



# IVR - A Novel P4P Treatment Concept focusing on the Back to Work Rate of Patients Suffering from Sub-acute or Chronic (Low) Back Pain

Nolte T, Mueller-Schwefe GHH, Kletzko H, Ueberall MA - Integrated Managed Care GmbH, Oberursel, Germany

**ABSTRACT (UPDATED)**  
**BACKGROUND/RATIONALE:**  
(Low) back pain [(L)BP], a common musculoskeletal symptom affecting 80% of people at some point in their life, accounts for more sick leave and disability than any other medical condition, worldwide. Annual (L)BP-related costs in Germany are estimated close to € 50 billion, mainly caused by disability, compensation benefits for lost time at work, and overall back-to-work rates of only 30% in patients suffering from sub-acute or chronic (L)BP. Research identified procedural driven, unimodal and surgical interventions as main initiator for this problem and claimed performance- as well as outcome-focused treatment/reimbursement approaches.

**METHODS:**  
IVR is an integrated health care project established by the Integrated Managed Care (IMC) Company in corporation with the German Pain Association and the Techniker Krankenkasse (TK) – one of the largest national compulsory health insurances in Germany. IVR offers patients suffering from sub-acute or chronic back pain and a sick leave duration of at least 28 days within 5 working days, an appointment with one of 34 interdisciplinary teams of well experienced specialists for a full review of medical records, a detailed physical and physiotherapeutic examination as well as a sophisticated psychological evaluation. Based on this, (L)BP specialist teams develop a multimodal treatment concept specifically tailored to meet the very unique healthcare needs of affected individuals. Patient allocation is conducted by specialized case managers of the TK. Reimbursement based on a merit-rating (bonus/malus) system and incorporates treatment duration as well as distinct treatment effect parameters (primarily the back to work rate - BTWR).

**RESULTS:**  
Until August 20<sup>th</sup>, 2010, 3.268 (L)BP patients were allocated. 2.237 patients finally participated and entered the multimodal tailored treatment period. After 4-8 weeks, 1.892 patients (84.6%) successfully returned back to work, of whom 84.1% remained there stable for at least 6 further months. Premature discontinuation despite verifiable improvements occurs in 8.1%, resulting in an overall non-responder rate of only 7.2%.

**CONCLUSION:**  
The freedom to address the unique healthcare needs of affected (L)BP patients in form of individualized multimodal treatment concepts in combination with a merit-rating (bonus/malus) reimbursement system focusing on the BTWR offers new perspectives for the management of one of the most expensive healthcare problems in the western world.

**CORRESPONDENCE ADDRESS:**  
Harry Kletzko, CEO  
IMC – Integrated Managed Care GmbH  
Adenauerallee 18  
61440 Oberursel  
Germany

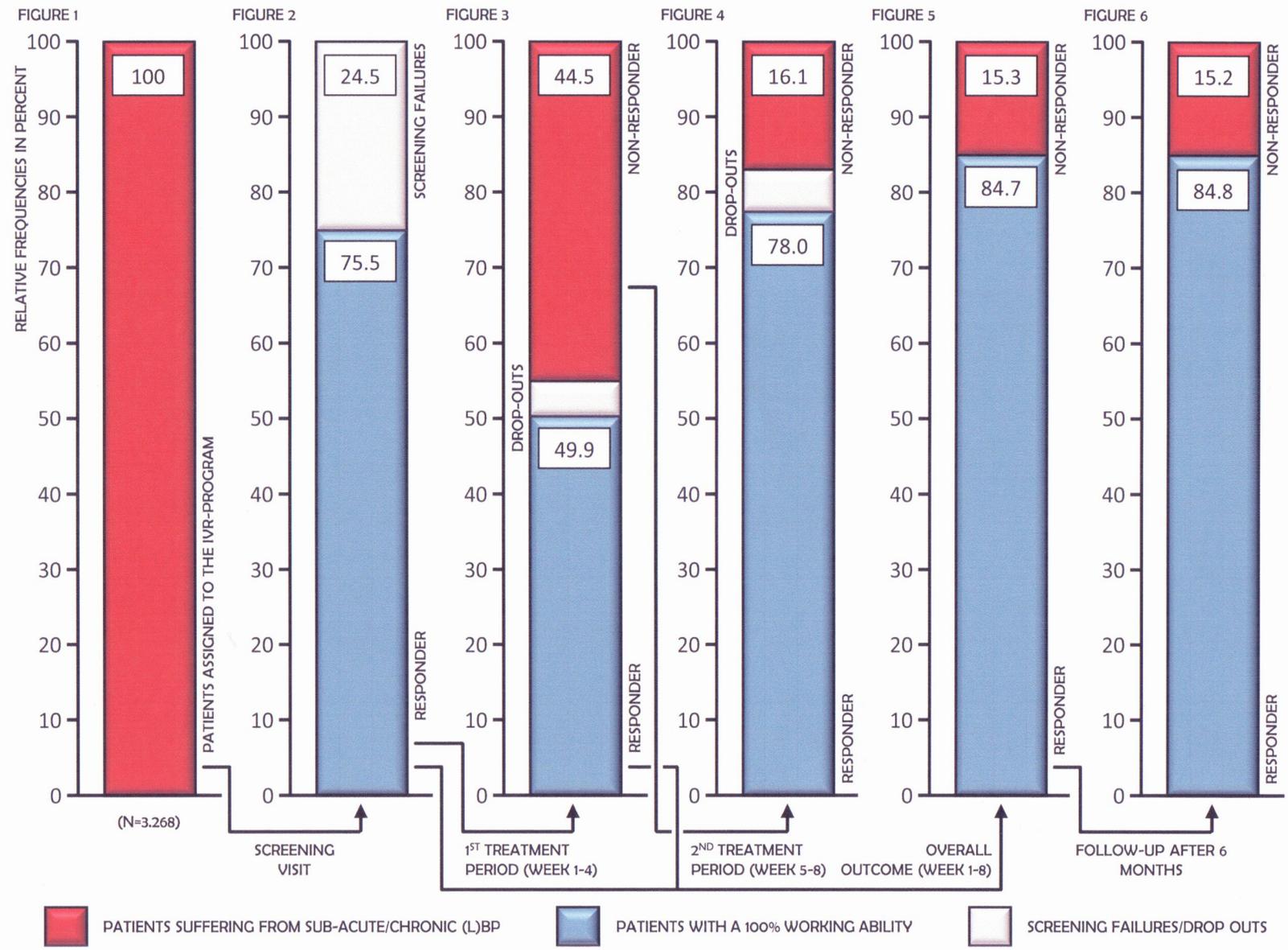


Figure 1 represents the total population of 3.268 patients suffering from sub-acute or chronic (L)BP who were invited till end of August 2010 by their health insurance company to a interdisciplinary screening visit. As a result of this, 800 patients (24.5%) were found not suited for this program, while the remaining proportion entered the 1<sup>st</sup> 4-week treatment phase (Figure 2). At the end of this period, a 100% working ability was achieved in 49.9% and 5.5% left the program prematurely (Figure 3). From the remaining 44.5%, who entered the 2<sup>nd</sup> 4-week treatment phase 78.0% achieved full-working ability (Figure 4). Overall, 84.7% of the patients who participated achieved a 100% working ability after 4-8 weeks (Figure 5) – in comparison to approx. 30-35% after routine care- and with 84.8%, the majority of them remained free of any back-pain-related working disabilities for at least six months after completion of this IVR-program (Figure 6).