Chapter 1

The Role of Leadership in Diagnostic Laboratories

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"**A leader is one who knows the way, goes the way, and shows the way**."
John C. Maxwell

DEFINING THE ROLE OF LEADERS

Leadership defines vision and motivation for all members of the organization to achieve the goals of the organization. Leadership in general sets directions and provides the platform to move the organization in right direction. There can be different models of leadership in various contexts. Informed and engaged leadership is central to the success of a diagnostic laboratory. To achieve the maximum healthcare goals, diagnostic laboratories are organized to assure that the team is greater than the sum of its component parts. Enlightened leadership can guide a laboratory team to achieve and perform beyond its expected capabilities. A leader's job is not only to control but also to teach, encourage, organize and facilitate. Effective leaders have technical insight regarding all the aspects of diagnostic operations, the work environment, equipment maintenance, quality and reliability of results and the confidence of all of the laboratory's stakeholders. An effective leader need not be as technically competent as the team's subject matter experts but is comfortable leading experts more accomplished. The topics of this chapter include the various aspects of a leader's role in a diagnostic laboratory, both at the primary and tertiary healthcare levels as well as in referral laboratories.

VISION AND MISSION

A leader must have a vision for the laboratory's mission accomplishment and clearly elucidate that vision to other members of the organization. While defining the laboratory's vision, it is important to clearly explain the primary purpose of the diagnostic laboratory which is to provide accurate, reliable and timely results to clinicians, thereby having direct positive impact on the management of each individual patient and promotion of health more broadly at all levels of the medical enterprise. Day to day activities of the staff also include the required technical improvements, elimination of possible errors through quality control, improvement of assay protocols, continual efforts to update the lab's technical hardware and staying abreast of innovation in health services. Leaders should encourage a culture of thinking in terms of "continual quality improvement". In addition to professional development of the staff, measures of success and rewards for excellent performance are the responsibility of an excellent leader. Every leader needs technical competence, but technical expertise alone is not enough.

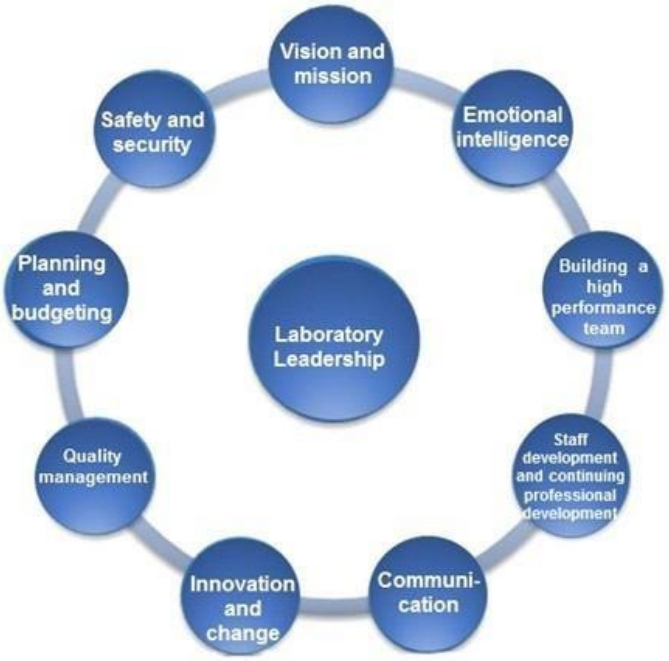

FIGURE 1-1: Laboratory leadership components (author's graphic)

EMOTIONAL INTELLIGENCE

Increased technical complexity and ever-changing healthcare management practices have significantly impacted the role of medical laboratories. Laboratory leaders must be able to explain such changes to laboratory staff, healthcare workers and patients. Lundberg stated in 1999, “The personal interaction between physicians and laboratorians has increased drastically since 1990 and will continue to increase as the value of the clinical laboratory and those who staff it expands”. This challenge is relevant to the laboratory director and will require increased interpersonal communication and mastery of soft skills. Unfortunately, not all technically competent healthcare professionals have spent time honing their soft skills, which are so necessary for effective human interaction.

An important role of the leader is to help instill traits such as collaboration, mutual trust, empathy, genuine appreciation, honesty and passion in the hearts and minds of the staff. Developing common work ethics and defining and setting a moral compass for the team is as essential as sophisticated reliable, up to date diagnostic equipment in the laboratory. Leaders, through their emotional intelligence, can inculcate the culture and improve the work environment with all these ingredients. A leader will point out opportunities for improvement when 'teaching moments' present themselves but do so in a positive manner so as not to undermine workers' confidence or the drive to grow and succeed. A few specific guidelines that illustrate the most necessary soft skills and approaches to implementing them effectively are elaborated here.

GUIDELINES FOR BUILDING A HIGH-PERFORMANCE LABORATORY TEAM

Team members respond to observed actions better than to verbal orders. Like an efficient and trustworthy team in any field of endeavor, the following are some key guiding points for developing an effective diagnostic laboratory. These points are emphasized in relevant sections of this chapter.

- Define a very clear picture of the healthcare or diagnostic requirements: a vision for the team.
- Establish clear goals in terms of technical diagnostic capabilities and contributions towards patient management.
- Communicate with staff frequently, particularly in difficult or controversial situations.
- Build and maintain trust at all levels by encouraging accountability of each team member and by operating in a way that earns the trust of the team.
- Maintain unity and discipline among all categories of the laboratory staff.
- Always be a good listener; let others speak freely.
- Make decisions and take informed risks.
- Provide candid and constant feedback.
- Learn to recognize and provide opportunities to grow and accept more responsibility, especially in the case of talented team members.
- Reward good performance, human interaction and behavior.
- Take every opportunity to encourage pleasant learning experiences.
- As a leader, be confident and dependable.
- Create opportunities to make the work environment enjoyable for all.
- Focus on the collective mission.

STAFFING OF THE DIAGNOSTIC LABORATORY AND GUIDING PRINCIPLES

Every organization comprises human resources who come and go throughout the life of the organization. Staff hiring and retention, to enhance mission and goals of the diagnostic laboratory, are never ending important and challenging tasks for a leader. The Human Resources department must always seek guidance from the technical managers. Overstaffing or understaffing can reduce the effectiveness of the organization. The following cardinal principles can serve as guiding points for strategic hiring:

- **Timing for laboratory staff hiring:** Practices vary in different healthcare systems. Usually the hiring process is accomplished during some specified time period. The Director or responsible manager should engage new employees early and often to assure a good start and to build open and trusted relationships with already hired laboratory staff. The completion of the hiring process and time to reach full functional employment may take weeks or months depending on technical complexity and requirements.
- **Selection criteria:** Section Managers or supervisors within the laboratory must play the central role in selection of suitable new team members. At the time of hiring it is important that the first line of management communicate to the employees, expectations and all relevant administrative and related technical information. It is important to have well defined job descriptions before initiating the hiring process (see Appendix 3 for sample job description).

- **Socialization:** The laboratory working environment and culture, including any specific rituals, should be explained to all new employees early in the process. Introductions and facilitation of open lines of communication and socialization among new and senior members of the staff are also important.
- **Resources and strategic alignment**: Leadership must consider resources and strategic alignment of the organization in individual hiring, always taking a broad view and considering the vision for the future.
- **Recruitment process:** While there may not always be hiring actions underway, the process of recruitment never stops. When resources allow, good leaders often hire an exceptional individual as the opportunity arises, rather than waiting until there is a position to be filled.
- **Selection of the best:** The most effective way to attract well-qualified and highly motivated staff for the laboratory is to be seen in the community as a "Best Employer".
- **Eligibility criteria:** Acceptable qualification and credentials for positions will vary with departments and organizational missions. Hiring authorities must give due consideration to age and technical qualifications as approved by the local laws and registration bodies. Job eligibility in terms of minimum qualification for each job; competency, in terms of experience, technical knowledge and any specific requirements should be followed strictly.
- **Job Descriptions and Laboratory standards:** Each laboratory should have prepared clear and concise job descriptions (JDs) for each category of employee and follow diagnostic laboratory policies and practices according to relevant accreditation standards or otherwise. Local laboratory policies should be in line with the relevant accreditation standards.
- **Ethical Principles:** All hiring, and personnel actions should be based on merit, openness and accountability with appropriate documentation. Always give due consideration to Conflicts of Interest, real and perceived. Selection by a professionally competent person and selection of the best candidate should be the rule. At the time of hiring, the employer should provide details such as schedule of work, job summary/description, duties and responsibilities, working conditions, work location or locations, travel or transportation availabilities and relevant requirements.
- **Health and safety considerations:** Medical laboratory staff must give special consideration to health and safety. It is the responsibility of leadership to provide detailed information in this regard to all staff members. The information should be based on technical experience of the senior technical leaders, formal risk analysis and biological safety guidelines.
- **Selection process:** Key issues of consideration during the selection process include identification of capable selection team or committee, appropriate job application forms, resumes and applications from candidates, in-person and electronic interviews, testing and reference checking. It is advisable to plan an objective Applicant Scoring System when possible. It is also appropriate to consider 'in-house hires' or transfers; this practice can enhance employee satisfaction

broadly. Always keep in mind the previous experience and performance record of candidates. As stated, contingency planning for hiring can be effective to avoid any possibility of a critical vacancy in any section of the laboratory. Similarly, it is important to focus on succession planning. This involves taking steps to groom replacements for an anticipated vacancy well before the vacancy comes about.

- **Professional networking:** Active communication and interaction with other diagnostic laboratories within the healthcare system may lead to networking beneficial to the employee search and hiring process. Seeking advice from senior leaders or colleagues in the system or hiring professional recruiters is also being practiced. Networking is also a source of continuing education and staff development.

STAFF DEVELOPMENT AND CONTINUING PROFESSIONAL DEVELOPMENT

Staff development is a continuous process and must be a priority. Encourage and provide opportunities to the staff to participate in national and international continuing professional development programs whenever possible. Continuing professional education and development ensures that all employees are competent to meet the required professional goals. Staff continuing education instills confidence and job satisfaction that translates directly into a healthy organizational culture and a more effective laboratory. Further details of professional development are given in the chapter on Professional Development and Certification.

THE WORK-LIFE BALANCE

Visionary laboratory managers always endeavor to improve the work environment. The following leadership principles, when applied effectively and in the appropriate local context can contribute to a healthy working environment:

- Consideration of the needs and responsibilities of the 'whole person' is an important concept.
- Empowerment and autonomy for all sections of the diagnostic laboratory.
- A sense of fairness for all.
- Innovation in terms of changes to keep up with technology and challenges.
- Open communication within and between all sections of laboratory.
- Confident and constructive 360-degree feedback.
- Consideration and thoughtfulness to enhance personal and community spirit.
- Equal access for all regarding available benefits and resources.
- The concept of “Living the Values” based on integrity and healthy social norms and standards.
- Addressing the specific needs of each individual and balanced professional work load according to recommendations of national and international standards and in accordance with ethical human behavior.

EFFECTIVE COMMUNICATION WITH LABORATORY STAFF

Regular effective communication is a key, as all the staff members should feel that the laboratory leader or manger is providing necessary and relevant information. Leaders must communicate with all tiers of the organization fairly and consistently. Always practice active listening skills. Be open-minded and respect other's opinion. Seeking the advice

and perspective of technically skilled employees is not only valuable for future planning but results in their support of leadership and increased efficiency and effectiveness. Frequent interaction, particularly when leadership demonstrates interest in the detailed technical work of the staff, improves everyone's sense of responsibility and personal value to the organization. Leaders must choose their words; regular praise and reminders of common goals and organizational values are an effective means of communication. Be ready to listen to any criticism and accept the challenges with a positive attitude. If leaders demonstrate openness to listen and resolve problems equitably, it is more likely that an unhappy or disgruntled employee will come forward, seeking help in time of personal or family crisis. Good leaders want to hear the 'bad news' first; the 'good news' will take care of itself. A 360-degree evaluation and feedback can be an integral part of the communication mechanism in laboratory management. It allows each individual to look in detail at his performance and effectiveness as a coworker. It provides insight regarding the professional skills and behaviors desired in the medical laboratory to achieve the common goals. This technique can be utilized to assist each individual to understand his strengths and weaknesses and possible approaches to professional development. It is particularly important to both address and practice gender equality in communication and professional development of the staff.

GENDER EQUALITY AND CULTURAL CHALLENGES

The male to female ratio of medical laboratories may vary with culture of a given country or region. In some developing and underdeveloped countries, the percentage of female staff has been significantly low historically. With global changes and equitable education this ratio is changing in favor of female staffing. In medical laboratories it is important to achieve work-place equality by providing equal access to all the resources and opportunities and to assure a sense of security for all. Rewards, resources and opportunities should be based on professional competences and should be provided regardless of gender. Cultural and gender diversity plays a positive role but can be a challenge as well; it often requires education and leadership setting the example. Developing appropriate communication skills in a setting of diverse cultures is required of a laboratory leader. When making any decision about the organization of the medical laboratory due consideration must be given to personal values, practices, traditions or beliefs of different groups or individuals with special consideration towards age, race, ethnicity, religion and gender. Gender roles are not the only factors that stress organizations in this ever-changing new 'small world'.

CHANGE AND INNOVATION

Leadership's role in motivation and innovation cannot be under estimated in any diagnostic laboratory. Creativity and innovation in medical care are playing a vital role in present day patient management; the same is happening in laboratory medicine. Advances in healthcare require rapid changes and commensurate innovations in diagnostic tools and methods also. Leaders with a vision for innovation-driven goals can orient and motivate laboratory staff. Managers should encourage the staff to accept any positive change by facilitating the process. Identification of process bottlenecks and their resolution, wherever they occur within the organization, is important. One must engage the right person at the right time in the right direction. Developing habits of sharing new ideas, autonomy, collaboration and encouragement will help to overcome inertia and will

make any change pleasantly acceptable to all. Tapping new ideas from laboratory staff and providing resources for implementation will add to a positive working culture. Fanning the passions to create, finding the courage to face failure or any difficulty and convincing the bureaucratic systems above to understand the importance of diagnostic laboratories will make this process a success and enhance employee loyalty. Organizational ingredients that can truly energize the staff include teamwork, an attractive work environment, professional development opportunities, transparency and regular objective appraisal. These factors will also help in creating a collaborative and progressive environment in any diagnostic laboratory. Not only is communication important within the laboratory; communication to and from the laboratory within the entire healthcare system must be timely and accurate. This is another technical field, which has advanced rapidly in the past few decades (see Chapter 12).

COMMUNICATION AND INFORMATION TECHNOLOGIES

In any component of the healthcare system, diagnostic work-ups and physician-patient communication play a pivotal role. Patients and treating physicians rely on timely communication and interpretation of laboratory results. Laboratory informatics is essential for data collection and informing patients and health-care providers of laboratory and diagnostic test results. For this and other reasons, establishment of a comprehensive communication system and efficient IT department within the diagnostic laboratory are fundamental. The laboratory manager's understanding of and trust in the possible benefit of this significant investment is critical. The role of information technology is also important for improving patient safety through identification, communication, and reliable documentation. It is becoming important for diagnostic laboratories to choose a laboratory informatics solution that is comprehensive and has long-term utility. Such a system will also help in managing a laboratory remotely and in collaborating with other laboratories. Laboratory systems should be compatible across a nation or region for greatest efficiency and positive impact. Laboratory leaders often rely heavily on technical experts in establishing IT systems but should have at least a working understanding of the technologies. Excellence in electronic communication obviously contributes to quality performance and is a necessary part of a quality management system. Keeping pace with the new concepts and development in the field of artificial intelligence relevant to diagnostic will be essential at all levels.

QUALITY MANAGEMENT

As highlighted in the World Health Organization's (WHO) Handbook on Laboratory Quality Management Systems, achieving, maintaining and improving accuracy, timeliness and reliability are major challenges for health laboratories worldwide. Part of a leader's responsibility is to inspire and organize through establishment of a comprehensive quality management system.

The concept of Total Quality Management (TQM) and its implementation should be etched in the vision and goals of each component of diagnostic laboratory function. The leadership should sponsor a quality management system through shaping the culture, which is essential for implementation and continual improvement. Quality management is also important for medical laboratory certification and the accreditation process. All sections of the diagnostic laboratory should be encouraged to participate regularly in

internal and external quality programs as recommended by the local health authorities. While planning and budgeting may seem mundane or unimportant to a highly technically qualified individual, they are also an essential part of the greater laboratory structure and functions. The subject has been dealt with in detail in the chapters on quality management (see Chapters 19 and 20).

PLANNING AND BUDGETING

Most diagnostic laboratories have separate budgeting and planning departments, but the functions are combined in some labs. It is essential for the laboratory managers and leaders to understand and provide timely strategic advice to these departments. It is advisable to be conservative and careful about overly optimistic financial forecasts. In most instances, local governments or hospital systems provide allocated funds and set healthcare policy. It is best to develop the budgeting activity with a leadership team and always make use of available consultancy. The task of annual or emergent budgets should be allocated to those individuals from the laboratory staff that have insight regarding future planning and a sense of the diagnostic requirements in a particular situation. Always spend adequate time in planning and allocation of funds to various departments of the laboratory. Comprehensive documentation of the complete budgeting process is an important safeguard. Everyone involved in the process should understand the documentation. Diagnostic laboratory managers and leaders should be provided opportunities to obtain continuing education regarding budgeting and its principles.

LABORATORY SAFETY AND SECURITY

Unlike planning and budgeting, laboratory safety is everyone's business. The role of diagnostic laboratories is to provide optimal diagnostic support required for the management of patients and prevention of disease. At the same time each laboratory must provide a safe environment for its staff and manage facilities, equipment and procedures in a way necessary to protect the environment. In accordance with local authorities, diagnostic laboratories are required to ensure implementation of various policies and procedures to ensure safety at all levels. In recent years, laboratory leadership has also been asked to consider 'security' of laboratory pathogen cultures, reagents and equipment. Biological Security is now often usefully considered along with Biological Safety under the concept of “Risk Assessment”.

Leadership must adopt and ensure that all employees embrace a culture of safety. Principles of employee and patient safety and safe disposal practices for any possible biological or hazardous waste from the laboratory must become part of the culture. Leadership plays the vital role in generating awareness and priorities regarding safe and secure diagnostic laboratories. Regular safety training and workshops arranged for the laboratory staff should be an essential component of continuing professional development for all. Biological Safety and Biological Security must become part of the culture of today's laboratories. They are not a 'product' of the laboratory, but without them, the lab will likely not succeed in today's global environment. Leaders must set the tone by accepting overall responsibility and supporting rational and reasonable best safety practices and by supporting the safety staff within the laboratory who are directly responsible (see Section II for relevant information regarding laboratory safety).

THE POWER OF COMMUNITIES OF TRUST

As we stated in the beginning, teamwork is the key to a successful laboratory. Teams can only function at their optimal level when they become communities of trust.While individuals at all levels can build or tear down trusted relationships, laboratory directors and key management leaders have the greatest opportunity to make a difference in a positive way.

An enlightened and effective leader steers with vision and an emphasis on quality science, safety, education, responsibility, accountability, honesty, transparency and ethics. The result will be what Steven Covey calls a “high trust organization”, with increased value, accelerated growth, enhanced innovation, improved collaboration, stronger partnerships, better execution, and heightened loyalty. Such an organization is unstoppable.