

Excellence in Clinical Engineering Leadership and the Inaugural AHTF ExCEL Award

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Dr Anthony C. Easty is the inaugural recipient of the American College of Clinical Engineering Healthcare Technology Foundation's Excellence in Clinical Engineering Leadership Award. This award was established to both define and recognize superior leadership at the institutional level. An important objective of this process is to also use the leadership attributes and performance of the award winners as a resource for further professional development of clinical engineering by disseminating these findings to the community. The article was written in connection with this award.

The American College of Clinical Engineering (ACCE) Healthcare Technology Foundation (AHTF) announced that the inaugural recipient of the foundation's Excellence in Clinical Engineering Leadership (ExCEL) Award is Dr Anthony C. Easty.

This award was established by the AHTF to promote excellence in clinical engineering (CE) as defined by broad institutional leadership and corresponding beneficial impact on the public. The principle of this award is that effective departmental leadership is certainly important, as is active professional involvement. Yet it is through institutional-level activities that CE can have its broadest impact, recognition, and professional growth. However, departmental strength is believed to be a prerequisite in that institutional impact by CE cannot be achieved without a strong and effective underlying department. Therefore, the management of an efficient and effective CE department that fulfills the basic require-

ments of CE was assumed to be a prerequisite to the leadership qualities that the ExCEL Award seeks to recognize. Similarly, national and, perhaps, international professional activity might be expected to be an attribute of local leaders, but such activity is not by itself what is being sought in this award. In addition, the ExCEL Award seeks individuals whose leadership is functional rather than merely being reflected by their position in the organization chart.

In defining the criteria for the award and the assessment methodology, it was recognized that those who contributed to the development of the award program did not necessarily know all of the attributes that constituted excellence in leadership and corresponding performance. Therefore, it is a key objective of the program that awardees not only be recognized but also become mentors to the profession through disseminating the programs and methods they use to be recognized institutional leaders. This need for leadership models that include collaboration, involvement, and action across a broad spectrum of technology issues has existed since the initial evolution of the CE profession.

For this award, 2 unique but related areas of success were defined. These are general leadership attributes and performance measures for which the attributes are likely to play a strong role. These attributes and performance measures are not necessarily the definitive set, and one of the objectives of the ExCEL Award program is to refine them as applications are received and reviewed and as we learn from the award winners themselves.

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Leadership Attributes

Whether in the CE department or in the institutional or other arenas, the attributes of a good leader can be generally defined to include the items listed in Table 1 and described below. For the purposes of this award, these characteristics were a key part of the evaluation criteria used by the selection committee in reviewing nomination packages.

1. *Knowledgeable, with adaptive expertise.* To be fully effective, leaders in a technical field should be strong in the basic knowledge associated with their profession. This must include both “classic” knowledge and what is often rapidly evolving knowledge requirements. For example, expertise in computer networks has become an area of increased attention in CE as medical devices become increasingly network dependent. The requirement for professional knowledge is a different perspective from the notion that trained managers can manage anything. Although this may have a degree of truth for managers, it is unlikely to be true for leaders.
2. *Organized, productive, and reliable.* Effective leaders are people who can actually get the job done, generally through their team. In fact, they can get multiple jobs done more or less simultaneously. This generally requires that leaders be highly organized so that they effectively manage themselves as a prerequisite to managing others. Time management is generally a prerequisite to personal productivity, and productivity is a prerequisite to being considered reliable, at least with respect to meeting deadlines. If someone is not known to be reliable in this regard, then they will not be sought out as a resource, and if they cannot be an effective resource, then they cannot be considered leaders. Individual skills in this regard

can also provide silent leadership, that is, accomplishment by example.

3. *Strong communication skills.* There are very few instances in which institutional accomplishment can be achieved without strong communication skills. Such skills include formal and informal oral exchanges, short written materials (eg, e-mails, memos), and longer written documents such as policies, training materials, and professional papers. The preparation of effective visuals (eg, PowerPoint slides) is also an important part of contemporary communication skills. Effective communication is generally required across a spectrum of other personnel, including administrative, clinical, and other staff. Equally important is recognizing inappropriate communications such as “jokes,” gossip, and the type of meeting-after-the-meeting in which group activity might be undermined.
4. *Facilitates participation and involvement by others.* It is rarely the case that leadership means doing tasks by oneself, based only on one’s own resources. Therefore, the ability to engage others and to marshal their expertise is an important attribute of effective leadership. Skills here are closely linked to communication in that how people are approached, drawn out, and engaged in a project can be strongly influenced by how they are communicated with. It must be recognized in this regard that it is not only assertive people who have good ideas and that the knowledge of someone who does not naturally speak up may be the key to an effective project.
5. *Respectful of others and their opinions.* As with communication skills and facilitation, respect for others and their opinions and ideas is important to gaining a full perspective on a problem and its resolution. One rushed or rude encounter, let alone persistent poorly thought-out communications, can shut down a potentially important communication link or, worse, create counter-currents of obstruction and outright sabotage. A leader that enables stake holders will contribute to optimal outcomes.
6. *Ability to integrate diverse ideas into a cohesive plan and activity.* Important problems in health-care rarely elicit only 1 obvious solution, and if one did, it is likely that it could be addressed at a local level. Therefore, the problems that challenge leaders are ones that elicit diverse ideas, and the need is to synthesize these ideas into a cohesive and generally agreed-upon plan of action. This can involve true detailed analysis as well as effectively dealing with the personalities and the opinions of those

Table 1. Leadership attributes

Knowledgeable, with adaptive expertise
Organized, productive, and reliable
Strong communication skills
Facilitates participation and involvement by others
Respectful of others and their opinions
Ability to integrate diverse ideas into a cohesive plan and activity
Coaches for performance, celebrates accomplishment of others
Respected for personal and professional skills
Ability to understand both the “big picture” and the task at hand
Ability to marshal and manage resources necessary to accomplish the objectives/results

whose ideas might not be incorporated in the final plan. When the latter occurs, it is a situation where communication skills again come into play with respect to facing the issue directly and explaining the rationale for the path taken, the value given to a person's input, and the reasons why their suggestions were not incorporated into the plan.

7. *Coaches for performance, celebrates accomplishment of others.* Excellent leaders seek out and rely on the work of others while also openly acknowledging their contributions. Alternatively, attempts to represent the work of others as one's own are sure to shut down future participation and motivation. The corresponding ability and desire to help develop the skills of others are strong leadership skills and contribute to others' motivation to improve their own performance and skill level,+ thereby contributing to their value to the institution. Suppressing the growth of others to improve retention is an immoral and usually counterproductive strategy.
8. *Respected for personal and professional skills.* Superior leaders are generally highly respected for their own personal and professional skills in technical knowledge, adaptability, ability to organize effective teams, and support of the contributions of others. These should be integrated into a total picture of admiration such that they become a person often sought out for issues directly, indirectly, and sometimes remotely associated with their primary professional responsibilities.
9. *Ability to understand both the "big picture" and the task at hand.* Few significant healthcare issues arise in isolation from either a content or resource perspective. Therefore, an effective leader must always be able to put problems in context with respect to other issues that the problems at hand interact with and prioritization of the current task with respect to other tasks either currently underway or anticipated. In this regard, a leader avoids both oversimplification and undersimplification of tasks and instead understands the true scope of the issues. This level of insight likely comes from core ability and knowledge and from direct experience.
10. *Ability to marshal and manage resources necessary to accomplish the objectives/results.* All tasks require resources of time, personnel, and money, in various combinations. Effective leadership requires the ability to first assess what resources are needed and to then effectively communicate these needs to resource control points. If resource needs are fairly assessed, their absence suggests that a project will not be successfully completed, at least in the time frame desired. Therefore,

taking on projects without adequate resources is a recipe for failure and disappointment. The leader must therefore also be able to explain the consequences of inadequate resources in a fair and factual manner, and a reputation of reliability will make such assertions credible. Once appropriate resources are made available, it is the leader's responsibility to use them effectively and efficiently and to communicate performance and routine utilization against goals and timelines as required by the institution or as necessary to communicate any issues that might arise.

Performance Measures

In addition to the personal attributes addressed above, an important measure of successful leadership is how these factors are translated into actual performance (Table 2). For this award, such performance was assessed against the following criteria:

1. *Provision of valued services beyond the effective operation of the CE department.* As noted above, the level of leadership being recognized in the ExCEL Award is at the institutional level. Therefore, it must be possible to identify significant and valuable services that the leader is providing to the institution beyond managing an effective department.
2. *Frequently called upon to help solve diverse and important institutional challenges.* One measure of the leadership value of individuals to the institution is the frequency with which they are called upon as a resource for diverse issues that arise at multiple levels. This emphasis is not to suggest that someone who does a superior job primarily at his/her assigned work is not to be recognized as an important contributor to the organization. In fact, we all know that those who do so are both valuable and rare, and they should certainly be singled out for recognition regardless of their area of service. However, leadership generally requires a higher level of both

Table 2. Performance measures

Provides valued services beyond the effective operation of the CE department
Frequently called upon to help solve diverse and important institutional challenges
Inspires team efforts
Reflects high standards of performance and ethical behavior
Recognized as a "go-to" person with respect to a wide range of technology issues
Recognized for the desire and ability to expand the value of CE for the betterment of the institution
Recognized for the desire and ability to expand their personal value for the betterment of the institution
Establishes pathways for improvement with key stakeholders

visibility and performance. One challenge in this regard, if strength is to be maintained in CE, is to not be continually drawn too far from their expertise base when it is discovered that their general leadership skills can be widely applied.

3. *Inspires team efforts.* Because it is often the case that complicated problems in institutional health-care are multidisciplinary success often requires real (as opposed to nominal) teamwork, and an important leadership role is to create valuable team performance from individual skills. Strong leadership skills and associated respect can make people want to work together for the leader, with full knowledge that their roles will be recognized. Thus, successful team efforts are a good measure of leadership accomplishments.
4. *Reflects high standards of performance and ethical behavior.* As mentioned above, respect from one's peers and teammates is often a key element of leadership performance. Such respect generally requires that the leaders have a personal record of consistent accomplishment such that working with them includes an expectation that a project will be successful and that, therefore, the participants will themselves also be seen as successful. High ethical standards is an important part of such respect and has direct impact on team efforts in terms of interactions with team members and in assuring recognition of the contributions of the members of the team. More generally, consistent evidence of ethical behavior adds to a leader's reputation of being someone who working with will be a comfortable and rewarding experience.
5. *Recognized as a "go-to" person with respect to a wide range of technology issues.* Although similar to number 2 above, this performance category emphasizes the technical roots of CE, although again with emphasis on being able to reach beyond existing knowledge to address technologies that are either totally new or new to the individual. This award is based, on part, on demonstrated examples of being a go-to person as reflected by actual performance within the institution.
6. *Recognized for the desire and ability to expand the value of CE for the betterment of the institution.* Because this award is for CE leadership, it is an important part of the criteria that there be evidence of working for the improvement and recognition of CE itself. Thus, the AHTF seeks to recognize not just personal achievements but also those achievements in the context of the CE profession. Evidence of this can be, in part, that CE is affirmatively valued within the institution. This addresses that recurring problem of upper administrations not quite knowing what it is that CE does or that it even exists.

7. *Recognized for the desire and ability to expand their personal value for the betterment of the institution.* Effective and valued leadership generally requires personal growth with respect to managerial and technical skills. Therefore, continuing education, whether formal or informal, is an important component of leadership excellence. This can be of particular value when the individuals reach out to expand their knowledge base and strengthen skills already held. To be recognized as an institutional value, such continuing education should be targeted at improving job performance.

8. *Establishes pathways for improvement with key stakeholders.* Many of the performance measures described above are responsive in nature; that is, they reflect effective performance with respect to tasks brought to the individual. Also important is the ability and desire to identify institutional issues and needs and to then bring them to the attention of others along with suggested approaches. Thus, this performance area goes beyond being an observer to include being an identifier of solutions and an initiator of actions. It also requires established and effective communication links across the institution so that information can be effectively transmitted to the appropriate parties, not as complaints but as a means to seek improvements. A number of the attributes discussed above are strongly linked to this one, including ethical behavior, support of teamwork, and proven abilities to be an effective agent for positive change.

Nomination Process

The nomination guidelines and forms are provided at the AHTF Web site at http://www.accefoundation.org/leadership_award.asp.

The basic qualifications for nominees are that they must be directly employed by a healthcare provider and have practiced in the field of CE for the past 5 years. Their core function must be that they are leading a team of employees carrying out comprehensive CE programs and tasks. In addition, they must be a member in good standing of the ACCE for at least the past year. These qualifications are based on the underlying concept that this is an award for institutional-level leadership in CE and that actual employment by the healthcare provider is necessary for the type and level of leadership excellence that the AHTF wishes to identify and recognize. Similarly, it is believed that membership in the ACCE is an appropriate measure of professional commitment.

The required nomination materials include the following (see Web site for further details):

- Basic professional and biographical information
- Employer information and details on the candidate's CE program

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- A nomination letter detailing how the nominee has made consistent and valued contributions to the institution with emphasis on leadership of specific projects or activities
 - Three additional nomination support letters that specifically address the nominee's institutional leadership
 - Examples of leadership roles, including the following:
 - talent builder/coach
 - multidisciplinary team development
 - leading institutional change
 - empowerment/delegation
 - establishing institutional strategic directions
 - effectively communicating with others outside the department
 - demonstrating integrity and adherence to a code of professional conduct and ethical principles
 - instilling passion in the institutions mission

The Awardee: Anthony C. Easty

Dr Anthony C. Easty is the senior director of Medical Engineering of the University Health Network, which consists of Toronto General Hospital, Toronto Western Hospital, and Princess Margaret Hospital, and he has been called one of the most trusted executives in the hospital system. Under Dr Easty's leadership, Medical Engineering at the University Health Network provides services in the following major areas: medical device selection and purchase; incoming inspection; in-service education; medical device repairs; performance assurance; incident investigation; medical device hazard notification; human factors; and research, development, and education. This scope of service is truly that of a full-service department.

Dr Easty is also the chair of Global eHealth Innovation and an educator at the University of Toronto. He is well recognized as a leader in CE, and he has positively influenced many clinical engineers, biomedical technologists, hospital administrators, nursing staff, and physicians over the more than 30 years of his career in CE, a period that has encompassed several generations of medical technology and significant growth in his institutional responsibilities. His ongoing view has been to broaden the scope of CE to better serve the Network, at first by including surgical instrumentation, and also by establishing the use of human factors as a device procurement criterion, with what is now likely to be the largest human factors healthcare group in the world. More recently, he has tackled today's biggest issue, the overlap and interdependence of CE and information technology. In this regard, he

has created a Medical Device Informatics group to plan and develop this convergence within his institutions, and in doing so, he has demonstrated one of the key attributes of leadership: seeing what is coming and planning for and guiding it, rather than merely responding to what is thrust upon him. Dr Easty is also cited in his nomination letter for establishing Clinical Engineering Standards of Practice, yet another example of proactive, forward-thinking leadership. He has also been a leader in continuous improvement of the Network's capital planning process and cultural change that now recognize the systems perspective of patient safety, and he publishes regularly to share results with the broader community. Beyond the Network, he is a fellow of the Canadian Medical and Biological Engineering Society, chair of the International Committee of ACCE, and an active member of several professional societies.

Dr Easty's approach to staff development includes active encouragement for people to broaden their expertise and be professionally active. He also is known for empowering staff through trusting them and by demonstrating that he is to be trusted. He also believes in and practices empowerment and allows staff to develop their own spheres of leadership. He is active in working with students to help ensure the development of the next generation of CE leaders. In addition, he is recognized for clear and effective communications throughout his interactions and to those with varying levels of technological sophistication.

As with many dynamic and respected leaders, Dr Easty also makes time for his family and his community. He has worked on community park development, on behalf of the Toronto workers Health and Safety Legal Aid Clinic, and as a board member of his daughter's ice hockey league.

Conclusion

Leadership can occur at many levels within an institution, and CE can have a number of service delivery models, each of which can be important and valuable to the institution. The award described here focuses on excellence in leadership in CE at the institutional level, building on the leadership of sound in-house CE program activities. This level and type of leadership have the potential to advance healthcare and the profession of CE and to provide for the ongoing definition of those personal and professional attributes that define leadership excellence. Dr Easty provides an outstanding example of what clinical engineers can achieve and what value they can provide to their institution. The AHTF is pleased to recognize Dr Easty and to have him as the inaugural recipient of the ExCEL Award.