

# Back & Neck program

# Enrolling your patients in the DBC back and neck program

## Dear Doctor

You'll be pleased to learn that Namibia Health Risk Solutions (NHRS) has been licensed as a Managed Care Company, to introduce a back and neck functional restoration program for patients who suffer from chronic and debilitating back and neck pain.

NHRS makes use of the DBC system, which has been implemented in clinics worldwide with well documented results. The focus of the DBC treatment is on both physical conditioning of the musculoskeletal system and addressing the psychological aspects of chronic back and neck pain.

If evidence-based guidelines and your judgment deem treatment necessary, please refer eligible patients to the NHRS Centre at Omuramba Day Clinic. The DBC trained clinical staff will then assess the patient and discuss the treatment options with you and them.

### After the assessment at the DBC Centre, the following will happen:

- Patients will, where logistically possible, be enrolled in the DBC functional restoration program, if inclusion criteria are met.
- If an operation is required, the clinical staff will advise accordingly.
- Emergency surgical cases will not require a DBC referral or an assessment.

To assist you in decision-making, we have pleasure in including DBC back and neck management algorithms.

### The DBC clinic is located at:

Town	Address
Windhoek	Unit 3
	Omuramba Medical Centre
	General Murtalla Muhammed Avenue
	Eros
	Windhoek

For further information please contact the NHRS call center on 061-44710 or via **email:** [info@nhrs.com.na](mailto:info@nhrs.com.na). You may also visit [www.nhrs.com.na](http://www.nhrs.com.na)

We look forward to your cooperation and support in our attempts to improve the health of the Namibian community. If you need more information on enrolling your patients in the Back and Neck program, please contact the NHRS offices on the above number or by email.



# Back & NECK PROGRAM

## DOCUMENTATION BASED CARE (DBC)

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### MANAGEMENT ALGORITHM

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'When low-back pain becomes chronic and disability more ingrained, an intensive interdisciplinary treatment approach is required because these patients have complex needs and requirements, and because of the deleterious effects of physical deconditioning ... thus, this stage of treatment is much more complex and demanding of healthcare professionals working independently. Consequently the strengths of multiple providers and coordinated systems to address the complex issues confronting patients disabled by chronic low-back pain are greatly needed.' – Gatchell and Bruga

THE Documentation Based Care (DBC) treatment concept is applied at clinics worldwide in the treatment and management of back and neck conditions that often involve prolonged and severe pain.

If patients carry out exercises intensively enough, their trunk control, muscle endurance, strength and range of motion improve. So does their mood, thanks to the reduction of fear and dispelling of misconceptions. Benefits extend even to the most severe cases.

Two key elements are combined in DBC functional rehabilitation programs: progressive physical conditioning and cognitive behavioral treatment.

#### Evaluation

The contents and duration of the programs depend on the severity of pain, the severity of deconditioning, psychological profile and social needs. These are assessed with validated questionnaires and measurements – not only to define patients' needs, but also to monitor progress and document outcomes.

The DBC treatment concept is translated into practice by a combination of assessment,

treatment and outcome-monitoring protocols.

These protocols are evidence-based.

#### Treatment reports

Treatment and evaluation reports on progress are generated at baseline, three weeks (or after six treatments) and six weeks (or after 12 treatments) follow-up and intermittently in the maintenance period. Patients are discharged with a choice of home-based, gym-based or DBC-based stretching and pain management programs.

#### Physical therapy

The key difference between back-specific and non-specific exercises is that the loading and, subsequently, the effect can be targeted in an isolated and safe way to the lumbar spine.

DBC-trained therapists guide the physical reconditioning programs. The treatment is primarily based on exercises in iso-inertial rehabilitation devices where correct loading and range limiters ensure exercises are performed in a painless and safe range of motion, targeting the lumbar spine paravertebral muscles.

Treatment includes controlled movements in

lumbar and thoracic flexion, extension, rotation and lateral flexion.

The treatment begins with low loads for the first weeks. The load is gradually increased until, at the end of the program, patients are instructed to continue an individualized secondary-prevention program. This is carried out with or without guidance depending on the patient's needs.

The aim is to achieve segmental motion of the lumbar spine in a controlled manner.

#### Cognitive and behavioral support

The patient receives handouts that explain the back problem in layman's terms. Members of the rehab team also reinforce the benign nature and good prognosis of low-back pain. This, combined with objective measurements of the patient's progress, result in diminished fear of pain and increased self-efficacy beliefs. DBC provides treatment- and cost-effective solutions to patients, practitioners and funders alike, improving quality of life and maintaining quality of care.

# BACK & NECK PROGRAM

## Documentation based care (DBC)

### MANAGEMENT ALGORITHMS

#### GENERAL WARNING SIGNS

- Sensory loss in the perineal area
- Night pain
- Local spinal column tenderness
- Abnormal pain patterns
- Other joints involved
- Intolerable pain
- Neurological symptoms
- The very young and very old are at greater risk.

#### EXERCISE THERAPY IN MANAGEMENT OF ACUTE LOWER BACK PAIN (LBP)

Many controlled randomised studies have been unable to find a favorable effect of exercise therapy on sickness absence or duration of the pain episode in acute (1st) LBP.

Instead, some analyses have indicated more and longer absences in the exercise therapy groups.

Therefore, these patients deserve other modalities of treatment than active exercises.

#### 1. Patient Education

Patient education should include:

- Expectations for rapid recovery
- The lack of need for special investigations unless red flags (warning signs) are present
- Safe and effective methods of symptom control
- Reasonable activity modifications
- Best means of limiting recurrent back problems

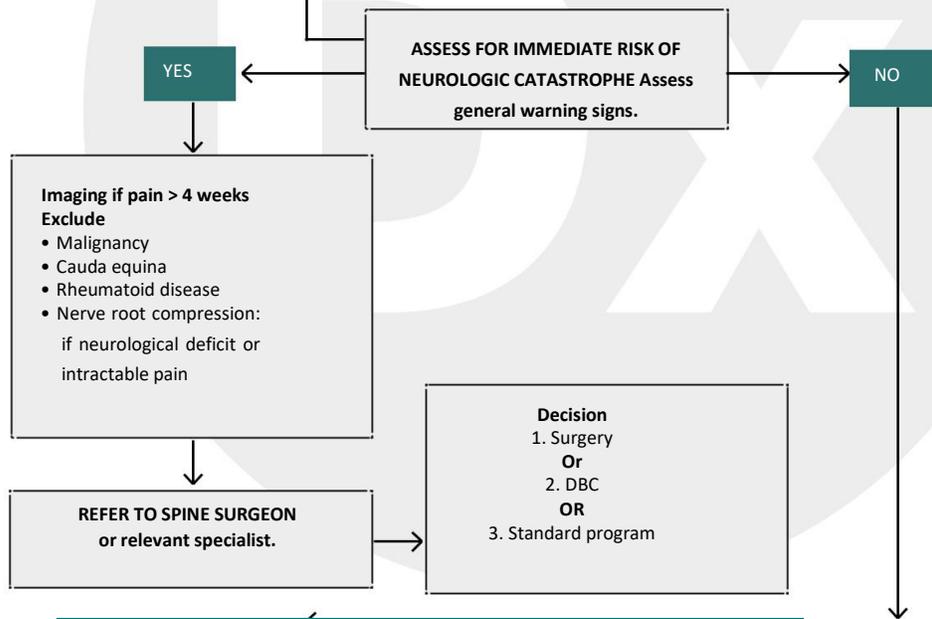
If symptoms persist, effectiveness and risks of diagnostic and treatment measures should be considered.

## Patient presenting with back pain

Is the pain 1 acute 2 repeat acute 3 subacute or 4 chronic, or 5 does the patient request surgery

1

IF ACUTE BACKACHE (0-6 weeks)



## INITIATE MANAGEMENT

#### 2. Symptom control

Medication NSAIDs/muscle relaxants/opioids are recommended.

Physical treatment Manipulation can be helpful when used within the first month of symptoms. Lumbar corsets, shoe insoles or hot/cold packs may be used since they are not harmful. Not recommended: TENS, traction, biofeedback.

Injection therapy not recommended, including injections to trigger points, ligaments, facet joints, epidural space; or acupuncture.

#### 3. Activity modification

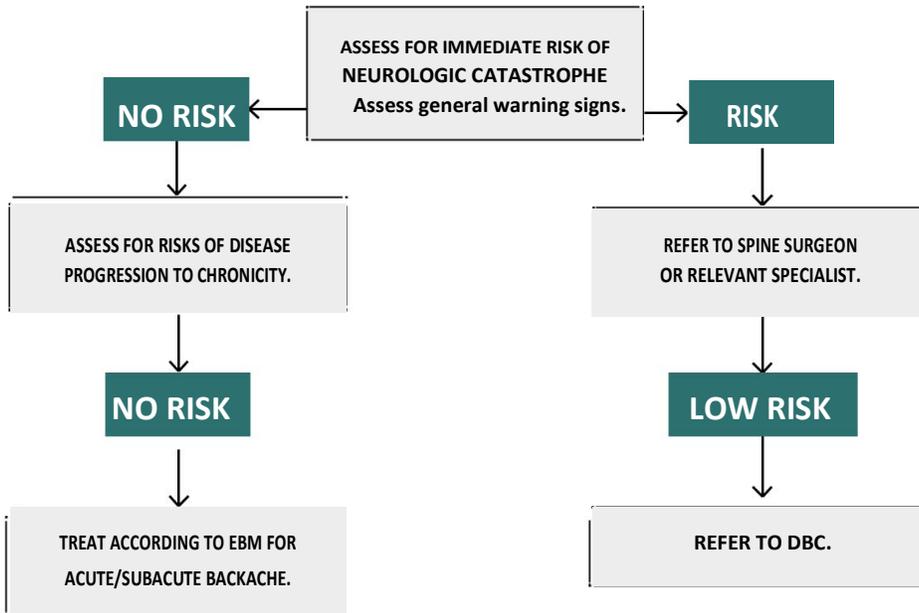
Recommendations Temporarily limit activities known to increase mechanical stress on the spine.

1. Bed rest Bed rest (> 4 days) should be avoided; gradually return to normal activities. Most patients don't need bed rest at all.

2. Exercise Stress aerobic exercise can prevent debilitation due to inactivity; these exercises can be started within the first 2 weeks for most patients. Gradual trunk muscle exercises after the first 2 weeks are helpful for patients with acute low-back problems, especially if symptoms persist. Evidence does not support stretching of back muscles in the treatment of acute LBP.

2

**IF REPEAT ACUTE BACKACHE**



**Risks of disease progression to chronicity**

- Pain intensity > 60 mm on pain visual analogue scale
- More than two acute back pain episodes
- Sleep disturbance due to pain
- High level of physical impairment/dysfunction
- Pain radiating into limbs
- Delayed or ineffective acute treatment

3

**IF SUBACUTE BACKACHE (7-12 weeks)  
(Prolonged > 5 weeks Post-traumatic/Post-operative)**

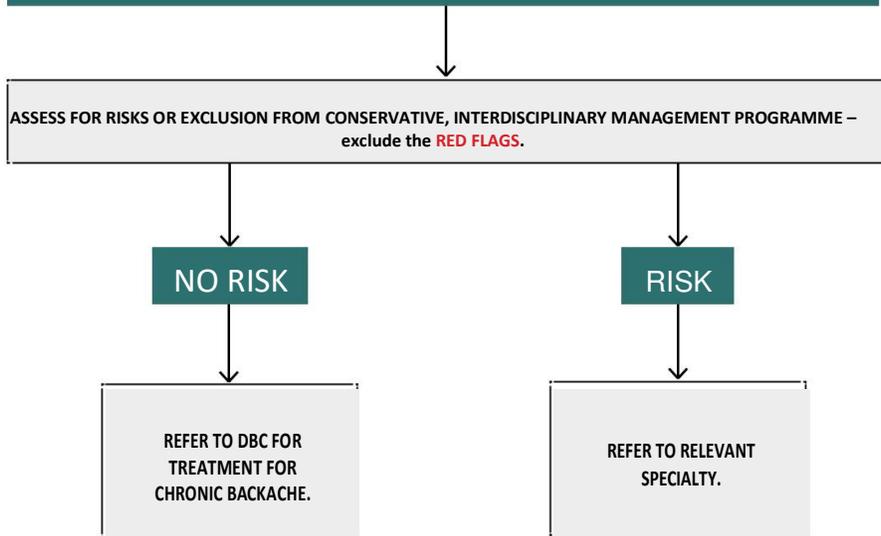


**Subacute backache**

is defined as having lasted longer than 6 or 7 weeks, but shorter than 3 months. There is evidence in the medical literature that a progressive activity program with a behavioural therapy approach is superior to traditional LBP care (conservative physical therapy) with regard to mobility, strength, fitness and, perhaps most importantly, earlier return to work.

4

**IF CHRONIC BACKACHE (> 3 months)**



**Red flags**

- Current nerve root entrapment with intolerable pain or with progressive neuro-motor deficit
- Cauda equina syndrome
- Spinal cord compression with neural claudication
- Spinal tumours
- Severe spine instability
- Severe osteoporosis with fracture risk
- Recent fracture
- Severe cardiovascular disease
- Severe metabolic disease/diabetes mellitus
- Morbid obesity: BMI ≥ 40
- Recent (less than 4 weeks) major operation: abdominal surgery, joint replacement.

## Predictors of chronic spine pathology and early retirement because of chronic spine pain

### Disease-related

- Previous pain
- High pain intensity
- High levels of physical impairment/ dysfunction
- Radiating pain

### Person-related

- Psychosocial setting
- Psychological distress
- Depression
- Job demands vs actual capabilities
- Self-perceived working ability
- Job satisfaction
- Claims and compensation

### Physical signs

- Paraspinal muscle atrophy
- Abnormal flexion-relaxation (EMG confirmed)
- Increased multifidus muscle fatigability- (EMG confirmed)
- Multiple symptoms or dysfunctional areas
- Previous spinal surgery
- Previous whiplash or equivalent physical injury.

## Disability/Sickness Absence

### RISKS – CHECK:

- Previous pain episodes
- Mood disturbances
- Psychosocial setting
- Economic status
- Job demands vs actual capabilities
- Delayed treatment

### Do:

- Fear Avoidance Behaviour Questionnaire
- Rimon's Brief Depression Scale
- Relocation Locus of Control Questionnaire
- Work Contents Questionnaire
- Specific Loading to Spine Questionnaire
- Self Exper. Strain at Work Questionnaire

### RISK FACTORS – CHECK:

- Perception of working ability
- Job-related factor/job satisfaction
- Delayed treatments
- Severity of disorders
- Claims for compensation

### Do:

- Functional capacity evaluation – occupational therapist.

## 5 IF SURGERY REQUESTED BY PATIENT

ASSESS FOR IMMEDIATE RISK OF NEUROLOGIC CATASTROPHE

NO RISK

RISK

REFER TO SPINE SURGEON

ASSESS FOR PREDICTORS OF CHRONIC SPINE PATHOLOGY OR DISABILITY PENSION REQUEST

NO RISK

RISK

REFER FOR PSYCHOLOGICAL OPINION

REFER TO DBC

## Lifestyle-associated risks of chronic spine pathology

- Sedentary work and social environment
- Psycho-emotional dysfunction (depression, anger, anxiety)
- Lack of exercise and muscle coordination, especially in ages 6-16
- Obesity
- Smoking
- High-risk sport activities
- Low social-economic standing
- Low education level
- Low employee status



Back and neck rehabilitation