IMPROVING THE QUALITY OF A PUBLIC LARGE SCALE RADIOL OGY PRACTICE IS AN EXTREMELY CHALLENGING MISSION, AND YET, A NECESSARY ONE. PARTICULARLY WITHIN OUR INSTITUTION, WHERE THE VOLUME OF EXAMINATIONS PERFORMED IS VERY HIGH, HEALTH UNITS ARE LOCATED IN FARAWAY DISTANCES FROM OUR HEADQUARTERS, AND BOTH PHYSICIANS AND PATIENTS’ PROFILES ARE HIGHLY DIVERSE.

THE AIM OF OUR WORK IS TO DEMONSTRATE HOW TELE-ULTRASOUND SERVES AS A USEFUL AND INNOVATIVE TOOL THAT NOT ONLY CREATES NEW WAYS OF SUPPORTING PHYSICIANS FROM FARAWAY HEALTH UNITS, BUT ALSO BOOSTS THE QUALITY OF MEDICAL REPORTS AND RESULTS PERFORMED IN LARGE AND PUBLIC RADIOLOGY PRACTICE.

THE MAIN DATA COLLECTED FROM THE EVALUATIONS, TRANSFORMED INTO ANALYTIC GRAPHS, INCLUDE, FOR EXAMPLE, THE EVOLUTION OF RESULTS VS. THE QUALITY GOAL ESTABLISHED FOR OUR INSTITUTION, WHICH WAS SET AT 80% OF SATISFACTORY EXAMS FOR THE SUPPORT ROOM. AFTER INTRODUCING MEDICAL EDUCATION ACTIONS ON SPECIFIC THEMES THAT WE IDENTIFIED AND DISCUSSED, FROM THE TECHNICAL DEFICIENCIES WE IDENTIFIED, AND OBJECTIVELY DESIGNED BY EXPERIENCED ULTRASONOGRAPHY PRACTITIONERS WITH SOLID ACADEMIC BACKGROUND, AND IT IS WIDELY COMPREHENSIVE, AS IT HAS ALSO BEEN DEVELOPED TO ADDRESS EVERY KIND OF ULTRASOUND EXAMINATION. ACCORDING TO EACH QUESTION MARKED IN THE EVALUATION FORM, THE SYSTEM PROVIDES AN AUTOMATED SCORE, WHICH CLASSIFIES THE EXAMINATION INTO 5 CATEGORIES: 1) EXCELLENT, 2) APPROPRIATE, 3) SATISFACTORY, 4) UNSATISFACTORY, 5) UNSUITABLE.

THE DATA ARE AUTOMATICALLY LOADED INTO A BUSINESS INTELLIGENCE DASHBOARD AND THEY GENERATE BOTH QUANTITATIVE AND QUALITATIVE INFORMATION, AS WELL AS PERFORMANCE INDICATORS THAT ARE CRUCIAL FOR QUALITY CONTROL PURPOSES (FIGURE 3). THE INDICATORS ARE REGULARLY REVIEWED TO GUIDE DECISION-MAKING ON TRAINING AND FURTHER MEDICAL EDUCATION. THEY ALSO SHED LIGHT ON IMPORTANT ISSUES RELATED TO THE OVERALL MANAGEMENT OF AN ULTRASOUND ROOM, FROM THE QUALITY OF THE EQUIPMENT TO THE TYPE AND INTENSITY OF THE EXAMINATION SCHEDULE.

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CONCLUSION

Since the implementation of SERUS we have observed a positive impact on patients’ treatment and medical reports, as well as an increased accountability and credibility of ultrasound practice in the public health institutions we serve. SERUS has proven its interest in reducing potential diagnosis errors that can lead to cost savings, by reducing the amount of dispensable complementary examinations’ requests, and most importantly, helping to avoid unnecessary invasive medical practice from taking place.

We conclude that tele-ultrasound for quality improvement purposes provides a solid base for the creation of health policies, education and further medical support actions.