

E-health will save society lots of time and money, but it is especially persons who will benefit.

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The demand for mental healthcare in the Netherlands increases strongly, due to several social developments, such as insufficient budgets, political choices, and the greater influx in healthcare. Well-oriented technology will provide solace. Therefore, the time seems right for a stronger implementation of digital applications. The government as well as healthcare and insurers start looking in the same direction, and push for progress – also due to the call for change of the healthcare sector. Particularly in diagnostics, which lags behind in terms of application of new technology, change is coming. One of the most striking newcomers, without a doubt, is the PTSS Screener. There are plenty of applications in the area of e-health.

What is e-health?

Under e-health, it is understood all ICT and internet technology for treatment or counselling of people with mental illness, such as online treatment programs, video calling, mobile apps, client platforms, the personal health file, serious games and virtual reality. More and more mental healthcare institutions offer treatments that happen partially online. Central in this evolution is the need to provide better care against lower costs. The remaining money can then be used for intensive treatment of people after or instead of the online activities.

The PTSS Screener is a state of the art tool that makes a diagnosis using advanced digital technology. Until recently, this was one of the most difficult areas to reach digitally the level of the classical way of diagnosis making.

Searching for a way to shorten the intake

The University of Twente established the project “Shortening and improving intake trajectories for people with posttraumatic stress illness”. The basis was text mining, combined with mathematical algorithms, a technique in which software analyses texts, and from the word use of the test person can conclude if he/she suffers from PTSS.

Started on patient forums

For the development of the instrument, the researchers received access to texts of PTSS patients and of patients suffering from other psychological illnesses. In their texts, patients wrote about what they went through and what they felt, in less than 20 lines. After some time, (combinations of) keywords could be classified with which PTSS patients could be identified by the program with 82% certainty. This made the program a success, and it paved the way for a major role in the intake of new patients through an accessible, fast and low impact intake procedure.

Advantages until the front door

Many examples can be given of situations where the PTSS Screener can lend a helping hand. One of these is the overloaded general practice, where nowadays too much expertise threatens to come together. The word ‘referring’ is already sensitive. Until the House of Representatives, there is disagreement about who needs to pay what, and the extent to which physicians tend to refer too much or too little. They should not refer as easily, has long been the credo of the financial watchdogs. Another example is the situation with ‘arbo services’ that are dealing with a looming labour shortage, and that are more and more confronted with people with psychological illnesses. The vigorous identification of PTSS is made more difficult because of this. Practice is complicated, definitely with the referral for complex illnesses such as PTSS. Unjustified referral is costly, but identifying a patient too late or not at all, is simply disastrous, for the patient who suffers more and more from PTSS as time goes by, and for society that in case of late identification gets a much higher bill to be paid. It reminds us of overdue paintwork on the exterior of a house: as more time goes by, next to peeling paint there will be wood rot, and repair becomes unnecessarily costly. ‘Taking no chances’ always was a pricey affair, and with the PTSS Screener the road is finally paved. This is true for general practitioners, but also for company doctors and other professionals.

An important role for ICT

Despite the worldwide recession, investments in pharmaceutical technology and ICT have increased over the last years. ICT has everything to solve problems that stand in the way of the efficient organization of healthcare. Innovations in which ICT plays a key role are almost the order of the day. This is not a superfluous luxury: studies show that caregivers spend almost 60% of their time communicating, and half of the information that caregivers need, is obtained through contacts with their colleagues. For homecare, lower percentages apply: 45% is spend on all types of communication. The effective application of ICT in mental healthcare depends on the correct setting of the internal organization.

The technology behind the PTSS Screener has the wind from behind. Not only has the application been scientifically tested, but researchers have also received awards, such as the Abbas Dissertation Award for QiweiHe, because of her innovative contribution to the development. The expectations of this new, diagnostic e-health application are rightfully very high.

REFERENCES FOR THIS ARTICLE

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