

Utilization of Telemedicine and Visual Presentations to Increase Osteoporosis Evaluation Participation

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The article by Johnson et al¹ shows the effectiveness of electronic medical records combined with an osteoporosis self-assessment tool and automatic sent letters to patients at risk of osteoporosis on increasing patient-driven osteoporosis evaluation, as the osteoporosis follow-up response rate was nearly 3 times higher in percentage points in the intervention group compared to the control group. Fortunately, more patients scheduled an osteoporosis follow-up in the intervention group, but unfortunately, less than half of the patients having sought osteoporosis evaluation are still too few. Thus, additional approaches to have more patients at risk of osteoporosis seek evaluation can be considered, such as those using more advanced technologies. For example, a study investigating the effectiveness of visualization using presentations with either 3-D printed bone models or an animated video on a tablet discussing the etiology of osteoporosis and how to treat it was shown to significantly increase participants' understanding of osteoporosis and its consequences, as well as their motivation to treat the disease, if necessary.² Therefore, in addition to sending an automated letter, as many people have smart phones these days, sending informational videos to the mobile phones of patients at risk of osteoporosis may motivate even more of them to seek osteoporosis evaluation. Furthermore, some people at risk of osteoporosis will not screen for the disease due to perceive physical barriers.³ As previously noted that many people have smart phones, a growing approach for medical professionals to overcome physical barriers and meet with patients is through telemedicine. A recent study found that osteoporosis care delivered via telemedicine produces perceived quality of care comparable with in-person visits, and patients were comfortable with the use of virtual technology, while expressing the benefits of convenience with reduced burden of time and cost to travel, as well as confidence in being assessed by an osteoporosis specialist, with an added interest in participating in a virtual osteoporosis self-management program focused on improving diet and lifestyle behaviors.⁴

Patients initially speaking with an osteoporosis specialist via telemedicine may be further persuaded to have an osteoporosis evaluation (e.g., dual x-ray absorptiometry (DXA) scan), and some places have mobile services that can arrive at patients' homes to perform DXA scans for further convenience. Although the use of telemedicine is still relatively new as there may still be issues of concern, such as improving follow-ups and coordination with other allied health professionals and administrators, the technology is available that our society can improve upon these methods and utilize them to better prevent, diagnose, treat, and manage osteoporosis.

In summary, in order to increase osteoporosis evaluation participation, more advanced technologies can be considered. With widespread access to smart phones, visual presentations on osteoporosis can be sent to patients at risk in order to increase their understanding of the disease and their motivation to treat it, and telemedicine can be utilized to more conveniently participate in virtual osteoporosis education programs. In addition to traditional methods of healthcare for osteoporosis, combining them with more innovative approaches can help enhance efforts to diagnose and treat the disease.

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