

NCCOR Student Resources Guide

ACCELERATING PROGRESS TO REDUCE CHILDHOOD OBESITY





ABOUT NCCOR

Launched in 2009, the National Collaborative on Childhood Obesity Research (NCCOR) brings together four of the nation's leading research funders—Centers for Disease Control and Prevention (CDC), National Institutes of Health (NIH), Robert Wood Johnson Foundation (RWJF), and the U.S. Department of Agriculture (USDA)—to accelerate progress in reducing childhood obesity in America.

What are NCCOR's tools?

Measures Registry Resource Suite

The **Measures Registry Resource Suite** encompasses three tools relevant to childhood obesity research and evaluation.

- The **Measures Registry** is a searchable database of nearly 1,400 diet and physical activity measures relevant to childhood obesity research. nccor.org/measures
- The **Measures Registry User Guides** walk users through the process of using the Measures Registry to select appropriate measures. nccor.org/mruserguides
- The **Measures Registry Learning Modules** highlight key concepts from the four domain-specific Measures Registry User Guides in 5 to 15-minute videos. nccor.org/mrmodules

Youth Compendium of Physical Activities

The **Youth Compendium of Physical Activities** provides a list of 196 common activities in which youth participate and the estimated energy cost associated with each activity. nccor.org/youthcompendium

The Youth Compendium provides energy cost values for:

- Sedentary activities, such as lying down or watching TV
- Standing, doing household chores, and playing active video games
- Playing and participating in games and sports activities
- Walking and running

Catalogue of Surveillance Systems

NCCOR's **Catalogue of Surveillance Systems** provides easy to navigate, one-stop access to over 100 publicly available datasets relevant to childhood obesity research and evaluation. nccor.org/css

Datasets profiled in the Catalogue include information on obesity-related topics:

- Health behaviors, outcomes, and determinants
- Policies and environmental factors

Student Q&A

7:00



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Why should students use NCCOR's tools?



They're free, easy to use, and save time by providing easy access in one centralized location! Work efficiently and effectively knowing these tools are created by reputable experts in the field.



How can these tools help me in my classes or on my projects?



These resources can assist you in selecting the most appropriate measures or datasets. 📊 These are handy for thesis 📝 or capstone projects where you can:

- Conduct systematic reviews and meta analyses
- Develop a childhood obesity intervention
- Compare surveillance systems and datasets
- Evaluate a health promotion program



What types of undergraduate and graduate programs can use these tools?



Students in all types of programs can benefit from these tools, including Master's and PhD programs in public health 🏥, nutrition 🥗, exercise physiology 🏃, and epidemiology, as well as dietetic, nursing, and medical programs.



Measures Registry Resource Suite



STUDENT CASE STUDY

Evaluating the Impacts of a Produce Prescription Program on Overweight and Obesity Among Pediatric Patients

BACKGROUND

For your capstone project, you and a team of MPH students started working with a clinic that recently adopted a produce prescription program. Before implementing the program, the clinic wants to develop an evaluation plan to demonstrate the effectiveness of the program on improving patients' diet. Your team is tasked with evaluating the program. Which measures should your team select for this evaluation?

CONSIDERATIONS

One key consideration is the limited resource availability at this community clinic. The pediatricians are already limited to short patient visit times, and the clinic staff does not have extra time or financial resources to support a lengthy evaluation. Another consideration is how to best measure changes in diet among pediatric patients. Some children will be too young to report on their food intake, and parents will be responsible for accurately reporting their child's behaviors. Children who can report their own behaviors may be limited by reading comprehension level, attention span, or inaccurate recall and reporting.

HOW TO USE THE MEASURES REGISTRY

- 1 To narrow down potential choices, your team selects "Individual Dietary Behavior" from the Measures Registry filter options.
- 2 Since the evaluation will take place at the clinic during patient visits, you enter "clinic" into the search box to further narrow the available tools.
- 3 Considering the limited patient visit time, your team decides to select "Questionnaire" to find a short questionnaire that can be administered in-person.

To accommodate the range in both patient ages and abilities to accurately complete a questionnaire, your team opts for a questionnaire that a family member or caregiver can complete for the patient. Based on these criteria, the "Key Eating Behavior Survey" and "HABITS Questionnaire" would both be useful for rapidly assessing dietary habits. Ultimately your team selects the "HABITS Questionnaire" (Wright et al. 2012) since this measure has validity and reliability estimates, is only 19 items, was developed specifically for use in a clinical setting to measure weight-related dietary habits, and is available directly in the Measures Registry.

Youth Compendium of Physical Activities



STUDENT CASE STUDY

Evaluating Caloric Expenditure of an Afterschool Program

BACKGROUND

As a part of your practicum course, you are working with a local afterschool program to evaluate physical activity programming and make recommendations. The program includes 30 minutes of free time where the children can choose from several activities including basketball, soccer, jump rope, dance, and computer time. You would like to know the average number of calories the children use during free time so you can learn to what extent the program helps children reach the recommended amount of daily physical activity. You use the Youth Compendium of Physical Activities to report which activities were associated with higher METy values.

CONSIDERATIONS

To determine total calorie expenditure, you first need to calculate the Basal Metabolic Rate (BMR) which is a function of weight and sex. You use the CDC growth charts to determine find the 50th percentile weight of an 11-year-old male and female.

HOW TO USE THE YOUTH COMPENDIUM

- 1 Open the Youth Compendium of Physical Activities and click on the green "Search the Compendium" box.
- 2 From the top navigation, select "METy Values (Smoothed)."
- 3 Use the search box to look up the METy for each activity and find the following for ages 10-12:

| | |
|---------------|----------|
| Basketball | 6.2 METy |
| Soccer | 5.6 METy |
| Jump rope | 7.1 METy |
| Dance | 4.1 METy |
| Computer work | 1.5 METy |

- 4 To calculate total energy expenditure, select "How to Access & Use These Data" from the top navigation. This page provides the equations to calculate BMR and total energy costs.
- 5 After the comparing the values, you report to your class the activities associated with higher METy values.

Catalogue of Surveillance Systems



STUDENT CASE STUDY

Implementation of State Laws Governing School-based Nutrition and Physical Activity

BACKGROUND

You are interested in the association between state laws regulating school-based nutrition and physical activity and actual school practices. For your capstone project, you want to investigate if schools report nutrition and physical activity related practices more frequently in states with laws requiring such practices.

CONSIDERATIONS

1 What data do you need to answer this question?

You will need two sets of data because you are searching for an association between two different factors. One dataset should have information regarding state laws and the other should have information regarding school practices. You will need to identify data sets with common geocodes (state identifiers) to link both sets of data.

2 How do you ensure you're comparing the same thing?

You are aware that state legislation requiring nutrition

education time might manifest itself in several ways, and the laws may differ by grade level. The schools may have specific courses related to nutrition and/or a requirement for nutrition education. You will need to confirm that what the schools are reporting matches the legislation.

3 What about policy lag, i.e., the time it takes for a policy to be implemented fully?

You decide you must account for this time difference when linking state law data to school practice-related data.

HOW TO USE THE CATALOGUE OF SURVEILLANCE SYSTEMS

After weighing your considerations, you are now ready to use the Catalogue. Go to nccor.org/css.

1 **Filter the database** by selecting “macro/policy” level and “state” scope. This will narrow the surveillance systems to a more manageable number.

2 **Compare the surveillance systems** by selecting several systems and clicking Compare.

- 3 Select one system** to see an overview including key variables measures, the population, geocodes. For this project you've decided to use data from "Classification of Laws Associated with School Students (C.L.A.S.S.)", which provides information on laws related to diet and physical activity, coded by school level and geocoded on a state level.
- 4 Reset the filters**, this time selecting "school" level and "state" scope. From the results, you decide to use the "School

Health Profiles." This dataset provides information related to middle and high school diet and physical activity and geocodes on a state level.

- 5** Now that you have both datasets, you're able to compare laws and the school health profiles. You're now ready to do your analysis to see if there are any trends accounting for the considerations listed above (i.e., policy lag time).



Additional Resources

SIGN UP FOR THE NCCOR STUDENT HUB!

Our quarterly student e-newsletter connects you to free tools and resources that can support your schoolwork and research! Each newsletter will feature a case study of a student using one of the tools and will also share other childhood obesity events and resources.



nccor.org/e-newsletter (Be sure to select student!)



CONNECT & EXPLORE WEBINARS

NCCOR connects the field to emerging issues and findings through the Connect & Explore webinar series. Nationally acclaimed experts are featured on each webinar to discuss current issues in childhood obesity research. The interactive series attracts participants from across the country, offering an opportunity to engage in dialogue with leading experts in the field, ask questions, and understand the nuances of research, policy, and evaluation.

nccor.org/webinars

FOR MORE INFORMATION ON NCCOR AND TO CONNECT ON SOCIAL MEDIA:

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**DO YOU WANT TO BE FEATURED
IN NCCOR'S STUDENT MATERIALS?**

Tell us how you have used our resources
and you might see your work in our case
studies, webinars, or the student hub!

email: NCCOR@fhi360.org



www.nccor.org



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National Institutes of Health (NIH)

Robert Wood Johnson Foundation (RWJF)

U.S. Department of Agriculture (USDA)

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