

Best Practice

Device-based therapy – but how?

In this first part of our major “Best Practice” series of articles, learn about the challenges facing evidence-based practice and why there is a need for a practice-oriented concept with a structured treatment guideline.

The attempt not simply to make therapeutically meaningful devices available, but to also pass on the necessary knowledge for its best possible use and application, last year THERA-Trainer began to develop their own, evidence-based treatment concept: the THERA concept. It takes account of every aspect for supportive action, drawing on the latest scientific findings. The content is relevant both for the professional groups involved in the practical work, such as physiotherapists, ergotherapists and sports therapists, and for physicians, health

economists and patients. Only someone who is well-informed about how these things operate understands why it is vitally important to exercise actively and continuously after suffering damage to the nervous system; and such persons will recognise the benefits from the systematically targeted use of therapy devices. That is the philosophy of its inventors.

The first part considers the challenge of the transfer from current evidence to clinical practice.





BEST PRACTICE

From evidence to clinical practice

In the context of neurological rehabilitation, evidence-based practice has become very important. Various expert committees at national and international level have taken on the task of developing guidelines, systematically setting out the evidence relevant for therapeutic decision-making. The intention of the authors of clinical guidelines is to prompt a change of behaviour on the user side and thus bring about an improvement in the quality of care. However, the fact is that there is still a lack of solutions for practical implementation.

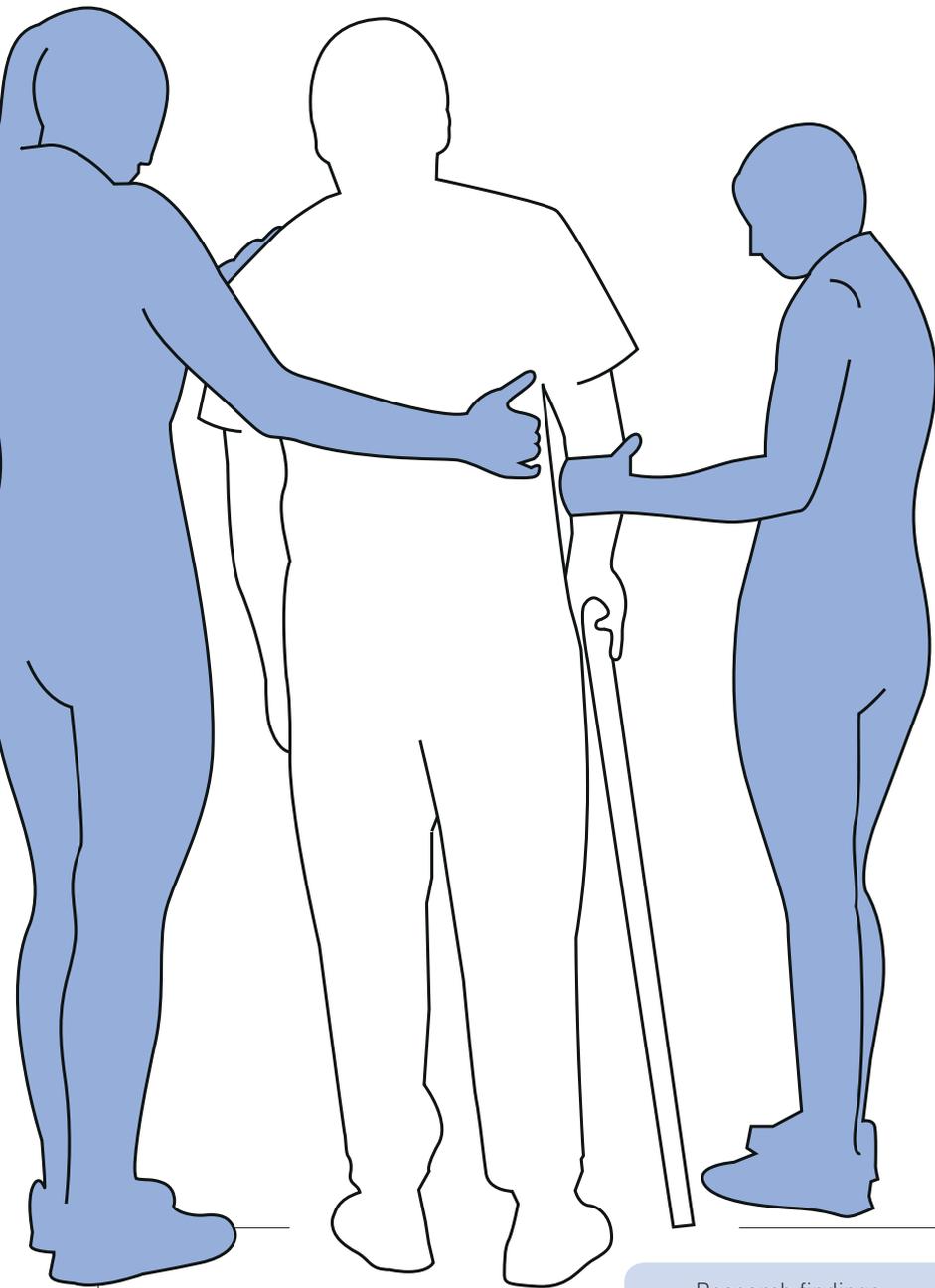
Text Jakob Tiebel

Modern neurorehabilitation is increasingly evidence-based, and thus takes account of the increasingly complex findings from basic and intervention research. Having an evidence base for therapies is, rightly, a modern-day requirement, and it is increasingly becoming standard. But what exactly is meant by the phrase “evidence-based therapy”?

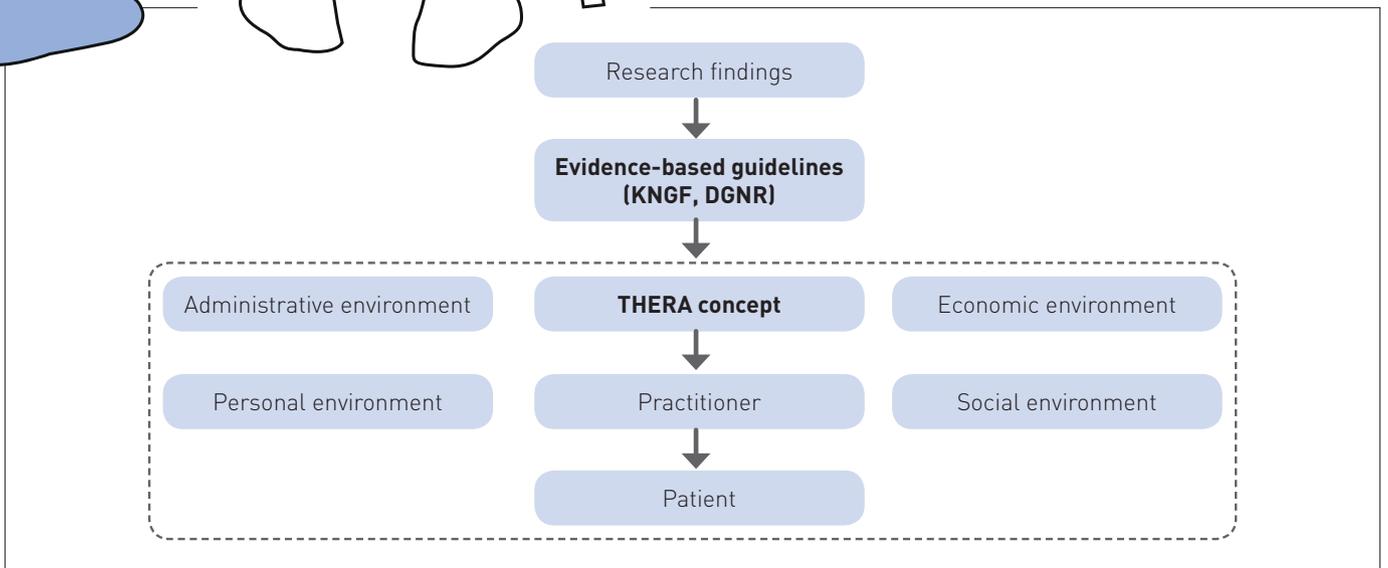
The “grandfather” of evidence-based medicine, Daniel Sackett, defines it as: “integration of individual clinical expertise with the best possible

external evidence from systematic research and the experiences and wishes of the patient” [14].

In evidence-based practice, therefore, the conscious, explicit and appropriate use of contemporary scientific findings is central to the choice of therapeutic measures [14]. This presents a fundamental question: which of the available therapeutic measures are best suited for the individual patient at a particular time? The answer should always be sought with the involvement of the patient and as part of a critical weighing-up



The THERA concept:
implementation
model based on
Lomas and Kitson
(Kitson et al. 1998)



of the available options [1], since the decision is dependent on the personal goals and preferences of the patient, the experience of the therapist and the structural conditions [5][6].

In the context of neurological rehabilitation, evidence-based practice has become highly important [7][11]. Various expert committees at national and international level have taken on the task of developing guidelines, and systematically viewing and presenting the evidence relevant for therapeutic decision-making. The intention of the authors of clinical guidelines is to prompt a change of behaviour on the user side and thus bring about an improvement in the quality of care [15].

Despite good progress and overall positive development, there is still potential for improvement. “Guidelines do not spontaneously implement themselves” [15] and scientific findings from specialist associations are not yet producing a treatment concept fit for the requirements of day-to-day clinical practice.

Implementation in clinical practice

In the literature, various strategies for implementing evidence-based guidelines in clinical practice are set out and, in part, the subject of heated debates [4][3] [2]. In the vast majority of cases, a “mixed teaching strategy” is recommended, aimed at ensuring effective knowledge transfer into clinical practice [4]. Jan Mehrholz refers to an implementation model by Lomas [9] and Kitson et al. [8] who propose a

“teaching strategy via knowledge transfer”. Under this arrangement, the results from science, research and development are consistently integrated into the therapeutic decision-making processes, with training being given without fail in the practical application [15].

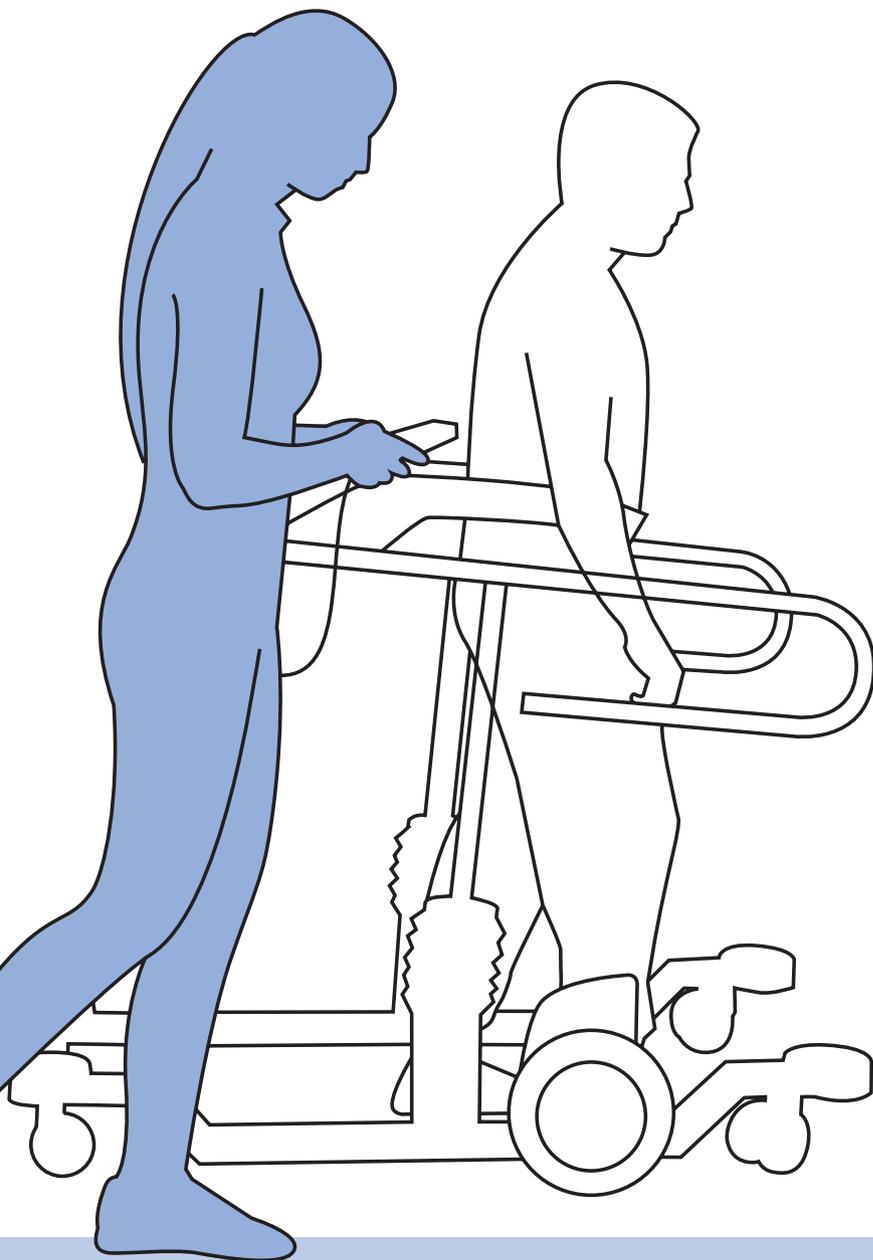
The THERA concept is one such implementation model. And it is the first of its kind which transfers solutions for structured and individualised application of device-based therapy measures into practice.

Via guidelines for action and interactive workshops with clinicians and practitioners, the THERA concept contributes to ensuring that therapeutic measures adopted as part of device-based therapy are designed more rationally and more efficiently. The challenge lies in providing orientation not only to clinical and out-patient users, but also to the adjoining and downstream administrative, economic and social core areas, as well as to patients and their family members.

Transferred to the Lomas and Kitson implementation model, it means consistent alignment to the latest research findings and scientific progress (see illustration on p. 21). The THERA concept is mainly oriented to the practical guidelines on “Stroke” by the Royal Dutch Society for Physical Therapy and the German Association for Neurological Rehabilitation [12][13], which are characterised by comprehensive research of the literature, significant specialist knowledge and a strong emphasis on practice.

The THERA concept

The THERA concept offers comprehensive expertise for all facilities involved with active rehabilitation and care of patients, on the basis of the latest evidence. At the heart of the concept is a practically-oriented guideline for action, making goal-oriented use of THERA-Trainer products possible across all phases of rehabilitation. This happens on the basis of the latest scientific findings, taking account of all adjoining areas. The THERA concept was developed together with physiotherapists, ergotherapists, doctors, engineers and IT experts.



LITERATURE

1. **Dawes M, Summerskill W, Glasziou P et al.** (2005) Sicily statement on evidence based practice.
2. **Greenhalgh T, Robert G, Macfarlane F et al.** (2004). Diffusion of innovations in service organizations: systematic review and recommendations. *Milbank Q* 82:581-629.
3. **Grimshaw JM, Thomas RE, MacLennan G et al.** (2004). Effectiveness and efficiency of guideline dissemination and implementation strategies. *Health Technol Assess* 8: 72.
4. **Grol R, Grimshaw J** (2003). From best evidence to best practice: effective implementation of change in patients' care. *Lancet* 362: 1225-1230.
5. **Haynes RB** (2002a). What kind of evidence is it that Evidence-Based Medicine advocates want health care providers and consumers to pay attention to? *BMC Health Serv Res.* 2: 3-10.
6. **Haynes RB, Deveraux PJ, Guyatt GH** (2002b). Clinical expertise in the era of evidence-based medicine and patient choice. *Vox Sang.* 83 (Suppl 1): 383-386.
7. **Holm M** (2000). Our mandate for the new millennium: evidence based practice. *Am J Occup Ther.* 54: 575-585.
8. **Kitson A, Harvey G, McCormack B** (1998). Enabling the implementation of evidence based practice: a conceptual framework. *Qual Health Care* 7: 149-158.
9. **Lomas, J** (1993). Teaching old (and not so old) dogs new tricks: effective ways to implement research findings. In: *Dunn, EV et al.: Volume 6: Disseminating research/ changing practice.* London: Sage.
10. **practice.** *BMC Med Educ.* 5: 1-7.
11. **Parker-Taillon D** (2002). CPA initiatives put the spotlight on evidence-based practice in physiotherapy. *Physiother Can.* 24: 12-15.
12. **ReMoS working group** (2015). S2e-Leitlinie. Rehabilitation der Mobilität nach Schlaganfall (ReMoS) [S2e guideline. Rehabilitation of mobility following stroke (ReMoS)].
13. **Royal Dutch Society for Physical Therapy** (2014). *KNGF Guideline, Stroke.*
14. **Sackett DL, Rosenberg WMC, Gray JAM et al.** (1996) Evidence based medicine: what it is and what it isn't. *BMJ* 312: 71-72.
15. **VanPeppen R, Mehrholz J** (2011) Evidenzbasierte Rehabilitation nach Schlaganfall [Evidence-based rehabilitation following stroke]. In: Mehrholz, J. (ed.): *Neuroreha nach Schlaganfall [Neurorehab following stroke].* Stuttgart, New York: Thieme Verlag.

Coming in the next issue:

1. Which are the assessment instruments that can be used quickly and straightforwardly in day-to-day clinical practice to determine the patient's capabilities in order to be able to formulate individual objectives?
2. Which interventions are most suitable, depending on the ability level and goals of the patient at a particular time?
3. Which THERA-Trainer products can be used in the respective phases to make the therapy more effective and economical?