UNIVERSIDADE DE PERNAMBUCO

FACULDADE DE CIÊNCIAS MÉDICAS

INSTITUTO DE CIÊNCIAS BIOLÓGICAS

MESTRADO EM CIÊNCIAS DA SAÚDE 2010

Prova de Inglês

Quarta-feira, dia 27 de janeiro de 2010

08h00 às 11h00

BY

Sharing English

PART I

Answer Questions 1-5 with reference to TEXT 1 that follows. Only one option is correct for each question.

Q1. According to Paragraph 1, why is it important to improve understanding of the economic consequences of neglected tropical diseases?

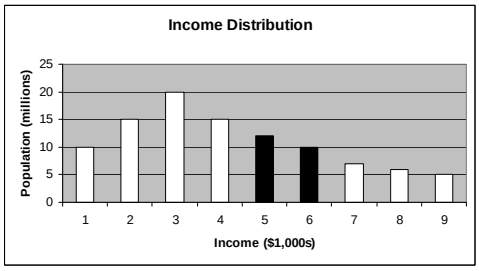
A. to provide a source of much needed income for physicians who no longer practice medicine
B. because this will help to develop treatments and bring down morbidity and mortality rates
C. because this enables national governments and local people to cut the cost of treatment regimens
D. because, in this way, it is possible to assess the financial impact of measures taken to control these diseases

Q2. The first sentence of Paragraph 2 implies that:

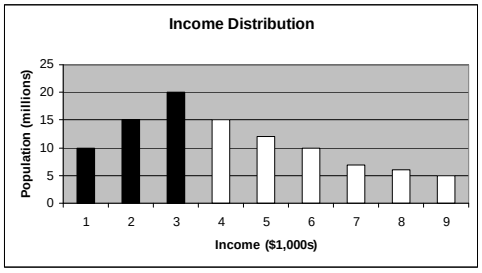
A. Governments should be footing a greater share of the bill for the treatment and control of neglected tropical diseases.
B. Studies have tended to focus on the expenses incurred by governments and health services, rather than those of patients and their families.
C. Health care professionals are better qualified to assess the costs of treatment and control of neglected tropical diseases.
D. Those committed to improving health-care in tropical areas are always requesting greater funding.

Q3. Which of the following diagrams best illustrates the "poorest earning quartile" mentioned in Lines 5-6 of Paragraph 2?

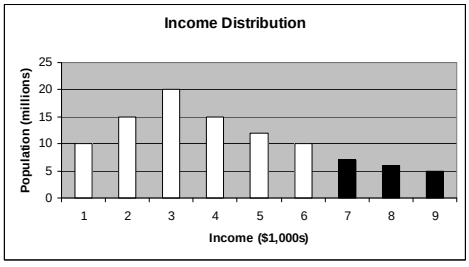
A.



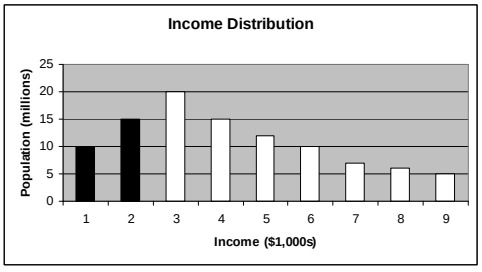
B.



C.



D.



Q4. It can be concluded from the evidence presented in Paragraph 2 that:

A. Families in Thailand and South Vietnam pay much less for treatment of dengue haemorrhagic fever than the poorest families in Ghana are obliged to fork out for long-term care of patients with Buruli ulcer.
B. In Ghana, medical care is largely provided in response to catastrophes, whilst in Sri Lanka patients find themselves trapped in the health care system.
C. In some developing nations, the cost of medical care represents a high percentage of or, in some cases, exceeds family income for all social classes, although there is still a significant disparity between the richest and poorest sectors of society.
D. While treatment of dengue haemorrhagic fever is relatively cheap in Thailand and South Vietnam, Ghanaian families regularly find themselves bankrupted by the high cost of treatment of Buruli ulcer. Sri Lankan families, on the other hand, contribute nothing towards the control of lymphatic filariasis, because treatment is impossible.

Q5. The last sentence of Paragraph 3 implies that:

A. Increasing loss of productivity as a result of a rise in the prevalence of neglected tropical diseases will not go unnoticed at national and international level.
B. Economies of scale resulting from international intervention can have a profound effect on the working lives of individuals living in poverty.
C. Individual cases of neglected tropical diseases can evolve into more serious conditions unless action is taken at national and international level.
D. The accumulated loss of working hours of individuals as a result of neglected tropical diseases amounts to a significant reduction in the productivity of emerging economies.

TEXT 1

Economic effect of neglected tropical diseases

Understanding the effect of neglected tropical diseases on the economy is crucial if we want to better estimate the benefit of their control on economic growth in endemic countries. The economic burden of these diseases can be assessed by adding the direct costs of expenditure on prevention and treatment with the indirect costs of productive labour time lost because of morbidity and mortality. Costs can be assessed at the microlevel to provide insight into the effect on individual households and businesses, and at the macrolevel, to show the effect on the economic performance of a nation.

Financial and economic costs of treatment and control of neglected tropical diseases are often considered from the perspective of the health-care provider, most notably the costs faced by government-funded health facilities. Individuals and families have heavy out-of-pocket (direct) costs when seeking care for treatment for these diseases. In Ghana, the cost of care per patient with Buruli ulcer in a household in the poorest earning quartile was reported as 242% (193—315%) of their annual earnings, which can be regarded as catastrophic. By contrast, in a household in the richest earning quartile the cost per patient was reported as 94% (89—105%) of their annual earnings. Although the economic effect on both income groups is catastrophic, this difference indicates inequity, since treatment costs disproportionally affect the incomes of the lowest-income households. A study in Sri Lanka reported how the poorest patients with lymphatic filariasis were driven into the medical poverty trap, and how they delayed accessing the health-care system, thereby allowing the symptoms to progress and making treatment difficult or impossible. Studies in Thailand and south Vietnam found that an average family pays US$74 and $67, respectively, to treat a child with dengue haemorrhagic fever, which was more than an average monthly salary at the time the studies were done.

The indirect costs to people affected by neglected tropical diseases and their carers, and the economic effect on a household, further compound the costs. Neglected tropical diseases affect worker productivity. In Bangladesh, the labour of tea pluckers showed a negative association with three worm infections (*Ascaris lumbricoides, Trichuris trichiura,* and hookworms) between the intensity of helminth infections (eggs and faeces) and worker productivity. In Egypt, workers with schistosomiasis benefited from improved quality of life and increase productivity if they could access early detection and treatment. If individual cases of lost productivity are scaled up, the effect on productivity at a national and international level is substantial.

The Lancet, Volume 375, Issue 9710, Pages 239 - 247, 16 January 2010

PART 2

Answer Questions 6-20 with reference to TEXT 2 that follows. Only one option is correct for each question.

Q6. The title of the article suggests that:

A. The article is about counting the number of qualified medical doctors and questions the usefulness of this.
B. The article will argue that the large numbers now entering the medical profession have resulted in a lower level of care.
C. The article will present a detailed statistical analysis of the extent to which physicians care about their patients.
D. The article is about the application of the physical theory of matter to current medical treatments.

Q7. "Staiger et al" in the first line of Paragraph 2:

A. Refers to the author of a recently published article.
B. Refers to the authors of a recently published article.
C. Is a term that can only be explained by reading the accompanying footnote.
D. Refers to an article published in another scholarly journal.

Q8. According to Paragraph 2, the American Medical Association Physician Masterfile

A. Is an inventory of all health professionals trained since 1906 that excludes those who are deceased or who no longer practice medicine.
B. Is a database of all qualified physicians, dating back to 1906.
C. Is a data bank that was scrapped in 1968 because it reflected only on the numbers of physicians and not on the amount of care they provide.
D. Is a classified list of doctors drawn up in 1968 for public consultation.

Q9. The word "undergone" in the last sentence of Paragraph 2 could be replaced by:

A. resisted
B. been the object of
C. been overwhelmed by
D. passed over

Q10. The last sentence of Paragraph 2 argues that the AMA Physician Masterfile

A. has been changed so much in recent years that its usefulness for policy-makers should now be called into question.
B. has greatly improved in quality in recent years, thereby boosting government revenues and the earnings of medical practitioners.
C. has led to a re-think of public health policy with regard to staff salaries and data collection methods
D. provides both important statistics for policy-makers and income for the American Medical Association.

Q11. Paragraph 3 states that the main issue to be addressed by the article is:

A. Both the discrepancy between different interpretations of the AMA data and the extent to which it shows there is a severe shortage of medical staff in the United States.
B. The extent to which the supply of trained physicians falls short of or exceeds demand, rather than the question of how data should be analyzed.
C. Whether the compilers of the AMA database have miscalculated the number of doctors available as a result of flawed methodological design.
D. The surprise with which Staiger et al was received in the medical community rather than the accuracy of the figures it contains.

Q12. The word “tracked” in line 8 of Paragraph 4 could be replaced by:

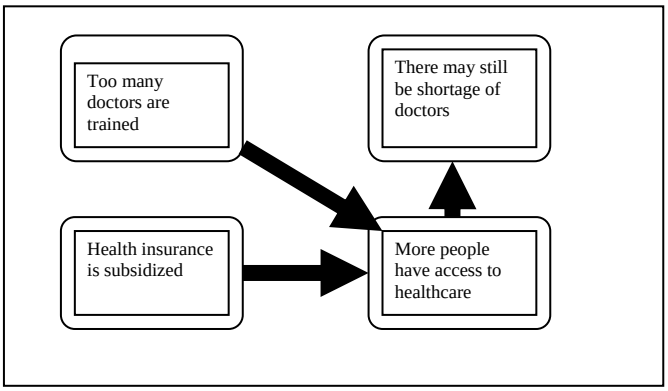
A. followed
B. hunted
C. persecuted
D. stalked

Q13. The word “highlights” in the first line of Paragraph 5 could be replaced by:

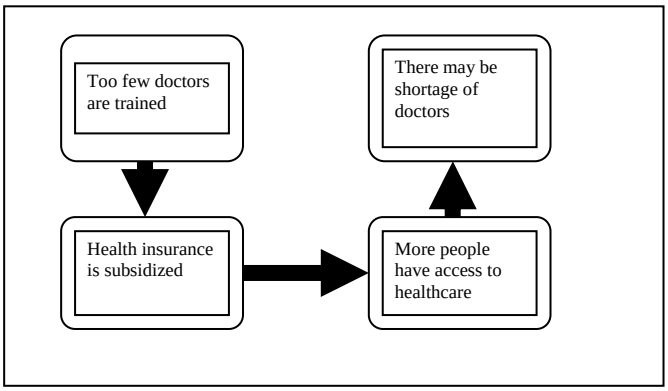
A. underlines
B. sheds light on
C. enhances
D. contrasts with

Q14. Which of the following flow-charts best represents the argument put forward in the underlined section of Paragraph 5.

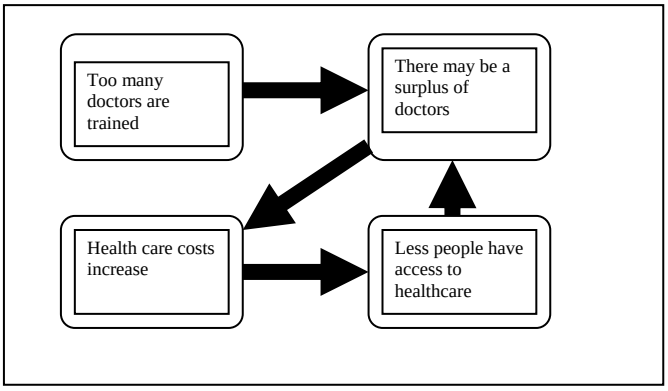
A.



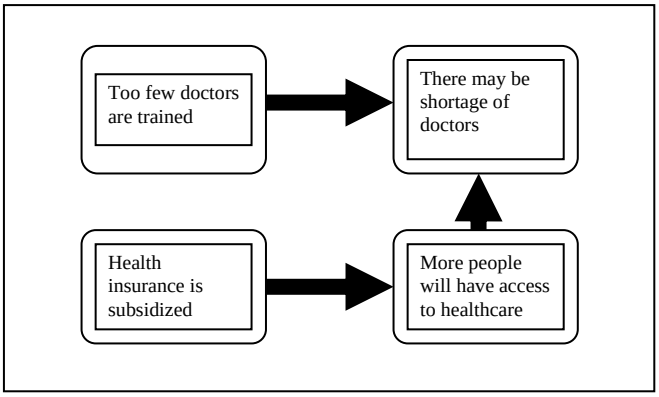
B.



C.



D.



Q15. The term “futile quest” in Paragraph 6 could be replaced by:

A. pointless search
B. fruitful investigation
C. irrelevant issue
D. dreary outlook

Q16. The word “may” in line 5 of Paragraph 6 could be replaced by:

A. perhaps
B. should
C. must
D. could

Q17. The phrase “gone unnoticed” in line 7 of Paragraph 6 could be replaced by:

A. disappeared
B. not been reported
C. not been observed
D. been ruled out

Q18. The word “uncover” in line 8 of Paragraph 6 could be replaced by:

A. reveal
B. relapse
C. conceal
D. strip away

Q19. The phrase “unless the supply is known” in line 9 of Paragraph 6 means

A. “so long as sufficient information is available on supplies”
B. “even though there is knowledge of the supply side of the equation”
C. “if there is no reliable information available on the supply”
D. “in spite of ignorance of the extent of the supply”

Q20. The article concludes that:

A. Physicians are increasingly delaying the age at which they retire and failing to report this to the relevant authorities.
B. The model used by Staiger et al fails to take into account fluctuations in the hours worked by physicians in different age groups over time.
C. Given the degree of accuracy of estimates regarding the supply of qualified physicians, it is surprising that no consensus can be reached on this issue.
D. Government reports regarding the supply of physicians tend to be of little use in guiding policy because they are always a step ahead of the projections drawn up by legislators.

TEXT 2

How Many Physicians? How Much Does It Matter?

Thomas C. Ricketts, PhD, MPH

JAMA. 2009;302(15):1701-1702.

The analysis of current estimates of the number of physicians practicing in the United States by Staiger and colleagues[1] in this issue of *JAMA* touches on a topic that is both arcane and central to policy debates. The arcane part is how physicians are counted; the policy part is how their contributions to the economy and to social needs are estimated.

The study by Staiger et al[1] examines a central source of data on the supply of physicians, the American Medical Association (AMA) Physician Masterfile. This is a longstanding inventory of the supply of all physicians, alive and dead, practicing medicine or not. Its origins trace back to 1906 when the AMA attempted to identify all practicing physicians in the United States, members and nonmembers.[2] The data file became widely accepted as the authoritative source of information about the number and location of physicians to the point that in 1966, the National Committee on Vital and Health Statistics, in a report entitled "United States Statistics on Medical Economics," took note of the value of the data file as a reliable source for information on the "geographic location, age, sex and specialty" of physicians, but also noted that the data could be improved to better reflect the volume of patient care the physician provided.[3] In 1968, the AMA Center for Health Services Research and Development revised its data collection processes and its method of classifying physicians. The file has since undergone various efforts to improve its quality over the years because it also is a source of revenue for the AMA,[4] as well as reference data for public policy deliberations.

It is not surprising that in the study by Staiger et al,[1] 2 separate ways of estimating the number of physicians in the United States should result in different numbers. However, the importance of the study is not about the method but whether the actual number is too many or too few.

The current controversy over the accuracy of the AMA Physician Masterfile data is a continuation of a longstanding debate over the supply of physicians and whether that number meets the US health care needs and promotes economic efficiency.[5] The supply of any labor resource, especially in the professions, is a critical component of market dynamics, as well as a mechanism to achieve social goals, including promoting a healthy population. The central policy question is how much public resources should be applied to regulating physician supply. The connection between physician supply and government policy has been tracked by economists[6] and physicians.[7] For example, physician supply is seen as an important determinant of costs in the Medicare program as well as a direct expense in the form of subsidy for graduate medical education.[8] Elements of health reform bills being discussed in the current session of Congress include adjusting the physician supply and its distribution with incentives targeted to expand the number of primary care practitioners or to attract physicians to rural and underserved places. That policy attention to supply has expanded to specialists, including psychiatrists and general surgeons.

The debate over health reform under way in and outside Congress highlights how physician supply is connected to the more macro policy objectives of universal access to care and cost control. If access is expanded through subsidy to health insurance, the demand for physician services will increase potentially beyond what is available. If physician supply is in excess of what the market will bear, the prices of those services may increase to unsustainable levels. The first situation is seen as a cause for alarm and further subsidy of medical training by the government; the second, as a further threat to the stability of the health care delivery system as costs increase very rapidly, displacing other goods and services.

Establishing the right number of physicians is difficult if they cannot be accurately counted. It has been argued that knowing what is the "right" number is a futile quest,[9] but enough is known about the distorting effects of an oversupply as well as an undersupply of physicians to provoke a search for accuracy. The margin of error of 10% attributable to sources as implied in the study by Staiger et al[1] may alternatively mean that such a difference does not affect outcomes as much as expected, because it has effectively gone unnoticed, or that the analyses must be reworked substantially and possibly uncover more potentially negative effects of undersupply and oversupply. That dilemma cannot be solved unless the supply is known—further argument for more accurate measure of physician supply.

The study by Staiger et al[1] provides one of several options for testing and comparing physician supply; in this case, US Census statistics and a cohort aging model. The model assumes consistent cohort effects over time when there may in fact be substantial changes in participation in clinical practice depending on the birth cohort—that is, physicians in the age range of 45 to 54 years may practice substantially more hours today than a similarly aged group in 2020. The lag in retirement reporting may be addressed with more timely reporting of activity from licensing agencies or third-party payers. For instance, development of better data collection and reporting mechanisms at the state level from licensing boards could be used to regularly update a central registry overseen by the Federation of State Medical Boards. What is surprising is that all of these are not used in a robust combination to provide a more consensus estimate of current and future effective supply of physicians. The federal government does, from time to time, issue a projection of physician supply,[10] but it usually provokes more contention than agreement. The effects of this federal report on policy debates are often attenuated because the projection is often too late to really provide much guidance.

Universidade de Pernambuco UPE

Faculdade de Ciências Médicas FCM

Instituto de Ciências Biológicas ICB

Prova de Inglês

Sexta feira dia 21 de janeiro de 2011

08h00 – 11h00

MESTRADO EM CIÊNCIAS DA SAÚDE 2011

Nome de candidato: _____

RG de candidato: _____

Question	Answer				Question	Answer			
1	A	B	C	D	**11**	A	B	C	D
2	A	B	C	D	**12**	A	B	C	D
3	A	B	C	D	**13**	A	B	C	D
4	A	B	C	D	**14**	A	B	C	D
5	A	B	C	D	**15**	A	B	C	D
6	A	B	C	D	**16**	A	B	C	D
7	A	B	C	D	**17**	A	B	C	D
8	A	B	C	D	**18**	A	B	C	D
9	A	B	C	D	**19**	A	B	C	D
10	A	B	C	D	**20**	A	B	C	D

GABARITO

1	D
2	B
3	D
4	C
5	D
6	A
7	B
8	B
9	B
10	D
11	B
12	A
13	A
14	D
15	A
16	D
17	C
18	A
19	C
20	B