

## ABSTRAK

**Latar belakang:** *Teleradiologi* adalah jenis *telemedicine* yang paling sering digunakan dalam dunia medis. Teleradiologi menitikberatkan pada pencitraan, transmisi, penyimpanan, penampilan kembali untuk interpretasi hasil secara elektronik. Variasi penerapan teleradiologi bergantung pada kebutuhan dan keadaan Instansi Kesehatan, namun klinisi dan manajemen rumah sakit perlu bersikap kreatif dalam memecahkan masalah pelayanan yang mungkin terjadi, sekaligus mematuhi regulasi yang berlaku di Indonesia.

**Tujuan:** Mendeskripsikan pelaksanaan teleradiologi di RS Mayapada Surabaya. Mengetahui upaya optimalisasi pelaksanaan teleradiologi di RS Mayapada Surabaya. Mengusulkan pelaksanaan teleradiologi yang aplikatif bagi Rumah Sakit secara keseluruhan dan bagi pengambil kebijakan (level pemerintah/ governing body).

**Metode:** Jenis pendekatan kualitatif deskriptif, untuk mengevaluasi penerapan teleradiologi di RS Mayapada Surabaya (Mayapada Hospital Surabaya/ MHSB). Responden sebanyak 11 orang (seorang dokter spesialis radiologi, 9 orang radiografer dan 1 orang staf IT (*information and technology*) MHSB. Pengambilan data dilakukan dengan metode observasi dan wawancara lisan. Variabel yang diamati adalah teleradiologi pada RS Mayapada Surabaya, sedangkan variabel terikat adalah aspek teknis (PACS, RIS), Faktor Pendukung Penerapan Teleradiologi (Alur dan Komunikasi, Kerjasama dan Kompetensi Staf), Faktor Penghambat Penerapan Teleradiologi (Komunikasi dengan Klinisi/ Pasien, Rendahnya Keamanan Data, Batas Etis dan Legalitas), Manfaat (Peningkatan Kualitas, Efisiensi Biaya, Waktu dan Sumber Daya, Keamanan di Masa Pandemi Covid-19, Penerapan pada Telemedicine Lainnya).

**Kesimpulan dan Saran:** Aspek teknis (PACS, RIS, HIS, dan infrastruktur), Alur, komunikasi didasari kerjasama dengan kompetensi yang saling melengkapi adalah faktor yang mendukung teleradiologi. Faktor kurang mendukung adalah kurangnya komunikasi antara dokter spesialis radiologi, DPJP dan pasien atau keluarga, kurangnya perlindungan data, batas etika dan legalitas.

**Kata kunci:** teleradiologi, teknologi informasi, kesehatan, rumah sakit, kualitatif

## ABSTRACT

**Background:** Telemedicine which mostly used on health sector is teleradiology. Teleradiology based on the process of imaging, transmission, storage and recalling for medical staff electronically interpretation means. How teleradiology implementation differs on different hospital depends on the need and circumstances of each healthcare provider, but it certainly necessary to have a standard process to make sure patients and healthcare provider staff have the protection from possibility of ethical and medicolegal issues meanwhile monitoring the quality of healthcare provider on general and teleradiology especially. Clinicians and healthcare managements on this era need to creatively choose problem solving ways and also make sure the regulations were followed.

**Purpose:** To describe Mayapada Hospital Surabaya (MHSB) teleradiology through the development of healthcare technology and information, regulation or medicolegal aspect, benefit and loss. To know ways to optimize MHSB teleradiology, give suggestion to application of teleradiology for all the hospital and governing body.

**Method:** Descriptive qualitative research to evaluate the use of teleradiology at MHSB. The research population is 11 person (a radiologist, 9 radiographer and 1 information and technology staff). Data collected by observation, written and verbal interview and documentary study. Variable observed is MHSB teleradiology, meanwhile dependent variables are technical aspect (PACS, RIS), Teleradiology Supporting Factor (workflow, communication, cooperation and staff competence), Teleradiology Inhibiting Factor (Communication between clinicians or patients, low data security, and legal and ethical boundary), Benefits (Quality Improvement, Cost Efficiency, Time and Resources, Safety on Pandemic Era), Other application of Teleradiology.

**Conclusion:** Tehnical aspect (PACS, RIS, HIS, and infrastructure), workflow based on cooperation with different competence are the most supporting factors. Less suporting factor were less communication between radiologist and or clinicians and patient, low data protection, and ethics and legal boundaries. Teleradiology also thought to increase the quality and efficiency of teleradiology service especially and Mayapada Surabaya hospital service generally.

**Keywords:** teleradiology, information technology, health, hospital, qualitative