

ADMINISTRATIVE MEDICINE

Part I Examination

Friday 2 June 2023

14:30 – 16:00 (1½ hours)

Paper IIB

Candidates must answer all parts of these questions

Style, clear grammatical English and legibility will be taken into consideration by the Examiners. Answers should be written in a form appropriate to the audience specified in the question.

Weighting of marks for each part of the question is shown in parenthesis.

DO NOT OPEN PAPER UNTIL THE INVIGILATOR INSTRUCTS YOU TO BEGIN

You are working in the Hospital Authority (HA) Annual Planning Office. At one of the Annual Planning Forums, the new Honorary COS of a Paediatrics Department, who is the Professor of Paediatrics of a University Hospital, is bidding for annual plan funding to support young diabetic patients to use the close-loop insulin pump. He has done some research in this area in United Kingdom before coming to Hong Kong 2 years ago. He mentioned in passing that the management of diabetes in Hospital Authority is outdated, and it is the time to change. He has cited many advantages of closed loop insulin pump, including a more accurate control of blood sugar level that may translate to a lower morbidity profile in the long term. Besides this can help the general shortage of nurses across the entire HA as this treatment can save nurses and hospital beds.

The Director of Strategy and Planning asks you to look up the literature to brief the senior executives of HA. He also gave you this latest article from New England Journal of Medicine by Wadwa et al on Trial of Hybrid Closed-Loop Control in Young Children with Type 1 Diabetes. N Engl J Med. 2023 Mar 16;388(11):991-1001.

Please read the article and answer all of the following questions:

1. Using the data available from the attached paper, please elaborate with reasons whether you think the evidence is beyond doubt that closed loop insulin pump treatment is much better than conventional treatment using insulin injections? (25 marks)

QUESTION CONTINUES

- 2. The paper mentioned that most of the teaching on the use of closed loop system was done virtually. What are the pros and cons for this kind of virtual training for patients and carers in Hong Kong? (15 marks)
- 3. Apart from the effectiveness and the training perspective, are there any other potential concerns if this system is to be implemented in Hong Kong? (20 marks)
- 4. The HA Board Chairman heard about it and told the Chief Executive that if funding is an issue, let him source some donation to do a large-scale study on it. For this to happen, he will need a one-page summary of not more than 400 words about what it is, how does it work, and how would it help the young children with diabetes. You are asked to write this one-page summary. (40 marks).

