CLINICAL AND LABORATORY STANDARDS INSTITUTE®

1st Edition

GP48

Essential Elements of a Phlebotomy Training Program

This guideline is a resource for health care professionals and educators for development and implementation of curricula for phlebotomy training programs and courses.

A guideline for global application developed through the Clinical and Laboratory Standards Institute consensus process.

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Essential Elements of a Phlebotomy Training Program

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Abstract

Clinical and Laboratory Standards Institute guideline GP48—*Essential Elements of a Phlebotomy Training Program* is a resource for developing curricula for phlebotomy training programs and courses. This guideline is designed for college and proprietary school educators, nurse educators, educational coordinators, laboratory directors and managers, phlebotomy supervisors, and any other health care professionals or educators responsible for the development and/or implementation of a specimen collection training program. It suggests what should be taught, rather than how to teach it.

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Foreword

Up to 93% of errors occurring in the laboratory diagnostic process occur in the preexamination phase.[1,2] Yet, health care facilities and career training programs providing instruction on blood and nonblood specimen collection procedures have few resources to guide them. As a result, key concepts may be inadvertently missed, putting patients, specimen collection personnel, and test results at risk.

Properly trained specimen collection personnel are critical to patient care. When patient specimens are collected and handled by properly trained personnel, test results are likely to be accurate. When results are accurate, physicians are able to diagnose, medicate, and manage their patients with the best possible outcomes. However, training programs vary significantly in content, which leads to a wide range of practical guidance in the field. When inadequately trained personnel compromise specimen quality, patients may be misdiagnosed, over- or undermedicated, and generally mismanaged. Inadequate training is also associated with increased test turnaround times, the spread of hospital-acquired infections, personnel exposure to bloodborne pathogens, patient injury, and legal liability.

This guideline provides the global community of educators, whether they conduct training at health care facilities or teach at academic or proprietary programs, with guidance in developing a comprehensive laboratory specimen collection training program. By using this guideline, educators will be able to develop a program that teaches essential elements of collection, handling, and processing of patient blood specimens in a manner that 1) protects them from accidental exposure; 2) protects patients from injury; and 3) ensures specimen quality and, hence, accurate test results. The information provided in this guideline serves as a guide for properly training specimen collection personnel. Implementation of the recommendations contained within this guideline may vary based upon a number of factors and will be highly dependent on these variables and the institution in which the program is being implemented. Therefore, due to the likelihood of variability, a timeframe for program implementation and completion is not provided.

This guideline was developed using CLSI's QMS model as a framework. This approach applies a core set of quality system essentials" (QSEs), basic to any organization, to all operations in any health care service's path of workflow. Organizing phlebotomy training programs in alignment with QMS principles ensures that applicable regulatory and accreditation requirements are covered and helps identify gaps in program content. A detailed description of the model is provided in CLSI document QMS01.[3]

The content recommendations in this guideline may not be universally applicable, but are appropriate for most settings. The topics order should not be interpreted as the order in which the topics should be taught. The training facility should arrange the content to fit its educational preferences.

Advanced practices outside the traditional role of specimen collection personnel (eg, performing electrocardiograms, draws from vascular access devices) are facility and region specific and are not included in this guideline.

The ultimate goal of this guideline is to help ensure all health care professionals with minimal or primary responsibilities in the preexamination processes are exposed to a high-level training curriculum.

NOTE: The content of this guideline is supported by the CLSI consensus process, and does not necessarily reflect the views of any single individual or organization.

KEY WORDS

Blood collection procedures
Educator
Phlebotomy
Preexamination
Samples
Skin puncture
Specimens
Training
Venipuncture

Chapter 1

Introduction

This chapter includes:

- Guideline's scope and applicable exclusions
- Background information pertinent to the guideline's content
- "Note on Terminology" that highlights particular use and/or variation in use of terms and/or definitions
- Terms and definitions used in the guideline
- Abbreviations and acronyms used in the guideline

Essential Elements of a Phlebotomy Training Program

NOTE:

GP48 is a resource for developing curricula for training programs and courses; it is not meant to substitute for or replace a curriculum.

1 Introduction

1.1 Scope

The intended users of this guideline are college and proprietary school educators, nurse educators, educational coordinators, laboratory directors and managers, phlebotomy supervisors, and any other health care professionals or educators responsible for the development and/or implementation of a specimen collection training program.

This guideline suggests what should be taught, rather than how to teach it. It is also beyond the scope of this guideline to provide instruction on how to perform specimen collection procedures, which are covered in CLSI documents GP41,[4] GP42,[5] and NBS01.[6] GP48 is a resource for developing curricula for training programs and courses; it is not meant to substitute for or replace a curriculum.

GP48 is not intended to prepare trainees for certification. Certification programs may have their own unique requirements.

1.2 Background

It is impossible to overstate the importance of comprehensively training those who collect, transport, handle, and/or process laboratory specimens. It is important that they take seriously the contribution they make, not only to patients' well-being, but to the health care team's ability to manage patients' care toward the best possible outcome.

Effective and efficient patient management depends on comprehensive training in all aspects of phlebotomy. Inadequately trained personnel cannot protect patients from medical mistakes directly attributable to specimens altered during collection, transport, handling, and processing, and from injuries caused by substandard techniques.

A wide variety of accurate and current documents, textbooks, training aids, educational resources, and other materials is necessary to implement the essential elements recommended in this guideline.