

## **Appendix 1**

### **Report of Hong Kong Phlebotomists Association survey 2013 Preanalytical Phase questionnaire on the phlebotomy**

#### **Background**

In Hong Kong, statutory regulation of healthcare professions can be traced back to the 1950's with the enactment of the Medical Registration Ordinance and the Dentists Registration Ordinance. Nurses, midwives, pharmacists and dental hygienists were put under statutory regulation in the 1960's. The Supplementary Medical Professions Ordinance (Cap 359) was enacted in 1980 to regulate five more disciplines which included medical laboratory technologists, occupational therapists, physiotherapists, radiographers and optometrists. The practice of chiropractors and Chinese medicine practitioners were regulated in 1993 and 1999 respectively in view of their popularity. Since then, no more healthcare professions have been put under statutory regulation. **Reference: Legislative Council Paper No. CB(2)1459/15-16(04), Appendix IV.**

However, media reports suggested that the health of the public might be at risk as a result of emergence of new types of treatments or intervention that have healthcare implications and substandard service provided by practitioners providing such intervention. Recent incidents concerning improper treatments by beauty salon practitioners pointed to the need for tighter monitoring and review of the regulatory regime for healthcare professions. The Ombudsman initiated this direct investigation on 21 January 2013 to examine whether the current control mechanism is sufficient and identify areas for improvement. Phlebotomist may also be concerned in this area as invasive interventions are involved.

#### **Hazards of Phlebotomist**

Phlebotomists draw blood, perform IV cannulation and Electrocardiogram (ECG) which are invasive intervention on patients in all clinical settings, adverse reactions from blood collection can occur and personnel collecting blood specimens must know what can occur and how best to manage the reactions. Since blood can transmit dangerous viruses and bacteria, being a phlebotomist can be hazardous if you're not in competency. In Hong Kong, most of the phlebotomists are handling IV cannulation and operating the ECG as well.

#### **Exposure to Bodily Fluids**

Needle sticks are common injuries among phlebotomists and those who start intravenous infusions.

Between 600,000 to 800,000 people stick themselves with needles each year; around half don't report their injury, the director of the National Institute for Occupational Safety and Health reported in 2000. Needle sticks expose phlebotomists to the human immunodeficiency virus (HIV) as well as hepatitis B and C. In some facilities, phlebotomists also handle specimen samples other than blood, such as sputum, urine or stool. Any of these can also carry diseases that will cause infection if the personnel handle them carelessly.

### **Adverse Reactions to the Patients**

- a. Hematoma: Blood can leak out of a vein and under the skin during venipuncture. This can cause discomfort and pain and can complicate further collections from that site.
- b. Pain: Since nerves are very close to veins and arteries, there is some risk a nerve maybe pierced by a needle during blood collection. The patient will complain that he/she feels an electric shock going up his/her arm.
- c. Nerve Damage: If a nerve has been pierced or cut, the patient will feel pain or numbness or a shocking sensation.
- d. Re-Bleed: Patients with some liver disease, vascular diseases, clotting disorders, or medications may complicate normal clotting post a blood collection. Hot temperatures outside may cause a site to re-bleed because the veins dilate to cool the body.
- e. Allergy: Some patients may have itching or burning at the collection site. Rashes or hives may form near the site. If the patient passes out or stops breathing, emergency care or CPR to the patient is needed.
- f. Phlebitis is inflammation of a vein. Thrombophlebitis is due to one or more blood clots in a vein that cause inflammation. Thrombophlebitis usually occurs in leg veins, but it may occur in an arm. The thrombus in the vein causes pain and irritation and may block blood flow in the veins. Phlebitis can occur in both the superficial or deep veins.
- g. Superficial phlebitis affects veins on the skin surface. The condition is rarely serious and, with proper care, usually resolves rapidly. There is usually a slow onset of a tender red area along the superficial veins on the skin. A long, thin red area may be seen as the inflammation follows a superficial vein.
- h. Vasovagal reaction: A reflex of the involuntary nervous system that causes bradycardia and that, at the same time, affects the nerves to the blood vessels in the legs permitting those vessels to dilate. As a result the heart puts out less blood, the blood pressure drops, and what blood is circulating tends to go into the legs rather than to the head. The brain is deprived of oxygen and the fainting episode occurs.

## **Questionnaire**

Key informants were interviewed using a structured questionnaire. The key informant questionnaire is one instrument from a questionnaire portfolio developed by Hong Kong Phlebotomists Association for measuring health system and the stakeholders responsiveness. The 2013 key informant instrument was refined following feedback from the 2011 key informant survey carried out in 30 clinical setting.

## **Implementation**

The surveys were administered through hospitals and laboratories representatives and liaison officers, accounting for roughly 89% of total responses. HKPIVA officer personally conducted face-to-face interviews. Some responses obtained were from individuals who responded to the questionnaire posted by electronic mailing. The purpose of the survey was to obtain the views of the mail user in hospitals and laboratories involved venipuncture, IV cannulation and ECG operation.

## **Preliminary Report by quantitative and qualitative survey**

### **Mission**

- a. Ensure the quality of phlebotomy practice in Hong Kong meeting the rapidly changing health care needs of the community through the establishment of a registration system, provision of guidance and intervention with discipline.
- b. To promote the best practice of Phlebotomists to perform competently in Venipuncture, Intravenous Cannulation and ECG operation to ensure the patients receive the best possible care and laboratories receive quality samples fit for purpose.

### **Phlebotomy Program Overview**

The mission of the Phlebotomy program is to provide learning experiences that prepare students to demonstrate the skills and behaviors congruent with those of professional phlebotomists.

1. Upon successful completion of the recognized Phlebotomy programme, plus 250 self-practice hours, the candidates are eligible and qualified to take a Hong Kong Phlebotomists Association certification (Licence) in order to become a Registered Phlebotomist.
2. The Phlebotomy programme endeavors to train individuals to technically and academically perform venipuncture, Intravenous cannulation, ECG Operation competently and the phlebotomists role are to function as professionals on a health care team in attitude, ethics and appearances, always keeping

patient care as the primary concern.

### Program Goals

The goals of the Phlebotomy program are to:

1. Provide a base of theory and practice that is appropriate to develop entry level skills as a phlebotomist.
2. Provide a program with ongoing review so that approval guidelines are maintained.
3. Demonstrate support of the HKPIVA mission and goals.
4. Support the profession by preparing graduates who are competent in the skill of phlebotomy, IV cannulation and ECG operation and as members of the health care team.

### Program Learning Outcomes

When students have successfully completed the Phlebotomy program, they should be able to:

1. Demonstrate proficiency in all areas of phlebotomy related to pre-analytical processes of laboratory testing, recognizing and adhering to infection control and safety policies and procedures.
2. Demonstrate the theoretical knowledge needed to assure the quality of phlebotomy processes through appropriate quality control methods, thus contributing to the accuracy of laboratory test results.
3. Exhibit the professional attitudes and behaviors that are necessary for gaining and maintaining the confidence of the health care community.
4. Meet requirements to take a certifying examination for Certified Phlebotomist.

### Code of Ethics

The health care profession relies on the knowledge, skills, honesty, and integrity of trained competent professionals. The Phlebotomy profession demands careful attention to detail, accuracy, and precision.

Phlebotomists must assume responsibility for the quality of their work and our employers rely on our program to produce ethical healthcare workers.

The Code of Ethics of the American Society for Clinical Laboratory Science (ASCLS) sets forth the principles and standards by which clinical laboratory professionals practice their profession.

## **I. Duty to the Patient**

Phlebotomy professionals are accountable for the quality and integrity of the laboratory services they provide. This obligation includes maintaining individual competence in judgment and performance and striving to safeguard the patient from incompetent or illegal practice by others. Clinical laboratory professionals maintain high standards of practice. They exercise sound judgment in establishing, performing and evaluating laboratory testing. Clinical laboratory professionals maintain strict confidentiality of patient information and test results. They safeguard the dignity and privacy of patients and provide accurate information to other health care professionals about the services they provide.

## **II. Duty to Colleagues and the Profession**

Clinical laboratory professionals uphold and maintain the dignity and respect of our profession and strive to maintain a reputation of honesty, integrity and reliability. They contribute to the advancement of the profession by improving the body of knowledge, adopting scientific advances that benefit the patient, maintaining high standards of practice and education, and seeking fair socioeconomic working conditions for members of the profession. Phlebotomy professionals actively strive to establish cooperative and respectful working relationships with other health care professionals with the primary objective of ensuring a high standard of care for the patients they serve.

## **III. Duty to Society**

As practitioners of an autonomous profession, clinical laboratory professionals have the responsibility to contribute from their sphere of professional competence to the general well-being of the community. Clinical laboratory professionals comply with relevant laws and regulations pertaining to the practice of clinical laboratory science and actively seek, within the dictates of their consciences, to change those which do not meet the high standards of care and practice to which the profession is committed.

## **Pledge to the Profession**

As a clinical phlebotomy professional, should strive to:

- ✧ Maintain and promote standards of excellence in performing and advancing the art and science of my profession.
- ✧ Preserve the dignity and privacy of others
- ✧ Uphold and maintain the dignity and respect of our profession
- ✧ Seek to establish cooperative and respectful working relationships with other health professionals
- ✧ Contribute to the general well-being of the community.

This is the end of the report consolidate the stakeholders comment and opinion. Next step, members of HKPIVA will be consult during the Annual General Meeting.

Plans and procedures will be reviewed annually in three years' time.

HKPIVA

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