



the clinical study

Dr Volker Sauer produced the following study to compare the regular hospital rehabilitation to home care rehabilitation. The study involved 76 patients, 37 of whom completed home care and the other 39 took hospital rehabilitation.

Prior to operation there were no significant differences between both groups with regards to KSS and Oxford score as well as the range of motion in flexion.

The evaluation points of the study would focus on: prior to operation, 6, 12 and 52 weeks' post operation.

Dr. Volker Sauer

Volker Sauer studied medicine at the university Heidelberg and worked for his dissertation 1998 at the University Freiburg on "Surgical treatment of calcaneus fractures". In 2001, Dr. Sauer became head surgeon at Fürst-Stirum-Klinik, Bruchsal and in 2003 he successfully completed a distance study in economics at the university Chur/Switzerland.

He finished his medical education as specialist orthopedy and traumatology in 2006 at Neckar-Odenwald-Kliniken, Mosbach. Since 2007, he is department leader of arthroplasty at Fürst-Stirum-Klinik, Bruchsal and since 2014, additionally leader of arthroplasty division at Rechberg-Klinik, Bretten. Dr. Sauer has already performed 4500 total arthroplasty surgeries in his career with 300 TKA and 250 THA only in 2016.

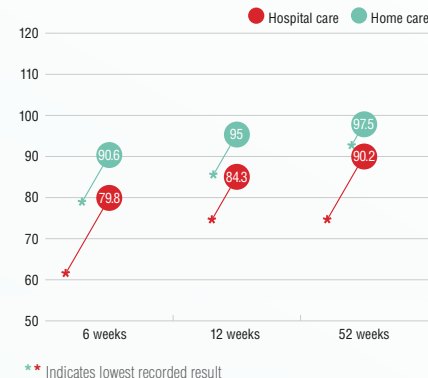
V. Sauer

BREAKDOWN OF REHABILITATION —

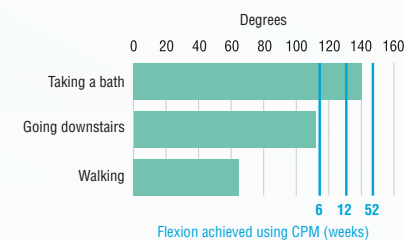
Hospital Care Rehabilitation Group

- Usual standard treatment concept for total knee arthroplasty (TKA)
- 3 weeks' rehabilitation in clinic including following quality standards of DRV, i.e. German Public Retirement Insurance:
- 8hrs per week physiotherapy, spread over 5 days
- 4hrs additional physical therapy over 3 weeks
- 1.5hrs daily activity training over 3 weeks
- Various other educations
- Total physiotherapist: 1.5 – 2hrs per day
- No CPM therapy required

Knee Society Score



Range of motion required for daily activities

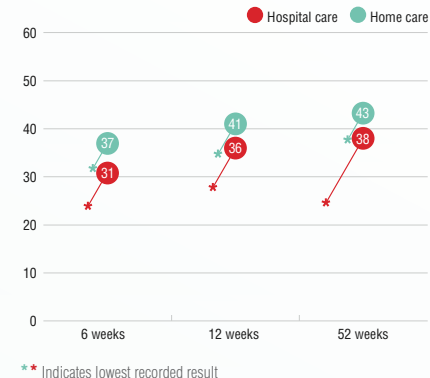


Significantly better range of motion at all investigation points with the home care treatment

Home Care Rehabilitation Group

- Home care treatment by one physiotherapist for the first 3 weeks, 5 days per week, 1.5 – 2hrs daily
- Total physiotherapist: 1.5 – 2hrs per day
- Daily use of CPM machine at home for 3 weeks, 7 days per week,
- Total CPM: 2hrs per day
- Measurement of patient compliance via CPM recording

Oxford Knee Score



These successful outcomes allow patients to regain independence quicker, post-operatively. This degree of independence ensure greater, long-term success for the patient.

Measured outcomes encourage confidence for the patient and medical professional.

the results

- Significantly better knee function (KSS 'excellent') at all post-op investigation points in home care group (physiotherapist + CPM)
- Home care group significantly better and more obvious in daily activities score (Oxford 'satisfactory joint function') at all post-op investigations
- Conclusions: the hospital rehab group (only physiotherapist) shows huge disadvantage still 1 year post-op and suffers from unsatisfying joint function in daily activity compared to home care group (physiotherapist + CPM)
- The home care rehabilitation, with intensive physiotherapy for 5 days per week and CPM use on 7 days per week, offers an excellent alternative to the hospital rehabilitation treatment after knee prosthesis surgery
- Cost savings (hospital therapy travel re-admissions)
- Improved patient outcomes (activity and return to work)

Kinetec® Spectra



post-op rehabilitation

The benefits of using
CPM technology

HOSPITAL v HOME CARE
EVALUATIONS FOLLOWING
KNEE PROSTHESIS SURGERY

kinetec®

kinetec kompanion™

Patient compliance, efficient outcomes and cost-effective solutions are amongst the most important concerns in the healthcare industry nowadays.

The Kinetec Kompanion® technology has been designed to meet the latest healthcare professionals requirements and guide (or accompany) their patients through a unique yet efficient CPM rehabilitation process.

The cutting-edge experience in CPM therapy offered by the Kinetec Kompanion® app features:

- A user friendly & intuitive interface
- A real-time individual monitoring system including explicit graphics
- Integration of the most-commonly used protocols and therapies
- Interactive pop-up messages and evaluation exercises to involve patients and improve their compliance
- A built-in messaging & video communication tool for diary logs and monitoring
- A patient data confidentiality portal fully secured in accordance with international requirements.

The Kinetec Kompanion® technology embeds all components to ensure a secured, efficient and progressive daily rehabilitation with the objective to improve patient monitoring, compliance and outcomes.

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