Overview of the STarT Back approach:

This overview includes both details about using the tool to identify back pain patients' risk-status and the matched targeted treatment pathways.

The STarT Back Screening Tool

Estimates suggest around 85% of primary care consulters have "non-specific" back pain where the specific underlying disease or pathology remains unknown (1). For these patients guidelines highlight the importance of assessing a broad range of potential influences on prognosis including fears and anxieties about the pain, mood and motivation and work situation (2-4). However, this is often difficult to do in practice and until recently no validated tool has existed to inform clinicians or others about the risk-status of individual patients.

The STarTBack Screening Tool (freely available from www.keele.ac.uk/startback) is a brief prognostic tool that is specifically designed to help clinicians produce an index of treatment modifiable risk factors, to be used to stratify individuals into appropriate initial treatment pathways (5). The tool has been tested for psychometric properties, including reliability and validity in different settings internationally (5-12). In addition, a recent high quality randomised trial in the UK has demonstrated that using the tool along with targeted treatments improves efficiency regarding referral to physiotherapy, improves patients' clinical outcomes and reduces health care costs (13 Lancet in Press).

Due to the rapidly changing and multi-factorial nature of acute back pain, clinicians need objective measures to help clarify the extent of improvement or deterioration. The STarTBack tool provides a consistent measure of the broad impact of the back problem for an individual. It also has an advantage over many other measures as it has established thresholds/cut-off levels which suggest alternative treatment pathways such as allocation to brief (minimal) care, or extra support from treatments delivered by physiotherapists.

Primary care data suggest that for first contact settings, such as GP consultations, around 55% of patients are at low risk of poor outcome (these are the patients who are likely to do well irrespective of treatment), 33% are at medium risk and 12% are at high-risk of poor outcome. In physiotherapy outpatient settings the proportion of low risk patients decreases and medium and high risk increases. Patients at high risk of poor outcome are not only those that are emotionally distressed by their back pain but also include patients with the most complex pathology and social circumstances. They are also often acute patients struggling with their symptoms (5) in addition to those with long standing symptoms.

The tool contains 9 items and takes less than 2 minutes to complete. It can be immediately scored by the clinician and the patient's risk group (low, medium or high) established. Training to use the tool is not necessary as it is quick, simple and self-explanatory. Some therapists are also using a modified version of the tool not only for initial risk status assessment but to monitor treatment progress over time (see www.keele.ac.uk/startback). The tool is available in 9 languages and is increasingly being adopted internationally with very positive feedback from users. Over 50 Centres are using the tool in the UK alone. The British Pain Society and Royal College of General Practitioners have recently commissioned a spinal pathway in collaboration with Map of Medicine and decided to embed the tool within this pathway. Some PCTs have made the STarTBack tool available online for GPs to use with patients (e.g. www.sheffieldbackpain.com).

The matched targeted treatment pathways

The STarTBack approach is not only about using the screening tool, but also about the use of matched treatment pathways that are guided by each patient's risk status. A summary of the targeted treatment pathways for patients at low, medium and high risk of poor outcome (13-17) is provided below.

Low-risk group: These patients are cost-effectively treated with a **minimal package** of good quality care. In the STarT Back trial (13) patients at low risk of poor outcome each received a 30 minute face to face appointment that consisted of a comprehensive assessment including a physical examination, individualised education and reassurance about diagnosis, prognosis and treatments and advice about medication, activity and work. This was supplemented with written materials (the Back Book [18] and a leaflet about local exercise

and activity facilities) and a 15-minute educational DVD ('Get back active' [19]). Patients were then discharged after this one off consultation with advice to re-consult if necessary. This targeted treatment ensures that these patients have their concerns addressed,are reassured about their good prognosis and empowered to self-manage, but that they are not over-treated. The trial data suggest that multiple ongoing treatments for these patients results in them taking more time off work without any additional clinical benefits from this additional treatment.

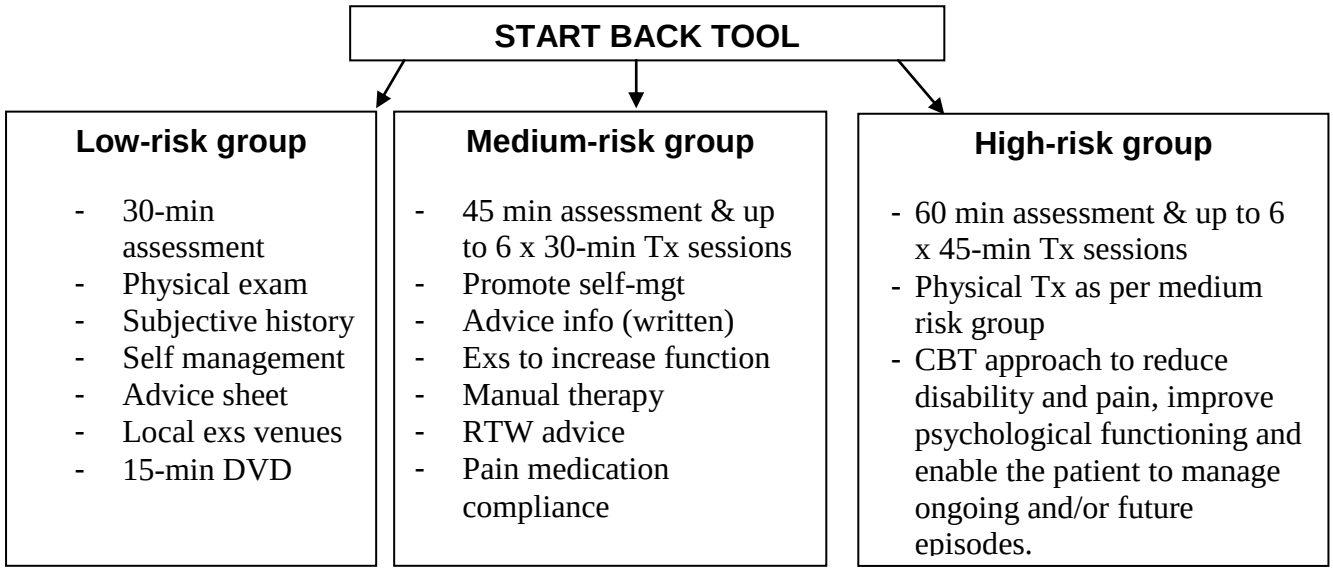
Medium risk group: For these patients a **referral to physiotherapy** is beneficial both in terms of their clinical outcomes and cost savings. Physiotherapists negotiated an individualised treatment plan with the patient aiming to reduce symptoms, disability and promote self-management. They used a range of evidence based interventions including advice, explanation, reassurance, education, manual therapy and exercises. Acupuncture treatment was provided at the discretion of the physiotherapist and patient. Consistent with evidence based guidelines (2-4) bed rest, traction, massage and electrotherapy were not recommended.

High-risk group: For these patients a **referral to an appropriately skilled physiotherapist** is beneficial both in terms of their clinical outcomes and cost savings. In the STarT Back trial it was cost-effective to allow longer appointments for high-risk patients. The high risk treatment (outlined below) is in addition to the treatments provided for medium risk patients.

1. Build rapport, validate and normalise the patient's experiences.
2. Conduct a comprehensive biopsychosocial assessment (physical examination, exploration of the impact that pain is having on the patient's physical and psychosocial functioning, identification of the patient's beliefs and expectations regarding LBP and its management and structured identification of potential obstacles to recovery).
3. Address gaps in patients knowledge, correct possible misunderstandings and provide a credible explanation for their pain (e.g. cause, mechanisms, prognosis, role of investigations and treatments),
4. Create opportunities for patient's to respond differently to difficult internal experiences (thoughts, feelings and bodily sensations) and to maintain or alter activity in keeping with their goals.
5. Provide guidance on a variety of pain rehabilitation techniques including pacing and graded activity.
6. Provide support in returning to usual activities, sleep and work.
7. Specifically focus on the psychological prognostic indicators (catastrophysing, low mood, anxiety and pain related fear) with the adoption of simple cognitive behavioural techniques.
8. Encourage patients to put skills into practice between sessions, review and reinforce progress and problem solve difficulties.
9. Emphasise the role of active self-management of ongoing or future episodes.

This approach is underpinned by a specific focus on communication skills, with careful attention to language and by collaborative goal setting. In addition to the appropriate training (see www.keele.ac.uk/startback or contact g.sowden@cphc.keele.ac.uk for details about training), it is important that these physiotherapists receive ongoing clinical supervision from appropriately skilled personnel.

Figure to summarise treatments:



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