Abstract: P1742

Is time to telemedicine diagnosis (TTD) analogous to door to balloon time?

Authors:
S. Mehta1, R. Botelho1, F. Fernandez1, J. Cade1, M. Prudente1, R. Cavalcanti1, C. Dusilek1, F. Bojanini1, O. De Los Rios1, M. Alcocer Gamba1, A. Frauenfelder1, C. Matheus1, M. A. Torres1, L. Pisana1, J. Mazzini1, 1Lumen Foundation - Miami - United States of America

Topic(s):
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Background: Telemedicine is a powerful, cost-efficient, and scalable tool for population-based AMI management. Traditional metrics of D2N, D2B do not gauge telemedicine effectiveness. We explored the utility of TTD in 784,947-screened patients within the Latin America Telemedicine Infarct Network (LATIN).

Purpose: To evaluate the competence of TTD as an efficiency indicator in telemedicine.

Methods: LATIN employed a spoke-hub strategy to expand access in Brazil, Colombia, Mexico, and Argentina. Small clinics (spokes) in remote areas were strategically connected to PCI-capable facilities (hubs). Experts at 4 remote locations provided urgent EKG diagnosis via tele-consultation, additionally, they triggered ambulance dispatch and implementation of guidelines-based protocols. Investing in updated telemedicine technology provided a system-wide TTD reduction.

Results: 714,450 patients were screened for AMI at 350 LATIN centers (Brazil 143, Colombia 118, Mexico 82, Argentina 7). Within our territories 8,448 (1.08%) patients were diagnosed as STEMI; 3,911 (46.3%) were urgently reperfused, of those 3,049 (78%) underwent Primary PCI. TTD was 3 min, demonstrating 98.9% tele-accuracy. D2B was 51 min; in-hospital mortality 5.2%. We encountered a linear correlation between D2B and TTD. The latter was, also, inversely related to the number of screened patients - both associations are favorable for LATIN.

Conclusions: TTD is an important indicator of telemedicine efficiency. LATIN will continue to explore this value's strength and other important associations.
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Relationship Between TTD & D2B

Relationship Between TTD & Screened Patients