

LETTERS TO THE EDITOR

Teledermatology integrated in the Dutch national healthcare system

Editor

Teledermatology (TD), since its introduction in 1995,^{1,2} has been subject of many studies and review articles. A recent review³ stated that 'until now, there is no country which has implemented TD within their national health system'. This holds true when evaluating publications in scientific press. However, TD has been successfully integrated in the Dutch healthcare system on a large scale.

KSYOS TeleMedical Centre is the first state-certified institution for specialized telemedical care in The Netherlands. It has successfully implemented store-and-forward TD in regular practice among 2500 general practitioners (GP) and 185 dermatologists since 4 years. To date, these GPs (>30% of all Dutch GPs) and dermatologists (40% of all Dutch dermatologists) have performed over 33 000 TD consultations through this virtual health institution. TD is fully reimbursed by the national health insurance system. The TD system used is a web-based service that allows the GPs to send digital photographs and textual patient history securely to the dermatologist they would normally refer their patients to. The photographs used in the teleconsultations have a resolution of 1.2 megapixels and are taken by the general practitioner or the GP's assistant. Cameras used for TD differ, but the same results are achieved with a low-end digital camera as with a high-end professional camera.⁴

The success of the integration of TD in the Dutch healthcare system can be attributed to several aspects:

- 1 Pre-selection of cases for TD by the GP. The GP selects 25% of the patients he normally physically refers to the dermatologist for TD.
- 2 Teledermatology is fully reimbursed by the Dutch healthcare insurance system. Both GP and dermatologist receive a reimbursement for every TD consultation they perform.
- 3 Teledermatology consultations go to the same dermatologist as the conventional physical referrals ensuring the regional chain of care to stay intact. In the event, a physical referral is still needed after the teleconsultation, the patient is referred to the same dermatologist who handled the teleconsultation.
- 4 Teledermatology is educational as immediate feedback is given. The GPs feel that TD strengthens the professional

relationship between GPs and dermatologists in the region and this interaction is experienced as educational.

- 5 Teledermatology is convenient. The store-and-forward design allows the GP and the dermatologists to handle a teleconsultation at the best-suited time in the day. Cameras, software, training and help service are provided by the telemedicine institution.

PhD research in TD in The Netherlands clearly indicates improvement of triage at the GP level through prevention of physical referrals to the dermatologist and the detection of critical cases that might not have been referred by the GP without TD. Thus, the care provider most suitable for the severity of the patient's condition treats patients. Preliminary data based on 26 788 teleconsultations describe a reduction of 67% of the physical referrals to the dermatologist in the patient group preselected for TD by the GP. These data also show that an average response time of the dermatologist to a new teleconsultation is around 5 h.

Most of Dutch GPs are situated in an urban setting; as a matter of fact, there are little rural areas. Teledermatology in The Netherlands therefore is not so much a solution to provide access to specialists for rural areas, but it is a solution to face increasing demand for specialist care.

Overall, TD improves the quality of care. In agreement with the Netherlands Technische Afspraak (National Technical Agreement) on telemedicine quality aspects at the level of care provision,⁵ the patient is receiving proper care, in good time, at the best location and from the proper actor.

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