**Supplementary File 3 Inclusion and Exclusion Criteria**

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| **Inclusion Criteria** | |
| 1 | Aged 30 years and over. |
| 2 | At least moderate hand pain (AUSCAN hand pain index score >5) and moderate functional hand disability(AUSCAN hand functional disability score >9)\*. |
| 3 | Show signs and symptoms of thumb base OA on clinical enquiry and examination, specifically: hard tissue enlargement of the first carpometacarpal joint (CMCJ) OR squaring of the thumb base OR pain that worsens when pinching OR pain that worsens on span grip (e.g. opening a jar) OR crepitus on movement OR reduction in thumb base range of movement OR positive thumb adduction provocation test OR positive thumb extension provocation test OR pain on palpation of the dorso-radial aspect of the thumb CMCJ. |
| 4 | No other household member participating in the trial. |
| 5 | Able to give written informed consent. |
| 6 | Available to attend Occupational Therapy/Physiotherapy/Hand Therapy sessions. |
| **Exclusion Criteria** | |
| **1** | Consultation with therapy department or treatment for this thumb problem (excluding pain killers and anti-inflammatories) in the previous six months. |
| **2** | Intra-articular joint injection to wrist, fingers or thumb in the previous two months. |
| **3** | Fractures or significant injury or surgery to the wrist or hand within the previous six months. |
| **4** | Red flags i.e. history of serious illness or disease. i.e. any other diagnosed rheumatic conditions: gout, psoriatic arthritis, ankylosing spondylitis, connective tissue disorders (systemic lupus, systemic sclerosis), resulting in inflammatory arthritis in the hand/s, or, progressive neurological signs, or acute swollen hand joint. |
| **5** | Diagnosis of dementia or significant disorder likely to affect communication. |
| **6** | Already received thumb splints for thumb base OA. |
| **7** | Skin disease that may interfere or contraindicate splint wear. |
| **8** | Participant of a drug or medical device trial in the last 12 weeks. |

These criteria were developed to include symptomatic BTOA participants representative of those patients referred to out-patient therapy services.

\*The AUSCAN was used as a screening tool to detect symptomatic hand OA as in previous therapy studies of non-pharmacological interventions [14]