

Laboratory Information System Management or Laboratory Knowledge Management? The Laboratory of the 21st Century (LaXXI)

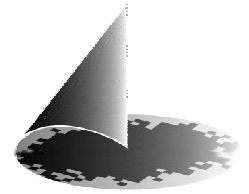
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The report of the National Academy of Sciences (NAS) “ Crossing the quality chasm: a new health system for the 21st Century” is a stunning blueprint for the future development of health system independently from the region and financing system and appears destined to influence many health operators and countries in the same way of the previous report “To err is human; building a safer health system”.¹ The report refers to a new perspective on the purpose and aims of the health care system, how patients and their clinicians should relate, and how care processes can be designed to optimize responsiveness to patient needs. The redesign principles presented are not only aimed at the health care organizations and professionals that comprise the delivery system but also involve the structures and the processes of the environment in which those organizations and professionals operate. Such change includes: setting better methods for disseminating and applying knowledge to practice, fostering the use of information technology in clinical care, creating payment policies that encourage innovation and reward improvement in performance, and enhancing educational programs to strengthen the health care workforce. According to the NAS, health care should be:¹

- *Safe*—avoiding injuries to patients from the care that is intended to help them.
- *Effective*—providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit.
- *Patient-centred*—providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions.
- *Timely*—reducing waits and sometimes-harmful delays for both those who receive and those who give care.
- *Efficient*—avoiding waste, including waste of equipment, supplies, ideas, and energy.
- *Equitable*—providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socio-economic status.

Quality problems can be grouped in three categories: *overuse, underuse and misuse*. Nobody doubts that clinical practice must be evidence-based but research that should change practice is often ignored for years; even when best practices are well known, they are often poorly implemented. There are at least four stages from evidence to action: the clinician needs to be aware, then agree, then adopt and finally adhere.



The knowledge translation loss along the research-to-practice pipeline is very often quite relevant.² There is a wide debate concerning the settings most suitable for applying knowledge translation and which intervention changes performance and healthcare outcomes.³ The clinical laboratory pioneered in the recent decades fields such as the quality control, the quality management, the accreditation and certification processes and the informatics implementation. The times and the technology are ripe for the same role also in the knowledge translation; all around the world the laboratorian could (or must?) be the first to become really an e-doctor.^{4,5}

- 1) Institute of Medicine. Crossing the quality chasm: a new health system for the 21st century. Washington: Institute of Medicine 2005.
- 2) Glasziou P, Haynes B. The paths from research to improved health outcomes. Evidence Based Nursing 2005; 8: 36-8.
- 3) Davis D, Evans M, Jadad A, Perrier L, Rath D, Ryan D et al. The case for knowledge translation: shortening the journey from evidence to effect. BMJ 2003; 327: 33-5.
- 4) Dorizzi RM. Appropriatelyzza diagnostica: gli strumenti per misurare. 2004; 5: 74-85
- 5) Ebell MH. Becoming an ephysician. J Fam Pract 2001; 50: 425.