

## **Chronic Pain Management: Review of current practice against a standardized systematic approach**

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### **Abstract**

Conditions for providing care in healthcare are constantly changing. The demographic of the population is evolving, service institutions are expanding, and our knowledge of both disease and condition management is exponentially rising. Through the last decades, healthcare providers have become more efficient, the patients are spending less time in hospitals, and we have new and better management strategies for diseases. However, the costs for care provision are rising and will continue to rise unless we change fundamentally the way we are providing care. Additionally, healthcare personnel are complaining over busy schedules and limited time available for each patient. There are many intertwined strategies to solve these problems, such as use of new technology, interdisciplinary collaboration and patient empowerment. In terms of diagnostics and treatment, technology tools have revolutionized healthcare, but technology to improve collaboration and patient empowerment has not had the same success.

Standardisation of care by developing guidelines and clinical pathways has been one improvement strategy, aiming to ensure that patients are given the same service regardless of provider. In Scotland, a scientifically based chronic pain guideline was developed and published on a national website, available for everyone in 2013. A clinical pathway for the same condition identified all professionals who through a systematic approach should contribute to provide pain management and relief for the patient. Additionally, the same official webpage provided patient information that should empower the patient to perform self-management of pain. We have tried to determine the level of knowledge of this guideline and of the corresponding clinical pathway, looking for evidence of implementation, by performing a study on patients and the pain management team.

Our evidence shows that the clinical approach in primary and specialist healthcare is fundamentally different. Our mapping of the perceived clinical pathway from the patient's point of view is chaotic. Additionally, the patients report years between experiencing initial symptoms to getting a diagnosis. There is, in our data, very limited evidence showing implementation of neither guidelines nor clinical pathway for chronic pain management. The patients report no use of webpage for information and self-management of pain. A recurring statement from the clinicians is that the one consistent source of information, record of previous success or failures in treatment that is available and present at all times, is the patient itself.

Both the healthcare providers in primary care and those in specialist healthcare denied making use of the chronic pain guideline. The primary care providers reported to find it challenging to make the patients understand their condition. Additionally, the patients were a constant source of frustration for a part of the pain management team in

primary care, because they kept reappearing, and there were so many of their like. In specialist care, the clinical information provided by the patient itself is reported as one of the most important decision-making inputs. This means that getting updated information and a complete overview over previous approaches, success and failure depends on information collected from the patient.

The pain management team is reported to be poorly organized in primary care, and has informal collaboration. Most of the patients spent most of their time in primary care. In specialist healthcare the patient spends no or very limited time, and the pain management team is reported to be well organized.

Mapping the patient interaction, we found limited evidence for implementation of clinical guidelines and clinical pathways, which implies limited evidence showing that the pain management is provided the intended way. Consequently, we are not able to review the efficiency, efficacy and quality of the service. Through the 5 years since publication a substantial amount of new evidence has been published. This new evidence could affect the validity of the current guidelines and care pathway, and make re-design required.

Clinical guidelines and patient pathways are developed from studies made on a standardized subset of patients. Especially in primary care, but also in specialist healthcare, the patient population is nothing like the standardized subset, and standardized solutions are therefore also hard to fit. E-Health solutions are often developed and refined based on standardization of care that may not ever have been found to be a good practical solution providing the best pain management in a clinical setting.

We have also identified that the patient's individual perception and presentation of updated summary and evaluation of previous pain management strategies is considered the most important source of information for decision making among all the involved parties. Although all healthcare providers and patients had access to and were using a substantial amount of e-Health technology, the individual's memory and evaluations were preferred in a face-to-face encounter.

The preliminary conclusions from our work are:

- Guidelines for chronic pain management are not implemented in the healthcare services
- It is not possible to conclude anything about the efficacy of guidelines and clinical pathways in the general population
- Specialist healthcare bases its treatment analysis and overview on the fallible memory of the patients

These findings are important when redesigning services and tools, since no assumptions can be made regarding the current practice.