deliver fresh fruits and vegetables to a workplace, and is available here.

Healthy Food Environments Pricing Incentives

This resource describes how a practice-tested pricing incentive policy intervention helped to increase the availability, visibility, and affordability for employees in a hospital system in North Carolina. Core elements, required resources, and an implementation plan are described, and the document is available here.

Kaiser Permanente Cafeteria Menu Labeling Intervention

This resource describes how an intervention focusing on stakeholder engagement and a menu-labeling pilot in 5 hospital cafeterias was implemented. The patron response and evaluation led to the dissemination of the intervention to 35 hospitals in 3 states, and is available here.

Snackwise® Nutrition Rating System

The Center for Healthy Weight and Nutrition at Nationwide Children's Hospital provides a useful snack rating system that can be used in assessments, and is available here.

Healthy Vending Guide

Nemours Health and Prevention Services developed a Healthy Vending Guide tool using the Go-Slow-Whoa system for rating items in the machine. The tool also discusses the 4 P's of Marketing as it applies to vending machines, as well as including cheat sheets for determining snack items that meet the criteria. Sample policies are also included, and are available here.

Healthy Salad Bar Initiative

The Iowa Department of Health has adapted the Nutrition Environment Measures Survey for Vending Machines (NEMS-V). A system for rating healthier salad bar items is available here.

Steps to Wellness: A Guide to Implementing the 2008 Physical Activity Guidelines for Americans in the Workplace

This guide provides ideas and suggestions to incorporating physical activity into the workplace by using the 2008 Physical Activity Guidelines for Americans available here.

StairWELL to Better Health

This CDC initiative provides useful information about steps to take to make stairwells promote physical activity and health.
Resources, including sample signage and a checklist, are provided and available here.

Point-of-Decision Prompts for Stairwell Use

This document provides information about how to use prompts as a low-cost and effective way to increase the use of stairwells in the workplace, and is available here.

Acknowledgements

The hospital food and beverage environment scan was adapted in part from the following sources with permission from the corresponding authors:

Glanz K, Sallis JF, Saelens BF, Frank LD. Nutrition environment measures survey in stores (NEMS-S). *Am J Prev Med*. 2007;32(4):282-289.

Saelens BE, Glanz K, Sallis JF, Frank LD. Nutrition environment measures study in restaurants (NEMS-R). *Am J Prev Med*. 2007;32(4):273-281.

The hospital vending machine scan was adapted in part from the following source with permission from the corresponding author:

lowa Department of Public Health. Nutrition environment measures survey-vending. Available at http://www.nems-v.com/index.html Accessed June 1, 2014.

The hospital physical activity environment scan was adapted in part from the following source with permission from the corresponding author:

Oldenburg B, Sallis JF, Harris D, Owen N. Checklist of health promotion environments at worksites (CHEW): development and measurement characteristics. *Am J Health Promot*. 2002; 16(5): 288-299.

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