Quality Management

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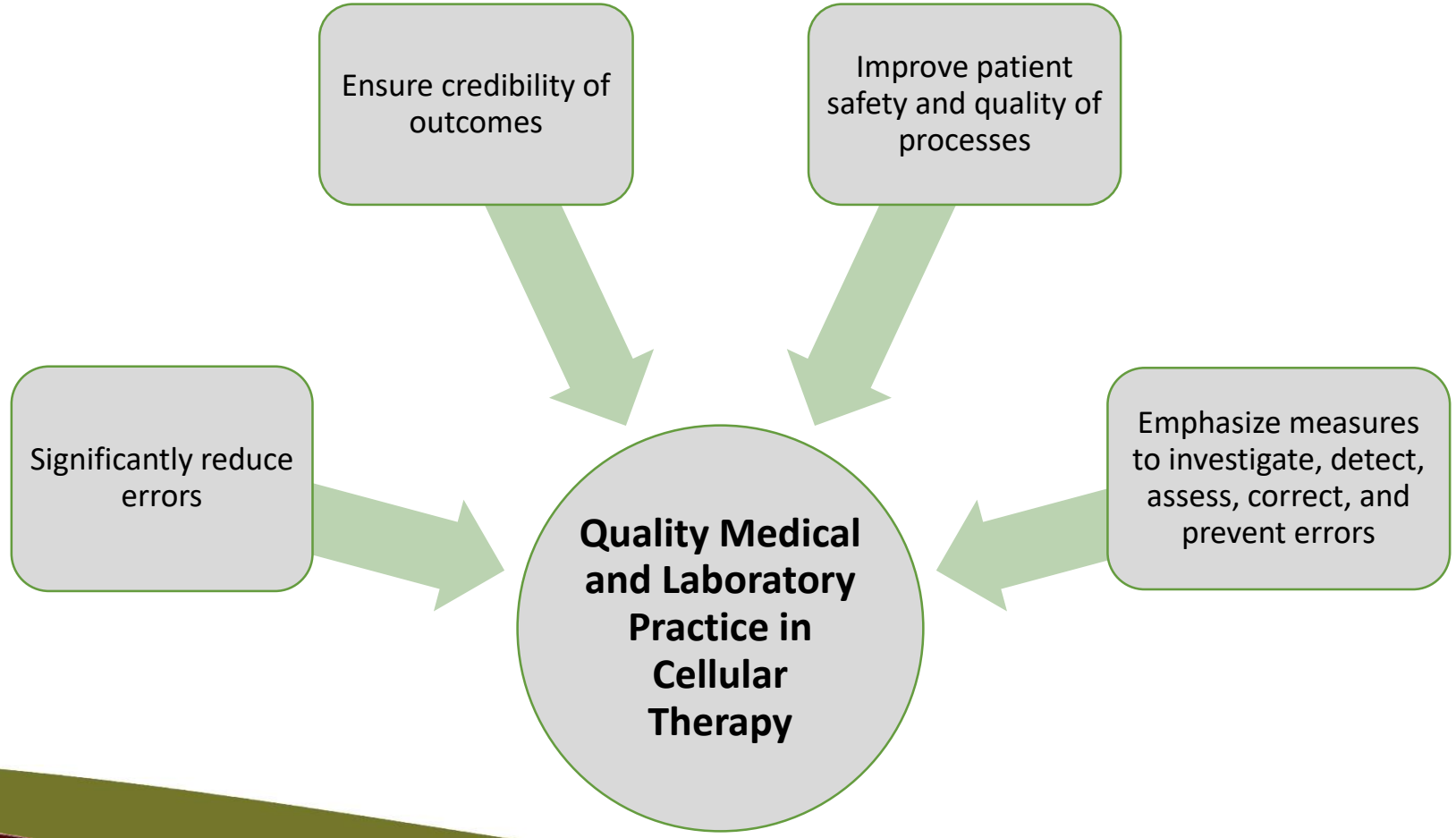
Goals of Quality Management

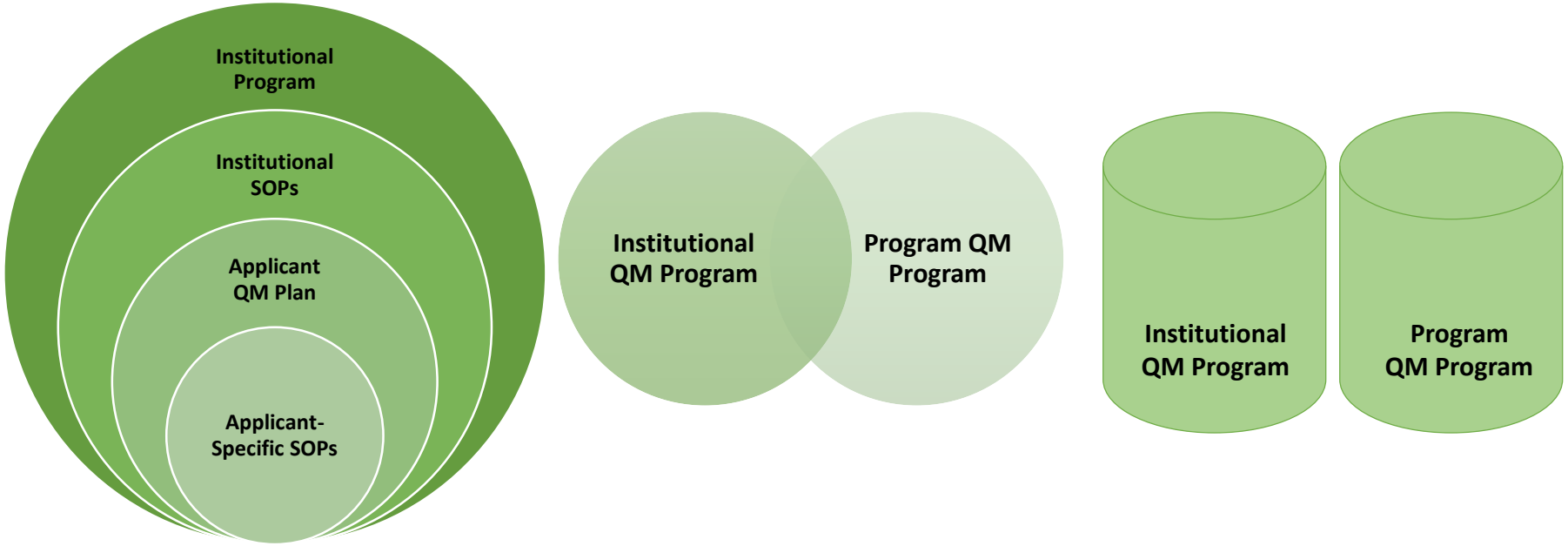


Elements of a QM Plan

- Structural Requirements
- Assessment and Reporting
- Information and Document Control

Quality Management Program

The Quality Management Program can be related to the institutional program in several ways, including:



Quality Management Plan

A written document that describes the systems in place to implement the quality management program

Policies

Documents that define the scope of an organization, explain how the goals of the organization will be achieved, and/or serve as a means by which authority can be delegated

Procedures

Documents that describe in detail the process or chronological steps taken to accomplish specific tasks; a procedure is more specific than a policy

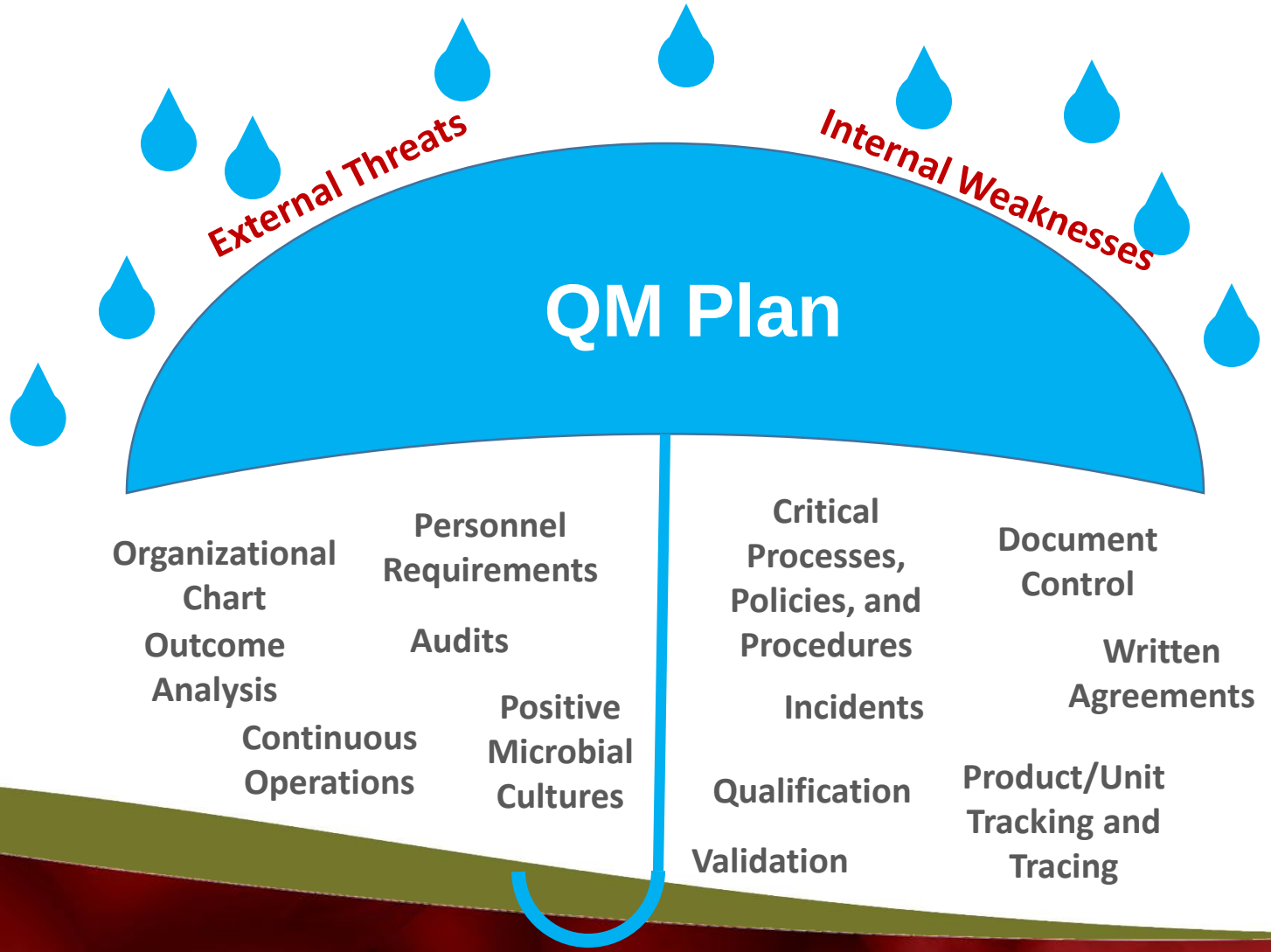
Supporting Documentation

Worksheets, forms, and templates through which performance of a procedure is documented.

QM Plan vs Policies vs Procedures

Quality Management Plan	Policies	Procedures
Example:		
The Clinical Program enters into written agreements with third parties whose services impact the clinical care of the recipient or donor.	Written agreements must be audited annually for compliance with contractual requirements.	1. Review contractual requirements 2. Request documentation from third-party 3. Reconcile documentation with requirements

The QM Plan in Perspective



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Suggested Steps to Establishing a QM Plan

- Assess existing materials
- Address missing elements
- Conduct final assessment with FACT Inspection Checklist
- Obtain final approval of the QM Plan

Common Questions

- “Where do we begin?
  - Identify what you already have
  - Follow the order of the Standards
- How do we integrate with:
  - “Main institution’s QM Plan?”
  - “Distinct facilities?”

The Quality Management Plan shall provide:

1. Sufficient summarization of the elements of the Quality Management Program

2. Reference to applicable policies and procedures

Cellular Therapy Product Institution

Quality Management Plan

Page 2

Structure:

An organizational chart of key personnel in the Collection Facility can be found in **Procedure 1-2007.** The Collection Facility Director is responsible for ensuring the Quality Management Program is effectively established and maintained. The Quality Management Supervisor is delegated responsibility for operational aspects of maintaining the Quality Management Program. This designated individual will report on quality management activities at monthly staff meetings and will provide a detailed quarterly report to the Collection Facility Director. All personnel in the Collection Facility are responsible for participating in the Quality Management Program through identification of improvement needs and establishment and review of policies and procedures. See **Procedure 2-2007** for details of this process.

Quality Audits

Independent quality audits will be conducted on a quarterly basis to verify compliance with the Quality Management Program, recognize problems, detect trends, and identify improvement opportunities. Policies and procedures will be selected for audits based upon sentinel events, importance to quality of care, and/or previous audits. See **Procedure 3-2007** for a detailed audit policy and procedure.

A Procedure for preparation, approval, implementation, review, and revising all procedures

A standardized format for policies and procedures, including worksheets, reports, and forms

Cellular Therapy Product Institute		
Title: Policy and Procedure Management	**Responsibility of:** Program Director	**Policy Number:** 1.1.1 **Implementation Date:** 05-2005 **Revision:** 3
	Issuer: QM Supervisor	**Review Date:** 01-2007

I. Purpose

Establish a standardized method of creating, approving, implementing, cataloguing, maintaining, reviewing, and revising policies and procedures.

II. Scope

All Cellular Therapy Product Institute personnel.

III. Implementation

A. Policies

a. Policies must be written in a standard format (see Template FORM-1):

i. Document type
ii. Subject category
iii. Policy Number (See Procedure 2.1.1)
iv. Policy Name
v. Date of implementation
vi. Issuer name
vii. Responsible party
viii. Revision Number
ix. Date of most recent review

b. Text Heading

i. Purpose (required)
ii. Scope (required)
iii. Definitions (optional)
iv. Policy (required)
v. References (required)

c. Footer

i. Page number
ii. Signature of QM Supervisor and Program Director

A system of numbering and/or titling of individual procedures, policies, worksheets, and forms

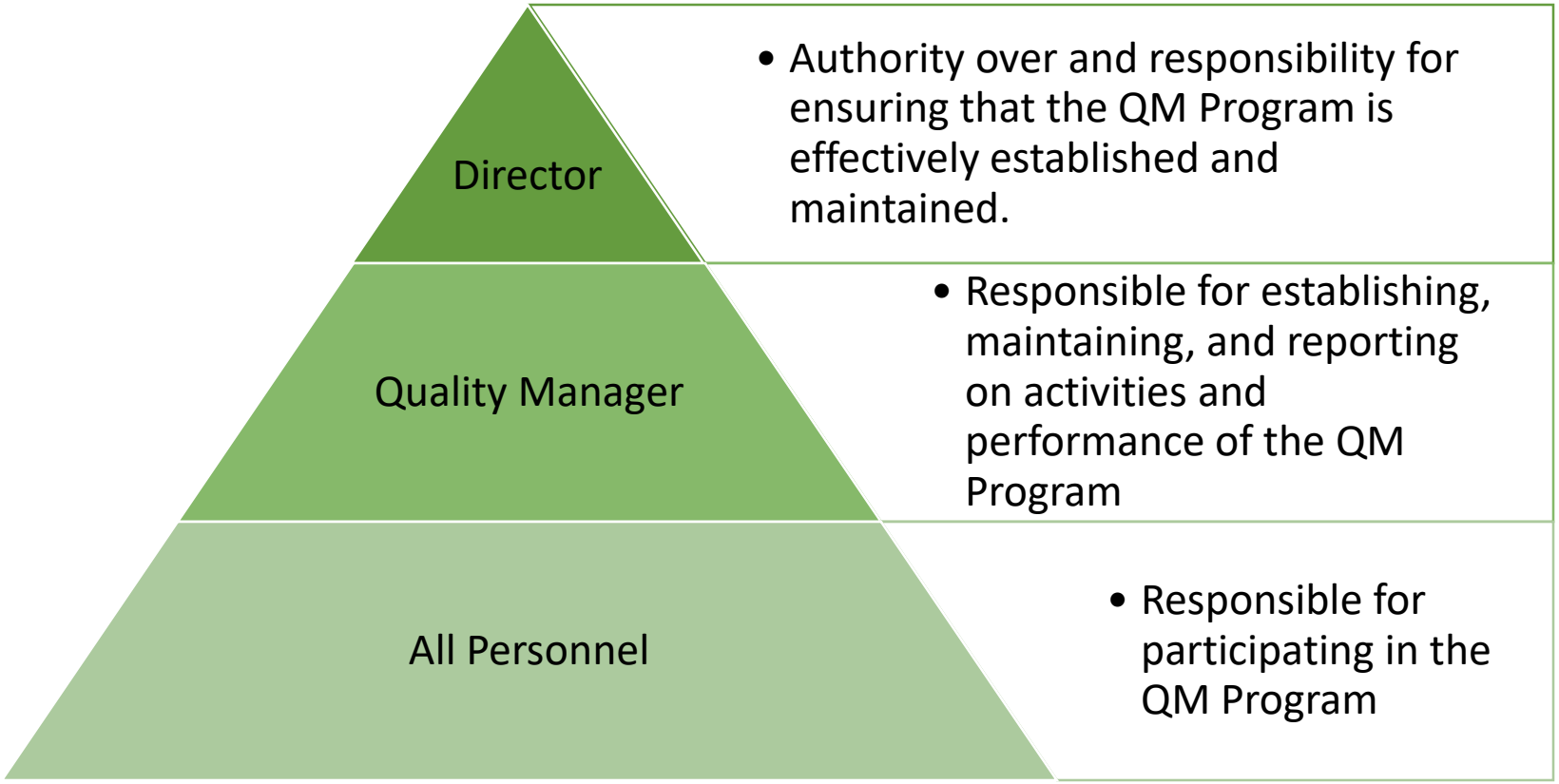
Critical Processes, Policies, and Procedures

- Each critical process, policy, and procedure remains accurate, operational, and relevant
  - Development
  - Approval
  - Validation
  - Implementation
  - Review
  - Revision
  - Archival

Document Control

- Critical documents used in the manufacturing process are current and protected
- Similar to process control, but specific to *documents*
  - SOPs
  - Worksheets
  - Forms
  - Labels
- Make sure the specific types of documents are listed in the QM Plan!

QM Responsibilities



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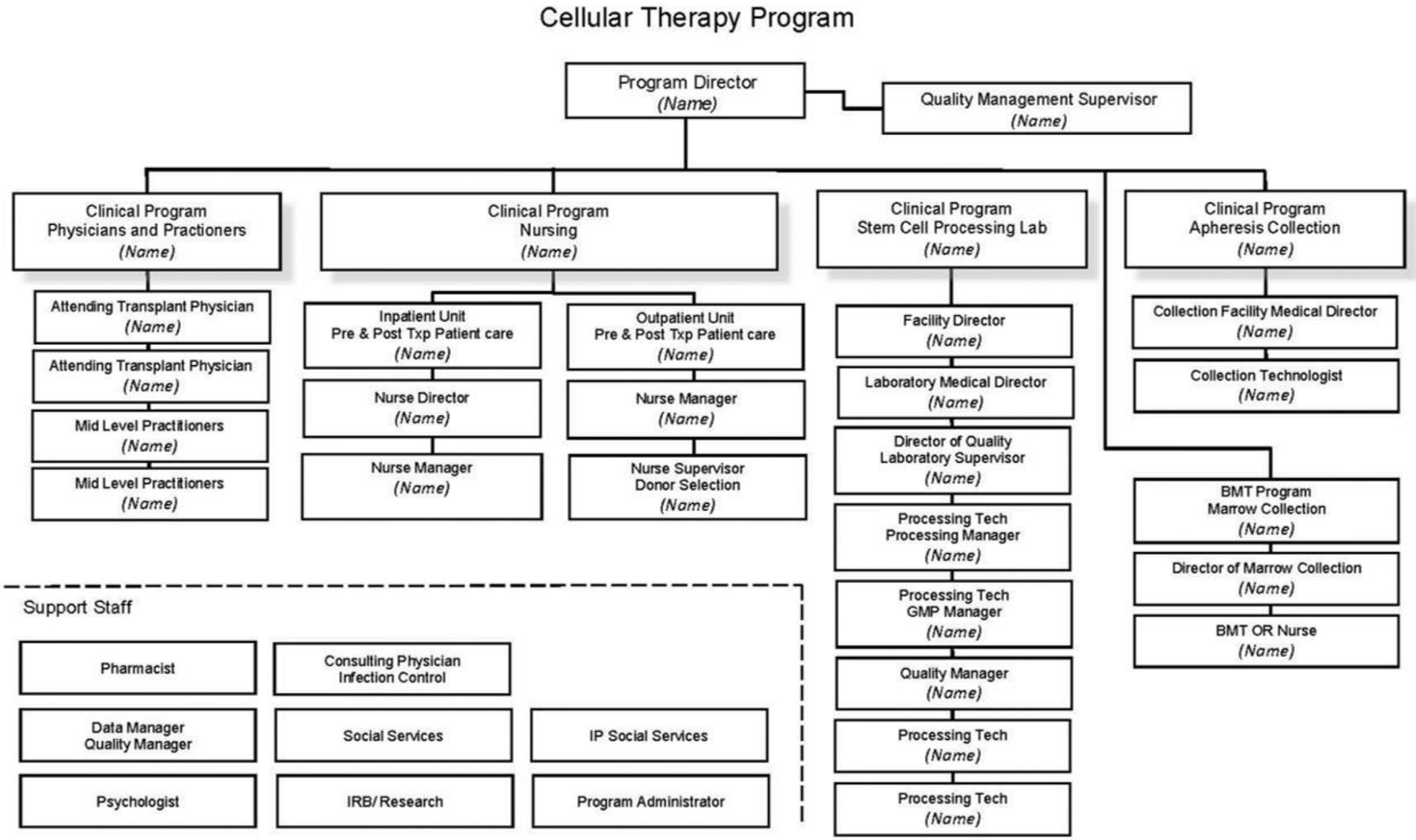

Cellular Therapy Program
Program Director
(Name)
Quality Management Supervisor
(Name)
Clinical Program
Physicians and Practioners
(Name)
Clinical Program
Nursing
(Name)
Clinical Program
Stem Cell Processing Lab
(Name)
Clinical Program
Apheresis Collection
(Name)
Attending Transplant Physician
(Name)
Attending Transplant Physician
(Name)
Mid Level Practitioners
(Name)
Mid Level Practitioners
(Name)
Inpatient Unit
Pre & Post Txp Patient care
(Name)
Nurse Director
(Name)
Nurse Manager
(Name)
Outpatient Unit
Pre & Post Txp Patient care
(Name)
Nurse Manager
(Name)
Nurse Supervisor
Donor Selection
(Name)
Facility Director
(Name)
Laboratory Medical Director
(Name)
Director of Quality
Laboratory Supervisor
(Name)
Processing Tech
Processing Manager
(Name)
Processing Tech
GMP Manager
(Name)
Quality Manager
(Name)
Processing Tech
(Name)
Processing Tech
(Name)
Collection Facility Medical Director
(Name)
Collection Technologist
(Name)
BMT Program
Marrow Collection
(Name)
Director of Marrow Collection
(Name)
BMT OR Nurse
(Name)
Support Staff
Pharmacist
Consulting Physician
Infection Control
Data Manager
Quality Manager
Social Services
IP Social Services
Psychologist
IRB/Research
Program Administrator

Organizational Chart and Description of Interactions

- Integration, cohesiveness, and objectivity throughout the entire life cycle of a cellular therapy product or cord blood unit
- Break down barriers
  - Physical space
  - Functions
  - Timing and chain of custody
  - Leadership
  - Third parties
  - Conflicts of interest

Quality Management Program Meetings

Clinical Program

Collection Facility

Other Services

Cell Precessing Laboratory

Personnel Requirements

Position-specific Requirements	Training	Continued Assessment
• Qualifications • Job description	• Orientation • Training plan	• Competency • Continuing education

Personnel

- Documentation of personnel qualifications and ownership of processes
- Investments in personnel that increase quality:
  - Education
  - Self-improvement
  - Empowerment
  - Job satisfaction

Written Agreements

- Third parties whose services impact the cellular therapy product or cord blood unit understand and comply with requirements
  - Reference Standards in agreements
  - Does not include suppliers (use vendor qualification)
  - Only applies to agreements that impact products or units
  - Include general description of process if no written agreements are currently used – commonly cited!

Outcome Analysis

- Therapeutic outcomes can indicate the quality of a cellular therapy program's processes.
- Use the data to analyze the *entire* program :
  - Analyze the data on an ongoing basis
  - Share the analysis with all aspects of the program or bank
  - Required and suggested criteria for product efficacy/clinical outcome in applicable Standards and Accreditation Manuals
  - Entities only involved with collection and/or processing must make genuine effort to obtain the data from clinical programs

Outcome Analysis

- Collection of Patient Outcome Data
- Evaluation of Data
- Distribution of Data
- Reanalyze

For more information on Outcome Analysis, please see several educational opportunities available in the FACT store at www.factwebsite.org/store.

Audit	Validation	Qualification
Definition:		
Documented, systematic evaluation to determine whether approved policies or procedures have been properly implemented and are being followed.	Confirmation by examination and provision of objective evidence that particular requirements can consistently be fulfilled.	The establishment of confidence that equipment and reagents function consistently within established limits.
Example:		
Audit of documentation of proper donor eligibility and determination.	Review viability and sterility of products prior to processing to validate the effectiveness of the apheresis procedure.	Prospective qualification of new controlled rate freezer to confirm the freezing program meets predetermined freezing parameters.

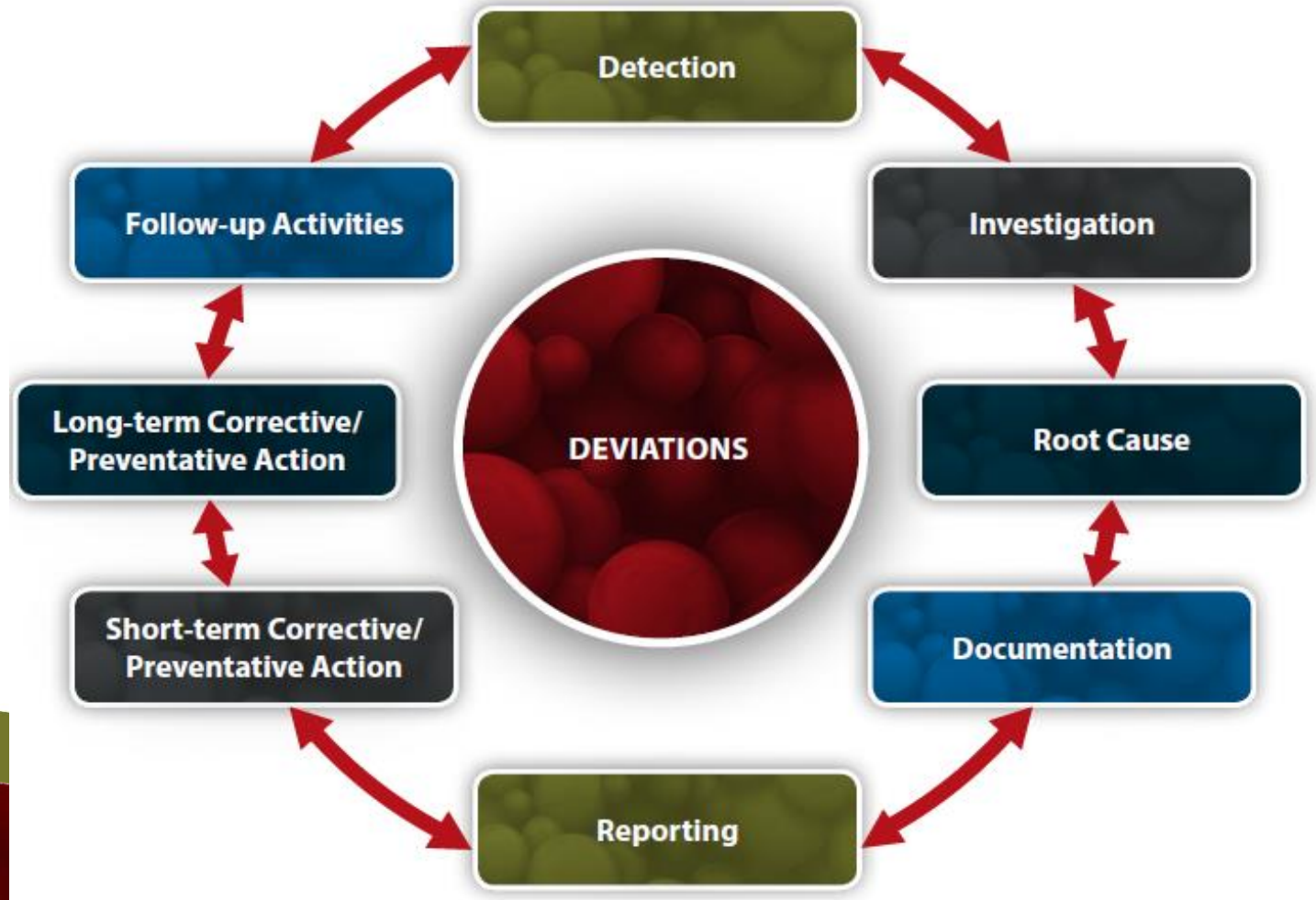
Performance vs Outcome Metrics

- Performance metrics: measure how personnel comply with policies and procedures, for example:
  - Completion of all donor evaluation steps
  - Inclusion of all requirements on chemotherapy order
  - Regular standardization and calibration of processing equipment
- Outcome metrics: measure success of therapy, for example:
  - Days to engraftment
  - Length of hospital stay
  - Survival

Positive Microbial Culture Results

- A major role of a Quality Management Plan is to assess regulatory affairs and ensure requirements are met
- One of the concerns of the US FDA is the use of products with positive microbial cultures
  - Will not be allowed for licensed products, but could be allowed for products under IND
  - Must notify the recipient and all facilities of the positive culture, an investigation is completed, and the incident is reported to the regulatory authority
  - Requires extensive teamwork between collection sites, processing facilities, cord blood banks (if applicable), and clinical programs

Errors, Accidents, Adverse Events, Biological Product Deviations, & Complaints



Information & Document Control

- Process for product tracking
- Actions to take when operations are interrupted

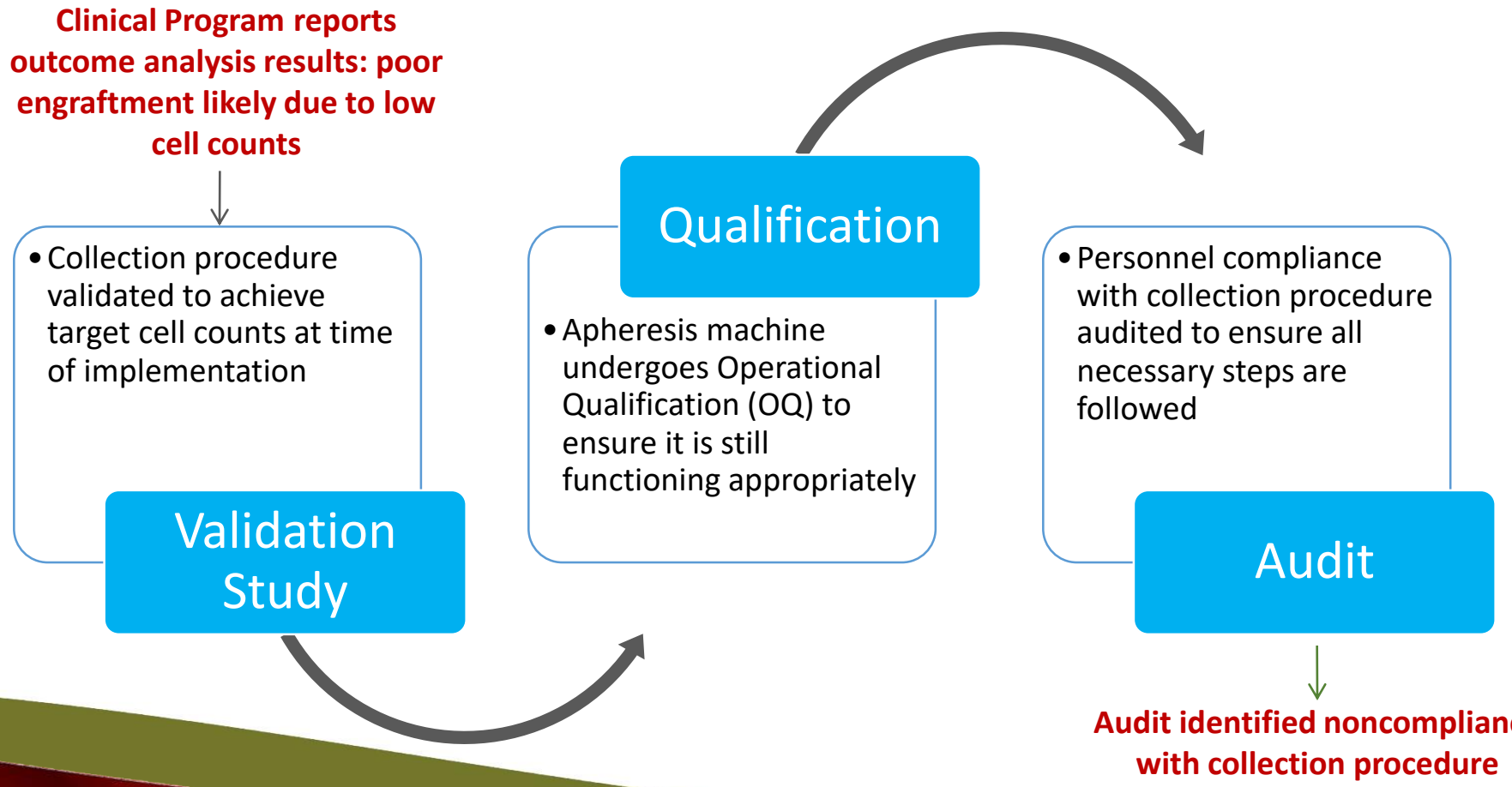
Tracking and Tracing

- Enable investigation of issues, document chain of custody, and maintain information needed for further action
  - Tracking: to follow a process from beginning to end
  - Tracing: to follow the history of a process, product, or service by review of documents

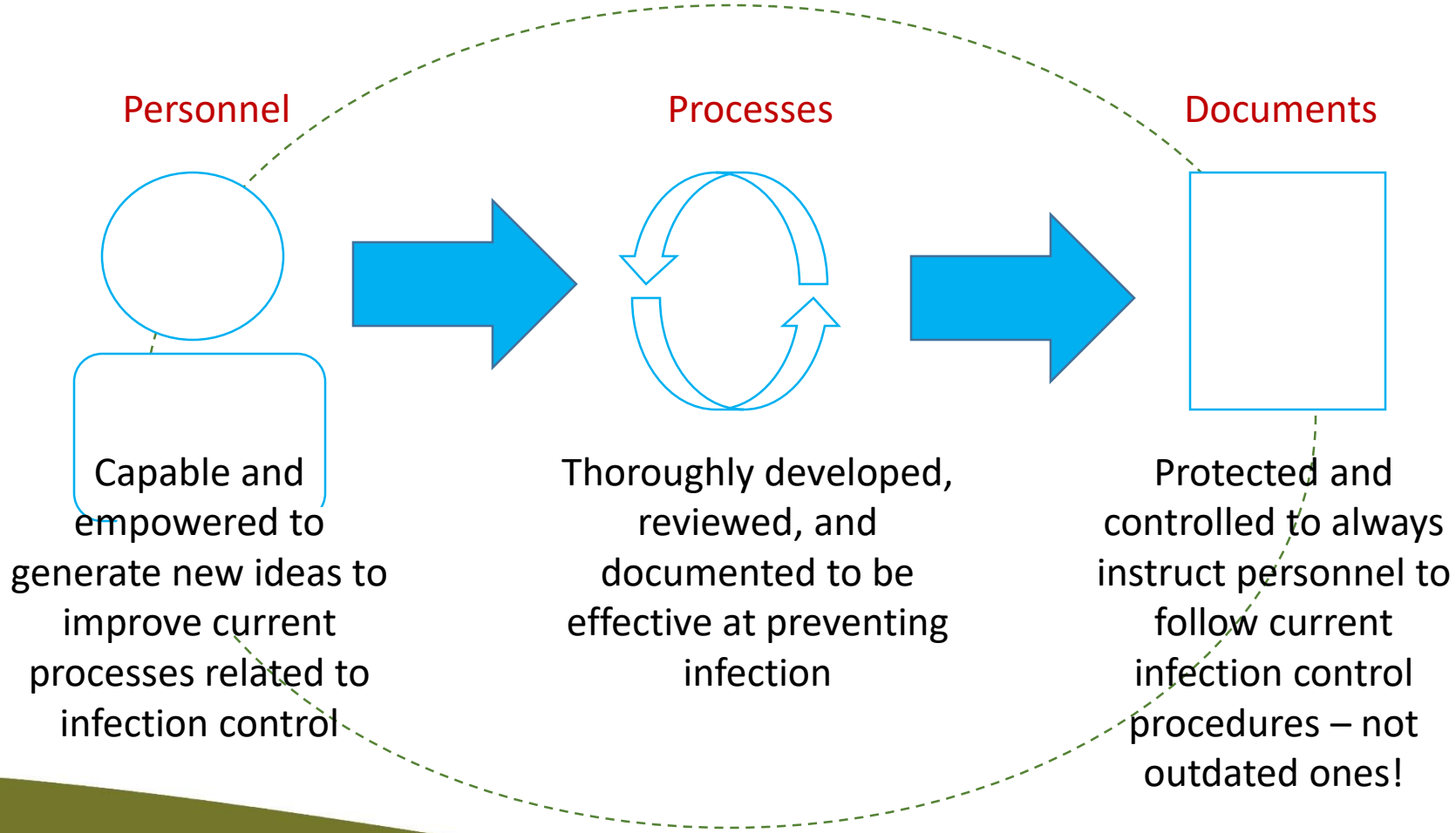
Continuous Operations

- Be prepared for situations that may interrupt typical operations
  - Policy or procedure is required that addresses emergencies and disasters
  - Programs must also have a plan for the management of interruptions that do not rise to the disaster level
  - Program is required to describe actions to take when an interruption presents, including:
    - Who needs to be contacted
    - How to prioritize cases
    - Key personnel to be involved in identifying alternative steps to continue functions

Case Study: Investigation of Poor Engraftment Results



Case Study: Clinical Program Infection Control



Thank You

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