### Supplementary Table 2. The meta-synthesis processes.

| EXAMPLES OF ILLUSTRATIVE FINDINGS<sup>a</sup> | CODES | CATEGORIES | THEMES |
|-----------------------------------------------|-------|------------|--------|
| • Patients described their pain by talking about the difficulties they had with movements, such as turning their head, and sensations in their arms, or talked about occasional headaches resulting from neck pain. Some patients experienced dizziness and impaired vision as well as tinnitus as a result of their pain. In addition, many of the patients described sleeping problems 43. | Neck pain, headache, restricted movement, dizziness, impaired vision, sleeping problems, nausea, shoulder pain, jaw pain, persistent, intense | Symptoms | My neck has gone wrong |
| • All patients reported neck pain as the main complaint, but also had shoulder pain, headaches, dizziness, nausea, visual impairments, and jaw pain 40. | | | |
| • Neck pain was most commonly described as persistent, dull and achy. This pain was typically of moderate intensity, or 3-6 range on a numeric 11-point pain rating scale and was usually persistent or “always there to some extent”. Patients reported pain overlay consisting of momentary to more prolonged episodes of acute pain 46. | | | |
| • Pain was dominant and interfered with their body perception. Patients found it very difficult, if not impossible, to concentrate on non-painful areas 42. | Lack of concentration, altered neck, unnatural movements | Body perception | |
| • Necks felt altered in both form and function, for example feeling swollen or distorted in proportion 42. | | | |
| • Other patients had not done the movement before and said it felt unnatural to execute 40. | | | |
| • Concentration and patience were also affected by the lack of sleep 40. | Concentration, patience, emotional distress, fear, anger, helplessness, disability, vulnerability. | Psychological consequences | I’m worried about my recovery |
| • Patients seemed to have little access to their emotions, although they reported fear of movement, since that would worsen the pain. A perception of pain as alien sometimes also resulted in helplessness. Patients also felt angry about their pain, because it made them feel disabled and required them to adapt their lives 42. | | | |
| • Patients display vulnerability and a certain amount of emotional distress. Many of them express a similarly fragile position in the face of private troubles 43. | | | |
| • Some patients stated that although they had problems with specific movement, they adjusted their behaviour so that the restriction did not interfere with activities 40. | Adjusted behaviour, endurance, avoid, distract, self-care. | Coping strategies | |
| • The most commonly reported strategy was simple endurance: the patients said that they passively sat through the pain and kept up their daily routine, a strategy that some planned to use | | | |
until they retired. They reported ‘pulling themselves together’ to meet their everyday obligations, not realising that this might aggravate their pain. Since neck pain was often increased by movement, the patients tended to avoid particular movements or to take up relieving postures. Although patients were not satisfied with this way of coping with their pain, for many endurances seemed to be the only way to handle it.

- Patients also tended to try and distract themselves from their pain. They reported working on despite or sometimes because of the pain in a bid to avoid being controlled by it.

- Many patients preferred self-care measures for the management of neck pain (analgesics, exercising, relaxation techniques or heat packs, warm showers, or electrical stimulation), and they sought professional help only when those measures failed.

- Patients talked about the muscle tensions in their neck as a source of their pain.

- Some patients acknowledged that medications were necessary or helpful at some time points, but they preferred to avoid them.

- Patients needed more information about the treatments they were being offered... wanted to know how the treatments worked and what they should expect.

- Patients reported three different categories of factors that affected their neck pain: position/posture, activity and stress. Neck postures that require flexion or extension, such as looking down when reading a book, and looking up, were postures that were most often reported as increasing symptoms.

- Patient’s strategy (e.g., excessive use of painkillers) may express dominant norms of masculinity, in which being “strong and silent” about supposedly trivial symptoms, and maintaining a prominent work position is seen favourably.

- In the men’s stories, the rehabilitation clinic plays a significant role as it provides the setting that allows them to (re)build a self after being disabled by chronic pain.

- Being in a subordinate position makes men feel extremely vulnerable and problems with custody routines can often be perceived by the men as hostile behaviour, representing a continuing threat to their role as a father and a man. The reason may be found in cultural expectations that men should exercise self-control and practice stoicism in the face of emotional distress.

| Muscle tension, medications, information, posture, activity, stress. | Mindset | Masculinity, strong, silent, self-control, vulnerability | Gender influence |
- Patients wanted to get their problems ‘fixed’ and hoped that medical treatment would stop their pain, allowing them to get on with their lives.  
- It was apparent that the amount of time clinicians were able to allocate to them, the degree of interest expressed and the apparent knowledge of their physician about neck pain all contributed to whether they felt that their family clinician was motivated and competent to help them with their neck pain problem.  
- Patients visited their clinicians with the predefined aim of receiving these therapies. Most patients wanted to have their self-diagnosed treatment needs fulfilled and seemed to be less interested in professional clinical counsel.

| Problems ‘fixed’, time, interest, knowledge, therapies | Expectations from health care professionals |
|--------------------------------------------------------|-------------------------------------------|

- Job is described not only as quite pleasurable, with a high level of responsibility, but also with high pressure and soaring stress levels, and it was the latter that he presented as damaging to his neck.  
- The consequences are longer periods of absence from work.  
- Inability of interviewees to fulfil their required workload at their jobs.

| Responsibility, stress, absence, workload | Work |
|------------------------------------------|------|

- Driving a car, sports participation, work, reading, and sleep were typically affected.  
- Many participants initially saw themselves as disabled by their pain, describing how they had limited their daily activities for physical or emotional reasons.  
- Activities that involved the use of neck/shoulder muscles, such as lifting and carrying, were the most commonly mentioned activities that aggravated neck and shoulder pain.

| Drive, sports participation, read, sleep, lift, carry, disability | Activity of Daily Living (ADL) disability |
|------------------------------------------------------------------|----------------------------------------|

- Exercise was the most commonly mentioned intervention that was perceived as challenging, but effectiveness requires more effort on their part and while they valued the longer-term benefits of exercise, they also acknowledged challenges in maintaining adherence.  
- A recurrent theme emerged about the complex relationship between physical activity or exercise and neck pain. Patients noted that they had to give up valued activity because of their neck pain. This loss affected their life satisfaction, but they also expressed concern that reduced activity would have many noted adverse health consequences in the longer-term.  
- The majority of interviewees named exercising to be an effective measure to prevent neck pain. In contrast, some admitted to not exercising sufficiently or not performing any physical activities at all despite believing in their beneficial effect.

| Challenging, effective, preventive, give up | Physical activity and sport |
|--------------------------------------------|-----------------------------|

- The patient, because he always had headaches in his youth, was excluded from socialization with friends.  
- An account of a ‘social fall’ and loss of social roles.

| Excluded from socialization, social | Social relationships |
|------------------------------------|----------------------|
Patients had increasingly withdrawn from activities and/or society for fear of worsening their pain.41

| fall, fear of worsening. |

Note: 4 Findings have been selected, extracted directly from the original manuscripts and reported in the table as examples; the full table of the meta-synthesis process is available from authors.