Antimicrobial stewardship through telemedicine in a community hospital in Southern Brazil.

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Abstract
We developed an antimicrobial stewardship programme, based on telemedicine, for a remote community hospital in southern Brazil. Expertise in infectious diseases was provided from a 250-bed tertiary hospital for cardiology patients located 575 km away. At the community hospital, antimicrobial prescriptions were completed via a secure web site. A written reply was sent back to the prescriber by email and SMS text message. During a 4-month study period there were 81 prescriptions for 76 patients. Most antimicrobial prescriptions (67%) were for respiratory infections. Ampicillin was prescribed in 44% of cases (n = 56), gentamicin in 18% of cases (n = 23) and azithromycin in 18% of cases (n = 23). Two infectious diseases specialists independently reviewed each antimicrobial prescription. A total of 41 prescriptions (55%) were considered inappropriate. The median time to obtain a second opinion via the web site was 22 min (interquartile range 12-55). Overall compliance with the recommendations of the infectious diseases specialist was 100% (81 out of 81 requests). Telemedicine appears to have a useful potential role in antimicrobial stewardship programmes.

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