Hospital Authority follows up on recommendations of Investigation Panel

The following is issued on behalf of the Hospital Authority:

The Hospital Authority (HA) set up an Investigation Panel last November to explore means to better support front-line healthcare workers to identify lesions in chest X-rays in a timely manner, following three cases of oversight of abnormal X-ray findings.

After investigation, the Panel concluded that the common root cause of the three cases was perceptual error and made the following recommendations:

1) Enhance specific training on skills of interpreting chest X-rays for front-line doctors;

2) In view of increasing demand for chest X-rays in public hospitals and the turnaround time for formal reporting, the Panel recommends the following measures to support front-line clinicians:
i) Explore the application of artificial intelligence to help pick up lesions that are incidental or not visualised;
ii) Outsourcing teleradiology reporting services to overseas radiology specialists for clinical decision support;
iii) Develop long-term manpower planning of radiologists to cope with growing demand for radiology services; and

3) The HA should develop criteria to facilitate the prioritisation and application of the above-mentioned supportive measures.

The HA has formulated the following action plans to implement the recommendations proposed by the Panel:

Short to Medium Term Measures

1) Senior clinicians to review chest X-rays of patients discharged directly from Accident and Emergency Departments.

2) Provide web-based training modules to enhance the skills of front-line clinicians in interpreting chest X-rays.

Medium to Long Term Measures

3) Conduct a feasibility study on applying artificial intelligence tools in clinical workflow. A pilot study will be held in a clinical unit before the end of this year.

4) Explore the feasibility of outsourcing to overseas teleradiology reporting services, with due consideration in technological, financial and legal issues and views from related clinical disciplines.

In accordance with the Panel's recommendations, the HA Coordinating Committee in Radiology will develop recommendations on the criteria for identifying and prioritising on the application of artificial intelligence and outsourcing teleradiology reporting services.

The HA Director (Quality and Safety), Dr Chung Kin-lai, remarked that the management had been mindful of the heavy workload faced by front-line clinicians and would explore the best possible means to support them. "We will actively explore and implement the measures to support our front-line clinicians to identify abnormalities in chest X-rays in a timely manner, without further aggravating their workload. Apart from formulating long-term strategy in radiology manpower planning, the HA will continue to recruit and retain staff, including the recruitment of non-locally trained doctors under Limited Registration to cope with service needs," Dr Chung said.

The HA also expressed its gratitude to the Chairman and Members of the Investigation Panel. Membership of the Panel is as follows:

Chairman:

Dr Wong Yiu-chung
Chief of Service, Department of Radiology and Nuclear Medicine,
Tuen Mun Hospital and Pok Oi Hospital

Members:

1. Dr Kenny Yuen
    Chief of Service, Department of Surgery,
    Tseung Kwan O Hospital

2. Dr Lau Chu-leung
    Chief of Service, Department of Accident and Emergency,
    Tuen Mun Hospital, Pok Oi Hospital and Tin Shui Wai Hospital

3. Dr Johnny Chan
    Chief of Service, Department of Medicine,
    Queen Elizabeth Hospital

4. Dr Sin Ngai-chuen
    Chief Manager (Patient Safety and Risk Management),
    Hospital Authority