

Multidisciplinary Contributions for the Improvement of Healthcare

Manuel Cardoso de Oliveira¹, Filipa Carneiro²

¹.Universidade Fernando Pessoa

².Centro Hospitalar
Tâmega-Sousa

ABSTRACT

The quality of healthcare is needing urgent care, as patients are subjected to errors and losing confidence in the system, health staff is overwhelmed with information and regulations, health problems have a lot to do with social environment, and economic constraints impose a more efficient and reliable system.

General Surgery as well as surgical specialities constitute no exception in this large picture, on the contrary, they will get their outcomes under better conditions when adhering to this new perspective. Improvement of healthcare demands convergent work at all its main levels: 1) patients (information/education, increase of autonomy, participation in evaluations/decisions); 2) professionals (scientific-technical preparation, reflective thinking, managerial skills, capacity to work in multidisciplinary teams, interaction with patients and families); 3) teaching and training; 4) healthcare system organization. Cross-talk among all these agents, institutions and activities are no better pursued than making them coincide at academic multidisciplinary centers where humanities, social sciences and health sciences are actively taught while interacting, both at pre-graduate and post-graduate levels. Enrollment of patient associations and health administrative authorities do also significantly enrich the skills of trainees. Furthermore, research work at any level, including the areas of patient safety and improvement of quality, may not only contribute to better professionals but also to an environment of self-sustained, continuous improvement.

Despite widespread recognition of the need for reliable measure in health care, we still have a poor understanding of what goes wrong, and, particularly, how and why things go wrong. Accreditation processes initiated in the 80's in health services brought positive contributions. However there was until recently little

convincing evidence about whether and how accreditation predicts health services performance. Work is needed to build on and extend this research as continuous large-scale investments in accreditation processes¹. At the start of this century, Control and Improvement of Quality and Patient Safety have been the subject of increasing attention, and it has been established that we need a new organization. The contribution of the multidisciplinary groups that study the characterization and modernization of national realities of specific interest ensure that patients and health institutions take faster measures in the field. The need to think differently an environment as volatile and complex as Health makes all efforts to create this multidisciplinary groups even more important.

What, in these considerations, apply to Health at large, apply with still more emphasis to General Surgery and Surgical Specialities. And indeed, surgeons have been pioneers in the treatment of this subjects^{2,3}.

In a sequence of multiple post-graduate courses in these areas for training healthcare professionals we created an Associação Para A Segurança dos Doentes (APASD) – Association for Patient Safety – where we join professionals, patients and families with their organizations, hoping to help ensure that hospitals and other health unities are safer and less frustrating places for patients, places where people can work with more pleasure and efficiency and also that the human and material resources invested in them can be an investment that yields return⁴. APASD is actively involved in gathering patient safety information and sharing ideas with health care professionals, patients and families, being a pioneer movement in our country. In this moment we are trying to have a structure where some professionals may have full-time devoting to patient safety.

Health care professionals and people from other disciplines have been very receptive to the patient safety initiative and we are thinking to implement something at a national basis. Our project is an important source for understanding the different aspects of

Patient Safety and provides an important field to research. We combine “real work” with academic study of health policy and management and so we are contributing to our own professional development as well as the National Health System. We are searching other organization (national and international) focused on patient safety to foster collaboration. It seems the association APASD will be an ideal organization to enhance the development of the Patient Safety agenda.

University Fernando Pessoa’s Teaching Hospital is under construction and will be concluded in 2012. It is an innovative project that aims to be unique and different because it integrates a health centre, a unit of continuous care and also brings health education and research in several areas. Equipped with state-of-the-art technology it will have a department of Risk Control, Improvement Quality and Patient Safety where multidisciplinary teams will work to promote quality and do research.^{5,6,7}

We totally agree with some authors⁸ that we need multidisciplinary centres for safety and quality improvement, learning from climate change science. A recent paper of these authors has been for us a strong stimulus to view the centre we have proposed as an organization with innovation and plenty of potentialities. We need deeper understanding of the systems in the delivery of care, searching knowledge in social sciences, in clinical disciplines and also in the science of improvement. Health care has much to gain if the doors of pragmatic science are open to improvement of quality methods or learning from reflection on practice. The classic work of Shewhart and others focused sharply on exploring and understanding unwanted variation as a key to redesigning a health care system with the highest possible quality, safety and value as has been referred.⁹ Incorporating scientific quality improvement into everyday work is not an easy task. We need to select projects, set measurable aims, assemble a multidisciplinary group, be creative in recruiting experts, develop study design without disrupting normal work, do

everything possible not to sacrifice data quality and completeness and whenever possible anticipate possible publications.¹⁰ Nobody can ever be certain that a quality and safety intervention reported to be effective in a certain place can be implemented successfully in other setting with the same positive result, as has been recognized. So we need to repeat the intervention in the different places to discuss how it is adapted, why and with what results.¹¹ Project designs that integrate data collection with the work itself are especially helpful and recognise the general perception that top-flight journals are loath to publish the results of quality improvement work.¹² SQUIRE (Standards for Quality Improvement Reporting Excellence) provide a promising framework for this kind of publications, but in this moment there are a lot of difficulties in the message transmission and we think that it is necessary to pursue with an adequate explanation of this concept until they get the respect of classical academics.¹³ The relationships between the methods of scientific research and of quality improvement have not yet been worked out well, and this can affect the funding and other resources available for research in this area. At present, the strong allegiance of many powerful forces to the methods of orthodox medical research serves to denigrate most other methods of gaining insights.¹⁴ The time is upon us, and it may be a long time returning if the current opportunities end up doing the same old thing and replicate the same familiar shortcomings. This is a very auspicious time to start doing things differently with regard to developing a methodology sufficient to guide healthcare services delivery reforms with confidence and efficiency.

Developing new and cross disciplinary skills, stimulating the publication of new kind of papers, training professionals and educating patients and families, preparing research for future fellowship and building a hospital for teaching where the multidisciplinary climate is stimulated, is the right thing to do. We are trying that our initiatives can go

in public health perspective and so we are maintaining strict contact with the Regional Administration of Health of the North of Portugal and we will try to obtain funding from a variety of sources in order to make the centre sustainable.

The relevant published literature is difficult to grasp, being scattered, diverse and multidisciplinary, and most of it is published in areas that are unfamiliar to medicine, as stated by Vincent et al.⁸ When these authors recognize that experts in the safety sciences have been gradually disappearing from view in patient safety and the initial enthusiasm has not been sustained, they are pointing in the same way of our strategy. Furthermore we agree with others who talk about the considerable gap between what we know from research and what is done in clinical practice.¹⁴ We think also that evidence-based medicine and clinical quality improvement can learn from each other. The methodological development and the training of this complementary disciplines would both gain as we stated before.¹⁵ A recent paper-“Can evidence-based medicine and clinical quality improvement learn from each other” invite us to recognize that those two are sides of the same coin in producing the best possible health care. Unfortunately, this global vision is not yet widely understood; nor is it widely implemented, according to these authors.¹⁴ We know that effective improvement and research rely on sustained multidisciplinary collaboration and so, taking advantage of the human and material resources of our young University and in the sequence of previous experiences, we proposed as we refer previously a Centre of Research and Development in

which experts from multiple disciplines are brought together to tackle the problem. This Centre joins multiple disciplines – Biostatistic, Epidemiology, Social Sciences, Clinical Disciplines, Engineering and Architecture. The centre will have different areas with cross fertilisation and in some of them there are research projects ongoing. We hope the centre will be an organization without walls, a movement for collaboration and change that spread innovations in our country and help professionals and health units in the learning of evidence-based medicine and the science of improvement.

Centre’s approach to quality improvement will be multidisciplinary, involving health professionals of diverse origins, people from social sciences, new technologies and clinical disciplines. The diversity and expertise gives strong foundation to advance the rigor of improvement science and evaluate our own programs and objectives. The centre will have an important role to play, educating professionals in the effective use of tools and techniques for quality improvement research. The centre will be a strong advocate of “integrate not aggregate” networks and databases to achieve the objectives referred. The centre will develop partnerships with hospitals and primary care units, and we hope to give an important contribution in the area of quality, patient safety and science of improvement. These initiatives should generate sustainable and transformational health care changes. The Centre consists of core academic personnel, research associates, visiting fellows as well as students, patients and people from civil society, and we think that we are building a better future.

Acknowledgements

We are grateful to Isabel Azevedo for her comments and reflections and to Olga Tavares for her technical assistance.

REFERENCES

- 1-Braithwaite, J., Greenfield, D., Westbrook, J., et al. Health service accreditation as a predictor of clinical and organisational performance: a blinded, random, stratified study. *Qual Saf Health Care* 2010;19:14-21
 - 2- Khuri SF, Daley J, Henderson W. The Department of Veterans Affairs the NSQIP: the first national, validated, outcome-based, risk-adjusted, and peer-controlled program for measurement and enhancement of quality of surgical care. *National VA Surgical Quality Improvement Program. Ann Surg* 1998; 228:491-507
 - 3- Itani Kamal M F. In memoriam: Shukri F. Khuri, MD, FACS: May 27, 1943-September 26, 2008. *Bull. Amer. Coll. Surgeons*. 94, 2:43-45
 - 4-Oliveira, M. Cardoso. Safety in Health Units: the contribution of the APASD. *Magazine University Fernando Pessoa*, 2011;12:30-32
 - 5-Oliveira, M. Cardoso. Centre of Research and Development in Health Quality and Patient Safety. *Magazine University Fernando Pessoa* in preparation
 - 6-Oliveira, M. Cardoso. Quality and Safety in Health: a thread connecting various initiatives. *Magazine University Fernando Pessoa*, 2011;12:39-42
 - 7-Trigo S. UFP opens teaching Hospital this year. *Magazine University Fernando Pessoa* 2011; editorial
 - 8-Vincent, C, Batalden, P., Davidoff, F. Multidisciplinary centres for Safety and Quality Improvement: learning from climate change science. *Qual Saf* 2011; 20(Suppl. 1):i73-i78.
 - 9-Neuhauser, D., Provost, L., Bergman, B., The meaning of variation to healthcare managers, clinical and health-services researchers, and individual patients. *Qual Saf* 2011;20 (Suppl.1):i36-i40
 - 10-Goldman, D., Ten tips for incorporating scientific quality improvement into everyday work. *Qual Saf* 2011; 20(Suppl.1):i69-i72
 - 11-Øvretveit, J., Leviton, L., Parry, G., Increasing the generalisability of improvement research with an improvement replication programme. *Qual Saf* 2011;20(Suppl.1):i87-i91.
 - 12-Davidoff F, Batalden P, Stevens D, et al; Mooney, for the SQUIRE development group. Publication guidelines for quality improvement in health care: evolution of the SQUIRE project. *Qual Saf Health Care* 2008;17(Suppl.1):i3-9
 - 13-Lynn, J., Building an integrated methodology of learning that can optimally support improvements in healthcare. *Qual Saf* 2011;20(Suppl.1):i58-i61
 - 14- Glasziou, P., Ogrinc, G., Goodman, S. Can evidence-based medicine and clinical quality improvement learn from each other? *Qual Saf* 2011; 20(Suppl.1):i13-i17
 - 15-Oliveira, M. Cardoso. A propósito de iconoclasias. *Arq. Med.* 2010; 24(4):153
-

Correspondência:

Manuel Cardoso de Oliveira
Universidade Fernando Pessoa
Praça 9 de Abril, 349
4249-004 Porto

Email:

manuelco@ufp.edu.pt
maco0410@gmail.pt