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VIRTUAL EMERGENCY ROOM: DEVELOPMENT OF THE FIRST DIRECT-TO-PATIENT URGENT CARE SYSTEM VIA TELEMEDICINE IN BRAZIL

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Brazil is a newly industrialized country with the world's sixth largest population (210+ million), the 9th world's greatest economy and roughly 66% internet access coverage, vastly above average for its development status. However, poverty levels are still high and poor quality healthcare delivery remains one of the nation's main problems. Although Brazilian federal constitution guarantees universal health coverage for all its citizens, there is great inequality in health access and resources distribution along its 3,3 million square miles, which makes delivery of good quality healthcare extremely expensive and the logistics even more complex. Therefore, telemedicine-based solutions have been increasingly adopted in the past decade, not only to overcome distance barriers but also to reduce logistic costs. Notwithstanding, so far, most projects were

directed to asynchronous tele-radiology, tele-EKG and phone support services, which in fact are now very consolidated nation-wide. Real-time live videoconference telemedicine systems are still at early stages of implementation or operate at a small scale.

This e-poster is intended to introduce the first well documented direct-to-patient urgent care program under development in Brazil, called Virtual Emergency Room (“Pronto Atendimento Virtual” in Portuguese) and explore the current context of healthcare delivery by live synchronous video visits in Brazil, market size, ongoing projects and main drawbacks to service scalability and implementation.

The Virtual Emergency Room is a web-based platform for real-time videoconference between patient and doctor and focused on urgent care for simple complaints. Due to unavailability of general practitioners, difficulties to schedule urgent appointments and a specialist-seeking local culture, emergency departments are crowded with patients with minor illnesses. Those are usually low-risk and easy-to-manage health concerns likely to be solved by a virtual consultation. Nonetheless, there are still many legal and technological drawbacks to be prevailed over before its widespread availability.

In brief, after filling a simple web-based questionnaire, patients are directed to a videoconference with a dedicated staff physician. Following specific protocols for each complaint, the patient might be given medical recommendation and a prescription as needed or he could be advised to seek traditional medical care.

The program at scale became available in mid-2017, with access limited to about 30.000 hospital employees and their families. In 2018 the platform became available to corporate clients. Data from the the year of 2018 will be presented, including satisfaction, safety and effectiveness surveys actively conducted with patients and physicians. 1168 virtual visits were completed, 75,8% of which were considered sufficient for diagnosis and treatment, 14,7% patients were directed to ambulatorial treatment and 13,1% directed to urgent care. 92% of the consultations did not result in an emergency department visit.

The most common complaints were those related to respiratory tract (39%), followed by acute gastroenteritis (11%), urinary tract infection (7%) and headache (5%).

The Virtual Emergency Room was developed by Hospital Israelita Albert Einstein, a 650-bed high complexity private general hospital, internationally accredited and considered a national reference in quality of care, part of a non-profit organization comprising numerous other buildings and health facilities, including a Medical School, research centers and has many ongoing government partnerships and philanthropic actions.