



Purpose: To identify the most cost-effective, beneficial public health measures

Activity at a Glance

- Activity type: Debate
- Age range: Middle school–adult
- Number of players: Four or more
- Duration: 30 minutes
- Space: Tables
- Facilitation: Required to introduce and process the activity
- Preparation time: 15 minutes

Overview

Every team receives 15 cards, each of which lists a healthcare option and its cost. The challenge is to design a healthcare system costing no more than \$500 million that keeps the largest possible number of people healthy. Teams review the 15 healthcare options and select the set they think will maximize the public health benefit while staying within their budget. The full group reconvenes, discusses each healthcare option, and devises a healthcare program that satisfies the challenge.

Core Concepts

- Public health specializes in preventive health care, protecting a population's health before people get sick. Treatment-based health care helps individuals after they have become ill.
- Good nutrition and clean water are important building blocks for a healthy life.
- Preventive health measures, such as vaccines and vitamins, help people avoid becoming sick.
- Preventive health care is less expensive on a per-person basis than treatment-based care.

Materials

One worksheet and set of cards per team. (Optional: calculators, pencils, scrap paper)

Preparation

For each team, print a set of cards and a worksheet. Cut the cards apart.

continued

Procedure

1. Tell players they are serving on a committee that advises the World Bank about how to fund a public health program in a (fictitious) country in the developing world. Their task is to recommend how to allocate \$500 million in the coming year to keep the largest possible number of people healthy.
2. Divide the group into teams of two to four players. Give each team a worksheet and set of cards. Have them read the descriptions of the challenge and the country on the worksheet.
3. Give the teams 15 minutes to review the cards and select the set of healthcare options they think will maximize the public health benefit without exceeding the budget allocation. Teams can choose as many (or as few) of the options as they wish, as long as they stay within their budget. (*NOTE: In this game, the “cost” assigned to each healthcare measure is fictitious, but it tries to reflect the cost of materials and the transport, delivery, and dissemination of the interventions, education, or materials.*)
4. Reconvene the group and tell them that each person will be speaking for himself or herself, rather than for their team. Use the following procedure to learn how the group rates each healthcare option:
 - On a board or a large piece of paper, make two columns. Label them: a) Should be part of this public health program and (b) Should not be part of this public health program.
 - Read one of the cards aloud.
 - Ask the group to assign this healthcare option to one of the columns.
 - Have individuals with opposing views explain their positions. At the end of the discussion, have the whole group vote (by majority rule) on where the option belongs. Write the title of this card and its cost under the appropriate heading.
 - Repeat with the remaining cards.
5. Once all 15 cards have been categorized, tally the total cost of the healthcare options in the “Should be part of this public health program” category.
 - If the cost is more than \$500 million, have the group remove some items until the total healthcare expenditure is \$500 million or less.
 - If the cost is significantly less than \$500 million, have the group add some items into the “Should be part of this public health program” column until the total healthcare expenditure is nearly \$500 million.
6. Discuss the following questions:
 - Which public health measures are the most important? Why? (*Good nutrition and clean water are important building blocks for a healthy life. In addition, because women play such a central role in the health of the family, many public health experts say that educating women about caring for their children and teaching them the importance of seeking out healthcare is a vitally important investment.*)
 - What are some differences between public health care and treatment-based health care? (*Public health care is devoted to preventive care—protecting people’s health before they get sick. Treatment-based healthcare happens after a patient has become ill.*)
 - How do the per-person costs of public health care and those of treatment-based health care compare? (*Public health care is less expensive on a per-person basis.*)

INVESTING YOUR MONEY WISELY Game Cards

Cut out cards along dotted lines.



Nutrition

Fact: Being adequately nourished keeps a person's immune system strong, which helps fight infection.

Cost: Helping farmers achieve a bountiful harvest costs \$100 million.

Clean Water

Fact: Dirty water can be a source of pathogens and parasites.

Cost: Building systems to supply clean drinking water costs \$100 million.

Mosquito Netting

Fact: Mosquito-transmitted diseases kill or incapacitate millions of people worldwide.

Cost: Insecticide-treated netting costs \$5 per person. Providing netting to people who need it costs \$25 million.

Vaccines

Fact: Each year, more than 2.3 million deaths (caused by just eight diseases) could easily be prevented by vaccinations.

Cost: Vaccines for six potentially deadly childhood diseases costs \$18 per person. Providing vaccines to people who need them costs \$50 million.

Antibiotics

Fact: Pneumonia is the second top killer of children in the world.

Cost: A course of antibiotics required to treat pneumonia costs 15 cents per child. Providing antibiotics to clinics, hospitals, and people who need them costs \$25 million.

Training Health Professionals

Fact: Many countries do not have enough doctors and nurses and must import them to staff their healthcare facilities and run their health programs.

Cost: Running schools to assure an adequate supply of doctors, nurses, and public health workers costs \$50 million.

Hospitals

Fact: Hospitals specialize in treating patients whose diseases have reached an advanced stage.

Cost: Each staffed hospital costs \$75 million and can serve up to two million people. The country needs 5 hospitals to completely meet its needs.

Early Detection of Disease

Fact: Crowded conditions and unsanitary conditions set the stage for epidemics.

Cost: Monitoring the outbreak of contagious disease costs \$25 million.

Diarrhea

Fact: Hydration therapy can reduce deaths caused by diarrhea, which is the top killer of children in the world.

Cost: Oral rehydration therapies (ORT) cost 10 cents per child per incident. Providing ORT to clinics, hospitals, and people who need it costs \$25 million.

INVESTING YOUR MONEY WISELY Game Cards

<p>Vitamins and Micronutrients</p> <p>Fact: Nutritional supplements improve a person's ability to ward off disease and prevent developmental problems. For example, each year, over 500,000 children worldwide become blind due to a Vitamin A deficiency.</p> <p>Cost: Providing nutritional supplements to clinics, hospitals, and people who need them costs \$25 million.</p>	<p>Community Health Education</p> <p>Fact: Educating people about health practices that prevent the spread of infectious diseases could reduce deaths by up to 26% worldwide.</p> <p>Cost: A public-health education campaign to prevent the spread of infectious disease costs \$25 million.</p>	<p>Breastfeeding Education</p> <p>Fact: Breastmilk boosts a baby's immune system, provides excellent nutrition, and avoids feeding babies formula made with tainted water.</p> <p>Cost: Educating mothers about how breastfeeding gives their babies a strong start in life costs \$25 million.</p>
<p>Community-based Medical Clinics</p> <p>Fact: Clinics serve local health needs. They educate people about good health practices and provide preventive- and some treatment-based health care, such as saving the lives of mothers who experience complications during childbirth.</p> <p>Cost: Each staffed clinic costs \$1 million and can serve 100,000 people. The country needs 75 clinics to completely meet its needs.</p>	<p>Family Planning</p> <p>Fact: Women who have children at a young age put their health at risk and their babies at risk of being born underweight and thus vulnerable to disease and developmental problems.</p> <p>Cost: Educating women about family planning practices costs \$25 million.</p>	<p>Schools</p> <p>Fact: Education helps people get jobs, and the income from these jobs helps them obtain adequate food and suitable living conditions. The average life expectancy is higher in countries where people make higher salaries.</p> <p>Cost: Running a nationwide school system costs \$100 million.</p>

Cut out cards along dotted lines.



Investing Your Money Wisely Activity Sheet



**RX FOR
CHILD
SURVIVAL**

A GLOBAL HEALTH CHALLENGE™

The Challenge

You are advising the World Bank about how to fund a public health program in a country in the developing world. Your task is to recommend how to allocate \$500 million in the coming year to keep the largest possible number of people healthy.

The Country

This (*fictitious*) country is about the size of Texas—250,000 square miles. A mountain range separates the country into two regions. Ten million people live in the coastal region, while five million live in the inland region. Half the people live in urban areas, and the other half are evenly distributed through the country. The coastal region has a hot, moist, tropical climate that supports lush jungles and fertile farmland. The inland region is dry and cool and is predominantly grassland and forest. The coastal region is well serviced by roads, but only about half the people in the inland region have convenient access to roads. Only the largest cities and towns have modern sanitation. Malnutrition and malaria are problems, few people are vaccinated, and there is little health care currently available. Most people grow their own food and have little extra money to spend. Few children attend school.

Healthcare options for this country's public health program

Should be included

Use this space for the cards you think belong in this column

Should NOT be included

Use this space for the cards you think belong in this column