

Spine Apps: Creating Order in the Chaos?

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In 2009, Apple first used the slogan “There is an app for that” in TV advertising, so successfully it trademarked the term a year later. At the time, the California tech giant brought attention to the fact that iOS apps are available at a scale unimaginable.

Thirteen years later, this is common knowledge and interestingly, [urbandictionary.com](https://www.urbandictionary.com) frames the term as “a phrase used in response to someone else’s problems”. Now spine care is no exception in the availability of apps with spine related content. And as we all know by the demographics, spine care certainly is not “someone else’s problem” but everybody’s topic at some point in his/her life. The App store has a number of categories and “Health and Fitness” ranks 8th, “Medical” ranks 13th most frequent category in Q1 of 2022. So naturally spine related apps can be found in almost every category. While I will not go into content detail or even attempt to rate the apps available, some smart, more mediocre and many simply useless ones can be found on any of the app stores online. And while patients find the app they have been looking for eventually, it is helpful to create some order in the overview.

Some apps address general questions: Which exercise can I do, what is good for my back, usual questions in spine clinics everyday. The majority of spine apps belong in this group.

From simple lists, lots of graphics and videos all the way to AR content, monitoring and correcting your actual exercise performance, the spectrum of content is large.

Insurance companies are behind a huge number of apps. For obvious reasons, the money spent on app-development and -maintenance is potentially saved on reimbursement and coverage. Spine related exercises and back-school information are primarily found in these apps.

Other apps are focussing more on specific patient groups: Back pain apps as part of a cognitive-behavioral program supporting patients at home and increasing compliance. Patient education has been proven to play a vital role specifically in treating patients with chronic back pain.

A number of apps link those to certain patient reported outcome measurement tools, some measure and explain pain. Other apps for scoliosis patients claim to monitor deformity progress or progression. Generally the trend of measuring and quantifying health is widespread in spine apps as well.

Some apps simply advertise certain institutions, offer more elaborate or more basic info on the conditions treated, their

medical and non-medical staff and the points of contact and making appointments.

Some surgical institutions apps focus on postOP rehabilitation: They summarize the standard postOP protocols for patients, family physicians, nurses and caregivers as well as physio- or occupational therapists and are able to answer questions that may arise after surgery.

A number of apps aim to directly support physicians in their diagnosis. Scoring resources, measuring devices and diagnostic and treatment algorithms as pocket tools for deformity, spine oncology or fracture treatment.

Medical device manufacturers often offer apps as a way to bundle information resources on products or techniques plus contact information.

Some spine related journals have specific apps for reading and utilizing its resources. And so do all of the major meetings with applications for individualized schedules, scientific programs, voting and evaluation as well as CME issues.

Some of the apps issued by scientific organizations focus on networking and sharing of cases such as the AOFoundations “MyAO” app.

More standard and general apps include collections of literature, surgical manuals, anatomy, drug interactions, antibiotics advice and collections of specific guidelines.

The collection of apps on a spine professionals phone/tablet is ever-growing and adapting over time. Many lack an independent scientific evaluation and need to be interpreted cautiously. But wisely used, the apps help to provide a higher standard of care and more precise and scientific medicine.

And while confusing at first and probably not universally applicable for all our patients, they themselves can be supported and encouraged to actively engage in treating their spinal condition.

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