The publicity around the recent assessment of the US President using the MoCA test caused a surge of interest in cognitive assessment. People rushed to do the MoCA themselves either out of curiosity or to self-assess their own cognitive function. In response, the authors of the test created an alternative, shorter version for people to try instead and asked the media not to re-produce the test. Their concerns are justified; over-exposure to the test will affect its sensitivity to detect cognitive impairment. However the MoCA incident is not isolated, but rather highlights the issue that cognitive assessments are now easily accessible outside the lab or clinic.

People currently in their 50s and 60s, who are comfortable using computers, are signing up for online services offering cognitive "MOT" and "brain training" services. Although the number of users is currently unknown, the number of available apps and services on offer, suggests that there is substantial demand. Stroop, n-back, paired-associates, digit and spatial span are some of the tests that are no longer exclusive to neuropsychologists but available to everyone who signs up for such services.

There are obvious advantages and disadvantages to making such services accessible. On one hand, it brings awareness to the risk of dementia and encourages people to remain cognitively active. On the other hand, people become overtrained on tasks that are commonly used to assess cognitive function in the clinic, thereby affecting the tests' sensitivity to detecting cognitive impairment. In the domain of clinical trials, this is not an issue, because overexposure is often necessary to minimize practice effects. However in clinical practice were patients only do the assessment once for diagnosis, this is more of a concern.

As the generation who grew up with computers and online games matures and enters the neuropsychology clinic, many of them will have been overexposed to our tools and we will no longer be confident that they are still effective. If a patient has practiced the digit span e.g. 10-20 times before he/she comes to the clinic, is their score an accurate reflection of his/her cognitive capacity? Probably not. People could develop strategies to improve their performance and e.g. mask early signs of cognitive impairment.

So what can we do? Although the MoCA would be kept out of the public eye for the time being, this is not the case for other online cognitive training services. Therefore to start with, we need to know about it – what "programme" is our patient currently following? Then we can decide whether to modify our assessment to provide alternatives or not. In the long term, neuropsychology will hopefully move away from the, single-session assessment diagnosis model and use new technologies e.g. to monitor cognitive function outside the clinic or simulate complex environments. Such methods are currently being developed and used in neuropsychology labs and will hopefully move to the clinic in the not too distant future.

Marina Papoutsi, 2nd February 2018