# COMMON CONDITIONS AFFECTING THE HAND AND WRIST PRIORITY SETTING PARTNERSHIP

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The British Society for Surgery of the Hand



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Judith Rogers coordinated the day-to-day running of the PSP in her role at the Oxford Biomedical Research Centre.

The help of Toto Anne Gronlund and Maryrose Tarpey in facilitating the final workshop along with Katherine Cowan, ensured the day ran smoothly and efficiently.

The work of the Centre for Evidence Based Hand Surgery has been critical in the completion of this PSP, particularly the HandSRev database.

Finally and most importantly, huge thanks go to all of the patients, carers and clinicians who took the time to complete the online surveys and prioritisation exercises. The Common Conditions Affecting the Hand and Wrist PSP would not have been possible without them. In addition the organisations, groups, twitter users and individuals who publicised the PSP and encouraged their members, friends and patients to participate were equally crucial.

Thank you.

# Foreword



I am delighted to highly recommend the results of the JLA Priority Setting Partnership in Common Conditions Affecting the Hand and Wrist. This has been a major piece of work designed to produce a list of broad research priorities. Anyone treating problems in the hand should use this work to focus research efforts in the areas of importance identified by the rigorous and widely respected methodology of the JLA.

I am confident that this work will form the basis for better research, looking at the topics that really matter to patients and clinicians. It should help everyone treating patients with hand problems

including surgeons, therapists, nurses and others to develop research ideas and gain funding to perform large scale studies addressing the important questions in hand surgery.

Historically most research in our field has originated from dedicated individuals in single centres. Now we need to concentrate on multicentre studies involving as many people as possible who want to be involved. By building a strong network of researchers we can better answer the important questions in Hand Surgery. This is a great opportunity for everyone involved in hand care to take our research to a new level.

I want to thank all who were involved in this tremendous piece of work especially the patients who have contributed greatly and the JLA team who have been so helpful and easy to work with. I particularly acknowledge the Research Committee of the BSSH (led by Professor Tim Davis) who conceived of and contributed so much to this project and especially to Ryan Trickett who led for the BSSH and worked enormously hard to ensure the project was delivered within budget and on time.

Professor Grey Giddins

President of the British Society for Surgery of the Hand (BSSH)

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## **Executive Summary**

#### About the Priority Setting Partnership

The James Lind Alliance (JLA—www.jla.nihr.ac.uk) is a non-profit making initiative serving to bring together patients, carers and frontline clinicians to identify and prioritise research uncertainties through a Priority Setting Partnership (PSP). A PSP highlights to funding bodies those research topics which are most important to patients and clinicians alike.

In 2015, the British Society for Surgery of the Hand (BSSH) Research Committee discussed the historic difficulties in funding and performing large scale research in hand surgery, particularly given the huge scope of the specialty across both plastic and orthopaedic surgery parent specialties. The BSSH decided to fund a PSP in April 2015.

#### The Steering Group and Scope of the PSP

The PSP was managed by a Steering Group comprising clinicians and patients who had first-hand experience of common conditions affecting the hand and wrist. Clinicians were selected to ensure representation from both plastic and orthopaedic surgery parent specialties, as well as hand therapists. Patients were purposefully sampled to ensure a spread of common conditions was represented. The group was independently chaired by the JLA and completed by an information specialist from the Centre for Evidence Based Hand Surgery who facilitated reviewing the current literature.

The scope of the PSP was designed to be broad, encompassing the common, everyday conditions affecting the adult hand. The Steering Group felt that many of these conditions were often treated on the basis of anecdote rather than evidence.

The PSP partnered with over 30 other organisations and groups and was chaired by an independent JLA adviser.

COMMON CONDITIONS AFFECTING THE HAND AND WRIST

# PRIORITY SETTING PARTNERSHIP

#### Initial Survey / Checking Uncertainties

A survey was designed asking both clinicians and patients/carers which questions about common hand and wrist conditions they would like to see answered by future research. Almost 900 questions were submitted and subsequently collated into 59 research priorities.

An additional 8 research priorities were identified by an extensive and systematic review of published research uncertainties from Cochrane reviews and NICE/SIGN evidence based guidance.

The 67 longlisted research priorities were then rigorously checked against the evidence base, greatly facilitated by the HandSRev database of systematic reviews, mapped by topic and developed by the Centre for Evidence Based Hand Surgery. This confirmed that all 67 priorities were "uncertainties" as defined by the JLA.

#### Methodology

#### **Interim Priority Setting**

The longlisted uncertainties were distributed for prioritisation to all respondents to the initial survey and publicised further by all partner organisations. Each respondent selected and ranked their top 10 uncertainties.

Ranking results from 261 individuals (41% patients/carers and 59% clinicians) were combined to rank the longlist. The top 30 uncertainties from this exercise, which included the top 10 priorities for both clinicians and patients, were shortlisted and taken forward to the final priority setting workshop.



Funded by:

The British Society for Surgery of the Hand

#### **Final Workshop**

With support and

guidance from:

The final workshop was held on 23rd May 2017 and attended by 12 clinicians and 9 patients - again purposefully sampled. Through a series of small and large group discussions facilitated by a group of JLA advisers, the uncertainties were ranked to identify the top 10 unanswered research priorities concerning common conditions affecting the hand and wrist, omitting a final numerical ranking owing to the diversity of conditions covered.

> James Lind Alliance



The British Society for Surgery of the Hand What methods are most accurate, user friendly and demonstrate the best clinical utility in measuring patient reported outcomes in common hand conditions?

The



In patients with Dupuytren's disease, what techniques give the best results in terms of function, recurrence and cost? What interventions/treatments will have the most positive effect following nerve injury?

In the treatment of common hand conditions, such as peripheral nerve compression syndromes (for example carpal tunnel syndrome), ganglia or arthritis of the fingers/thumb/wrist, do surgical interventions have a demonstrable benefit in patient reported outcome when compared with non-surgical methods or placebo (sham) surgery?

Which hand/finger/thumb injuries would benefit from surgical intervention over hand therapy or no formal treatment, considering both functional outcome and societal cost?

> Which hand therapy techniques enable the most efficient return to full function following surgery or injury?

Regarding patient and cost benefits, which interventions (for example movement preserving surgeries such as joint or cartilage replacement, fusion operations permanently stiffening the joint and novel therapies) give the best results in the treatment of painful joints in the hand/wrist?

Which patients with acute ligament injuries to the wrist or chronic wrist/distal radio-ulnar joint (the joint on the little finger side of the wrist) instability benefit from surgical treatment rather than from nonsurgical methods?

Can scar/fibrosis formation be manipulated to improve results following hand surgery/trauma?

What are the most effective nonsurgical methods for treating early arthritis in the hand and fingers?

In no order of priority

#### **Next Steps for Researchers:**

The Top 10 as well as the longlist of prioritised uncertainties map out a framework for future clinical research in common hand conditions. All of these topics have a demonstrable need for answers in the future.

#### Next Steps for the BSSH:

This PSP delivered a wealth of information, not least concerning aspects of common hand conditions not related directly to clinical treatments. This provides further evidence for the directed research of basic science and epidemiology which underpins many of the conditions we treat.

#### Next Steps for Research Funders:

This work will allow research funders to prioritise their attention to those common hand conditions which matter most to patients, their carers and the frontline clinicians who treat them. These priorities can be tackled together with the BSSH.

Supported by Oxford Biomedical Research Centre

## Introduction

James Lind, a naval surgeon, is credited with being the first to undertake a clinical trial in the history of medicine. He demonstrated the superiority of oranges and lemons over cider, sea water, vinegar, acid or garlic paste in improving the symptoms of scurvy in seamen. In his treatise on the treatment of scurvy he also performed a rigorous systematic review, summarising the known treatments for scurvy at the time. James Lind's controlled clinical trial established the importance of rigorous scientific methodology in medical research.

The James Lind Alliance (JLA) was established in 2004 by Sir Iain Chalmers, Dr John Scadding and Sir Nick Partridge. Its aim, to bring patients, carers and clinicians together to determine unanswered questions about the effects of treatments using a systematic and rigorous method, was published in the Lancet (2004). The methodology behind this process – termed a Priority Setting Partnership (PSP) – ultimately seeks to focus the attention of health research funders on the topics most relevant to patients and clinicians.

The key beliefs of the JLA are that:

- addressing uncertainties about the effects of treatments should become accepted as a routine part of clinical practice.
- patients, carers and clinicians should work together to agree which, among those uncertainties, matter most and deserve priority attention.

[The James Lind Alliance. Tackling Treatment Uncertainties Together. Southampton University]

The infrastructure of the JLA is a non-profit entity, funded entirely by the National

Institute for Health Research (NIHR). The JLA and NIHR work together closely to ensure that treatment uncertainties are quickly bought to the attention of important funders of research, including the NIHR themselves.

To date 53 PSPs have been completed and a further 39 are in progress in the United Kingdom and overseas. The methodology is well established in fields as diverse as hip and knee replacement surgery, cleft lip and palate, multiple sclerosis and eczema.

The British Society for Surgery of the Hand (BSSH) was originally formed as the Second Hand Club in 1956, and was given charitable status in 1975. Its constitution states its principle aims are to promote and direct the development of Hand Surgery and to foster and co-ordinate education, study and research in Hand Surgery. The BSSH now has over 700 members. It owns the European Journal of Hand Surgery, currently the foremost hand surgery journal in the world, as well as supporting National Educational Fellowships for hand surgeons nearing the completion of their training. It also created and organises Hand Diploma and MSc programmes in conjunction with Manchester University.

The BSSH Research Committee recognised in early 2015 that hand surgery research was attracting interest from funding bodies. It was considered important that priority was given to the areas of hand surgery that clinically "deserved" research, rather than others with greater financial reasons and implications. The JLA PSP methodology was viewed as an ideal solution to focus research funders' attention on the important topics. The BSSH Council approved and fully funded a hand surgery PSP to commence in early 2015.





# Methodology

The Common Conditions Affecting the Hand and Wrist PSP followed the methodology dictated by the JLA throughout.

#### **Steering Group**

The initial step in establishing a PSP is to recruit the Steering Group who are responsible for its management. The Steering Group should consist of representatives from important stakeholders and include patients (and/or carers where applicable) as well as clinical members.

The clinical members were recruited from the BSSH Research Committee (at the time known as the Research and Audit Committee). Ryan Trickett, a consultant hand and wrist surgeon based in Cardiff was given the lead clinician role, ultimately responsible for completing the PSP. The remainder of the Steering Group were selected to represent as many facets of the specialty of hand surgery as possible. Importantly, given the crucial role that hand therapy plays in optimising outcomes following injury or surgery, two hand therapists were also invited. In addition, an information specialist was recruited from the Centre for Evidence Based Hand Surgery to assist in the literature search and data analysis phases of the PSP.

The PSP was overseen by the senior JLA adviser Katherine Cowan and supported from an administrative point of view by the Oxford Biomedical Research Centre.

Patient representatives were selected from the practices of the clinical members of the steering group. Purposive sampling was considered when inviting patients to participate, to ensure that a spectrum of hand and wrist pathology was represented on the steering group.

The PSP met on three occasions in person and multiple times via teleconference facilities. A minimum number of patient and clinical representatives was required to be present before any decisions were made.

The full membership of the Steering Committee is given below:

#### Patient Representatives



Christopher Delaney – Christopher is currently a medical student at the University of East Anglia. He attended Wellington College, Berkshire where he

studied for A-Levels. After leaving school, he spent his gap year working in operating theatres at Stoke Mandeville Hospital, where he gained a great insight in to the NHS. Before injuring his wrist (scapholunate ligament tear) he had a strong interest in playing rugby, being a member of England U16 squad and Ireland U18 squad. He has interests in all aspects of medicine, although he has future aspirations for a career in Orthopaedics.



Jo Horsey – Jo graduated from Sheffield University in 1970 and then spent 40 years in education, finishing her career as head teacher of a secondary school in Nottingham. Jo is now retired

and spends time gardening and in voluntary work. Jo suffered a wrist fracture in an accident in 1997.



David Skilton – David is Emeritus Professor of English at Cardiff University. He is a specialist in the Victorian novel, the art and literature of London, and anticipated ruins. He has

published extensively on literary illustration. For many years carpal tunnel syndrome caused him problems when working on a



computer keyboard, or playing the piano or the violin.



Sheila Wade – Sheila's main working life has been spent in British embassies and consulates whilst accompanying her husband

on Foreign and Commonwealth Office (FCO) postings. During the last 12 years of her working life she was Chair of the Editorial Board at the Diplomatic Service Language Centre, advising on, producing and publishing language teaching guides in all languages for diplomats. Throughout this time she also ran Language Testing Associates (consultants contracted to the FCO), which compiled and operated examinations, and tested diplomats in all languages. She has also worked for various American computer and financial companies in both technical and administrative roles. She is now retired and living in Norfolk. Sheila has Dupuytren's contracture.



Gillian Walton – Originally an historian, Gillian retrained in her early 30s as a psychotherapist. She works with individuals and couples, and supervises and consults to other colleagues. She

is married to a doctor and has 4 children and 9 grandchildren. She has had rheumatoid arthritis for 35 years and is very well looked after by physicians and surgeons alike.

#### Clinical Representatives



Ryan Trickett – Ryan is the consultant lead for the PSP. He is a consultant hand surgeon based in Cardiff and Vale University Health Board and a member of

the BSSH Research Committee. He was awarded an MSc in Trauma Surgery in 2010. His current research interests are in traumatic hand conditions and patient reported outcome measures. He developed a novel patient reported outcome measure using qualitative methodology, for which he was awarded an MD in 2017.



Tim Davis – Professor Davis is a Consultant Hand Surgeon at the Nottingham University Hospitals and Honorary Professor of Trauma and Orthopaedic Surgery.

He has a long-term interest in research, particularly into the outcomes of different treatments for common hand injuries and conditions, particularly thumb osteoarthritis, Dupuytren's contracture and scaphoid and distal radius fractures.



Dominic Furniss – Dominic is an Associate Professor at Oxford University and an Honorary Consultant Plastic Surgeon at

Oxford University Hospitals. His research interests focus on understanding both the genetic and non-genetic causes of diseases of the hand, with the ultimate aim of developing new treatments for disease.



Grey Giddins – Grey is a Consultant Orthopaedic and Hand Surgeon, previous Editor-in-Chief of the Journal of Hand Surgery (European), visiting Professor at

the University of Bath and President of the British Society for Surgery of the Hand. He has research interests in hand and wrist biomechanics, hand fractures particularly non-operative treatment and minimal access surgical techniques to minimise morbidity.



Abhilash Jain – Professor Jain graduated in Medicine in 1995 (London). He was awarded both an MSc (Distinction) (University College London) and PhD

(Imperial College London) for his research looking at the effects of rheumatoid arthritis on the hand. He has extensive clinical and academic training in Plastic Surgery and this was recognised when he was the first Plastic Surgeon to win a prestigious HEFCE Clinical Senior Lecturer-NHS award. He was appointed as Clinical Senior Lecturer and Honorary



Consultant Plastic Surgeon at Imperial College London in 2010. In 2013 he was appointed as the Surgical Specialty Lead by the Royal College of Surgeons to develop clinical research for the BSSH and British Association of Plastic, Reconstructive and Aesthetic Surgeons (BAPRAS). He founded and leads the Reconstructive Surgery Trials Network (RSTN) to deliver collaborative multi-centre clinical research on behalf of BAPRAS and BSSH. He is currently an Associate Professor of Plastic and Hand Surgery at the University of Oxford and Imperial College London NHS Trust, Chairman of the BAPRAS Research Committee and member of the BSSH Research Committee.



Alexia Karantana – Alexia was appointed as Clinical Associate Professor in Hand Surgery at the University of Nottingham in 2015. She is a consultant hand surgeon

and treats patients with hand and wrist problems at Nottingham University Hospitals NHS Trust. Her academic role has been to establish the Centre for Evidence Based Hand Surgery and work with patients and the British Society for Surgery of the Hand (BSSH) to enable high quality patient-centred research into common hand conditions – research which addresses current uncertainties and is relevant to patients and the NHS.



Donna Kennedy – Donna is a Fellow in Pain Research at Imperial College London and Clinical Specialist Occupational

Therapist in Hand Therapy at Imperial College Healthcare NHS Trust. She has extensive experience in the management of rheumatologic, orthopaedic and traumatic hand conditions. She is a member of the Clinical Evidence Committee of the British Association of Hand Therapists and is passionate about promoting evidence-based best practice.



Debbie Larson – Debbie is a clinical hand therapist in the NHS. She is a co-investigator in a multicentre RCT investigating the use of splints following surgery for

Dupuytren's contracture and has presented the findings at hand surgical meetings in Miami, Delhi and Milan. She is currently investigating the impact of pre-existing anxiety and depression on recovery following elective hand surgery.

#### Scientific Expertise



Douglas Grindlay – Douglas is an Information Specialist in the Centre for Evidence Based Hand Surgery at the University of Nottingham, working on various

aspects of evidence-based medicine, systematic reviews and database searching, and developing methods for disseminating research and assessing impact. Douglas has an MA from Loughborough University and a PhD from the University of Nottingham, and is a Chartered Member of the Chartered Institute of Library and Information Professionals.

#### Support



Katherine Cowan – Katherine is Senior Adviser to the JLA and chaired the Steering Group. She

has been a key contributor to the development of the JLA methods and profile since 2008. She co-wrote and edited the original JLA Guidebook. She has chaired over 30 PSPs, and facilitated almost 50 priority setting workshops, including for schizophrenia, childhood disability, palliative care, dementia, mesothelioma, spinal cord injury, and sight loss and vision.

Judith Rogers – Judith was the James Lind Alliance Assistant Project Co-ordinator for the National Institute of Health Research (NIHR) Oxford Biomedical Research Centre. She has supported a number of PSPs across a variety



of health areas. Her background is in training management and delivery, HR, and project management. In recent years she has had freelance contracts across a range of business sectors from blue chip companies to the health and social care sectors. This work included supporting some early JLA PSPs.

#### <u>Scope</u>

The high function of the human hand enables interaction with our surroundings, from simple activities of daily living through to highly skilled activities such as using tools, typing or playing musical instruments. Both disease and injury can have a profound impact on our hands. There is a huge spectrum of diseases, conditions and pathology that can affect the hand and wrist.

Patients with conditions affecting their hand or wrist can be managed by surgeons drawn from two parent specialties: plastic surgery and orthopaedic surgery, often considered together as hand surgeons. Additionally, hand therapists, occupational therapists and physiotherapists have a vital role in the management of these patients. While many conditions may be treated with medication or therapy, many require surgical treatment.

The Steering Group determined the exact scope of the PSP in the early stage of the PSP. It was important that the PSP focussed on topics relevant to the membership of the BSSH, namely common conditions that may require surgery.

While chronic diseases in the hand are often the focus of healthcare managers and funders, traumatic injury has significant individual, societal and financial implications. The Steering Group felt that it was important to consider both traumatic and chronic conditions that affected the hand and wrist.

The Steering Group also considered at length how broadly the hand could be affected by disease and injury. For example, chronic skin conditions such as eczema can have a profound impact on the function of the hand, as can traumatic brain injury. However, whilst surgery may form part of the treatment in the hand following brain injury, eczema is not treated surgically, nor routinely by a "hand specialist", be that a therapist or a surgeon. The Steering Group also considered those conditions which were routinely treated by non-surgical methods, particularly in the early stages.

Conditions affecting the elbow with no distant anatomical effects on the hand, such as tennis or golfer's elbow were excluded from the scope.

In summary, the Steering Group decided to concentrate on common hand conditions that were routinely treated by hand specialists, including hand surgeons and hand therapists.

In line with the JLA methods, the PSP was limited to identifying research questions concerning the results of intervention, rather than the basic science or epidemiology behind disease. However, it was apparent from an early stage that the cause and natural history of many common hand conditions were poorly understood. Such "out-of-scope" data was not discarded but stored to guide future epidemiological and basic science studies.

#### **Establishing the Partnership**

Once the Steering Group had decided the scope of the PSP, the wider partnership was established. This collection of groups, societies and individuals would assist in publicising the PSP and where appropriate, contribute to the data collection.

A full list of agreed Partners is given in Appendix I.

#### **Initial Survey**

The Steering Group developed parallel questionnaires for both patients or their carers, and clinicians. This enabled a more relevant description of the PSP process to each group. The surveys were made available



in paper format through the Steering Group's and Partner organisation's networks and online via the PSP website. Social media (Twitter/Facebook/LinkedIn) and email campaigns were used to further publicise the surveys.

The surveys collected respondent demographics, concerning age, gender, occupation (for clinicians) and hand condition (for patients/carers). The main questions were:

- Patient/Carer: What question(s) about the management of your hand or wrist condition(s) would you like to see answered by future research?
- Clinician: What question(s) about the management of Common Conditions Affecting the Hand and Wrist would you like to see answered by future research?

Respondents were also given the opportunity to consent to further involvement in the PSP by providing their contact details.

The surveys were launched on the 15<sup>th</sup> August 2016 and closed on the 3<sup>rd</sup> January 2017.

Once the submitted "questions" from the surveys had been collated, out-of-scope submissions were excluded but retained for further review following the PSP. Submissions were analysed and combined into research "uncertainties". This process carefully considered the background of the respondent – clinician versus patient/carer, as well as the patients' diagnosis – in best determining the intention and meaning of the submitted question. If submitted questions were similar they were combined into a single uncertainty.

Where possible, uncertainties were framed using the PICO format – Patient/Population, Intervention, Comparator and Outcome.

#### Additional Uncertainties

Stated and implied research recommendations were extracted from relevant published Cochrane Reviews, National Institute for Health and Care Excellence (NICE) guidance and Scottish Intercollegiate Guidelines Network (SIGN) guidelines, as well as published protocols for incomplete reviews. These reviews were obtained via the Centre for Evidence Based Hand Surgery (CEBHS) HandSRev database – a comprehensive database of systematic reviews concerning hand surgery topics. There was no time limit for inclusion of reviews, guidelines or protocols to ensure maximum inclusion of research recommendations from high methodological quality publications.

Each review, guideline and protocol was reviewed independently by two clinicians from the Steering Group. Research recommendations were extracted. If differences in extraction existed between the two reviewers, a discussion enabled an agreement to be reached. These additional uncertainties were added to those derived from the patient/carer and clinician surveys.

#### **Checking Uncertainties**

The taxonomy from the CEBHS HandSRev database was used to categorise each uncertainty. Uncertainties were aligned with the relevant published systematic reviews in the HandSRev database published since 2011. All systematic reviews were included in the checking process regardless of methodological quality.

The uncertainties were checked against the relevant systematic reviews to ensure that the uncertainty had not been previously answered by original research or meta-analyses. Checking was performed by the clinical members of the Steering Group. If an uncertainty was confirmed to persist, the criteria in Table 1 (page 16) were used to classify the reason for the persistent uncertainty.



#### **Interim Prioritisation**

Once the long list of confirmed uncertainties had been checked against the available literature, it was released for interim prioritisation. An online survey was created allowing respondents to select their own personal top 10 research uncertainties. The survey was publicised in an identical manner to the initial surveys. It was also sent personally to those respondents who answered the initial survey and left contact information, and was freely available at the PSP website.

The prioritisation survey opened on the 6<sup>th</sup> April 2017 and closed on the 2<sup>nd</sup> May 2017.

Each respondent to the survey was given equal weighting in the interim prioritisation. The top 10 for each respondent was reverse scored, with the uncertainty prioritised in first position allocated "10", and the uncertainty prioritised last, allocated "1". Scores for the clinician respondents and patient/carer respondents were summated separately creating a prioritisation list for each group and subsequently combined.

The Steering Group elected to short list the overall top 30 uncertainties. This included the respective top 10's from both the patient/carer and clinician interim prioritisations. The Top 30 uncertainties were taken forwards for detailed discussion at the final workshop.

Being part of the PSP gave a fascinating and reassuring insight into the nature of clinical research. The views of the patient representatives were taken seriously and made a genuine contribution to the relevance of future projects.

David Skilton Steering Group Patient Representative

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#### Final Workshop

The final workshop took place at the Royal College of Surgeons, Lincoln's Inn Fields in London, on the 23<sup>rd</sup> May 2017. The goal was to agree a prioritised list of the Top 10 uncertainties. The workshop was guided by Katherine Cowan, Senior JLA Advisor and facilitated by two additional JLA advisors, Maryrose Tarpey and Toto Gronlund. Attendees were selected purposefully to ensure a spread of patient participants' conditions and a variety of surgical and therapy subspecialties were represented.

All participants completed a declaration of interests form and submitted a short biography. Biographies and the short list of 30 uncertainties were circulated to all participants prior to the workshop.

An initial pre-workshop ranking exercise was completed by each participant. This formed the start-point of the initial discussions on the day.

The workshop followed the JLA methodology of an adapted Nominal Group Technique which enables all participants to have an equal influence on the process. It was made clear to all participants at the start of the workshop that views based upon lived experience and professional knowledge were of equal value to the discussion. Through a series of small group discussions and a larger discussion involving the whole group a final prioritised list was agreed.

All of the participants at the final workshop made considerable and valuable contributions to the discussions. It was a long and mentally challenging day. At points a general consensus was difficult to reach. The facilitators expertly ensured that all participants were given opportunity to express their opinions. All voices were heard equally regardless of the background of the participant.



#### **Publishing the Findings**

This report and the accompanying executive summary are initial publications to publicise the results of this PSP.

In addition, the results will be formally presented to the membership of the BSSH at their Autumn 2017 Scientific Meeting to be held in Edinburgh in November 2017.

The James Lind Alliance PSP was a fantastic experience. The chance to hear disparate views from clinicians, patients and carers in a supportive environment was invaluable, and there was a real sense of camaraderie, of wanting to grasp this important opportunity and truly represent the views of all parties. The final priority setting meeting was intense, at times frustrating - when realising your personal priorities are not necessarily widely shared - but ultimately very rewarding. I hope that we have created strong foundations for the next decade of clinical research in Hand Surgery.

Dominic Furniss Steering Group Clinical Representative



Representatives from the NIHR attended the final workshop and were privy to the short-list of uncertainties produced by the interim prioritisation.

The out-of-scope submissions were collected separately and reserved for a separate analysis and prioritisation following the completion of this PSP.



It was an honour to sit as a hand therapist, representing BAHT, on the BSSH JLA PSP steering committee. It was inspiring to see the extensive efforts made by the BSSH and the JLA to ensure the process was inclusive. Prior to participating I couldn't have imagined how much work would be involved in scrutinising the available evidence to ensure treatment uncertainties were indeed uncertain! I'm very proud of the piece of work created by all those who participated at every level. It is an *important document that will help us to* ask and hopefully answer important hand surgery and therapy research questions for the next decade.

Donna Kennedy Steering Group Clinical Representative



## Results

#### Initial Survey

Following removal of incomplete submissions there were 889 individually submitted questions to the initial surveys. Of these, 124 patients/carers submitted 359 questions, and 152 clinicians submitted 529 questions. Considering the patient/carer survey, there were 120 patients and 4 carers. Basic demographics of the respondents are shown in Figures 1, 2, 3 and 4).













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Whilst the surveys were open, interim analysis suggested that the majority of respondents were middle to late aged English, white females. The Steering Group made significant efforts during the second half of the survey period to actively invite a greater number of participants from the under-represented groups. This included targeted invitations to patients directly in clinic as well as Partner invitations to organisations representing minority groups in the community.

Upon the closure of the surveys, the balance had improved but remained similarly biased. The clinical members of the Steering Group commented that although there was a clear difference, the skewed distributions reflected the common patient profile seen in hand surgery clinics. It also reflected the involvement of some of the Partner organisations, particularly the patient groups for rheumatoid arthritis and Dupuytren's disease. Both groups have large patient networks and publicised the PSP thoroughly, but represent diseases that commonly affect Caucasians only.

In general patients had undergone the full spectrum of non-surgical and surgical treatments, and many respondents had experience of multiple treatments (Figure 5), explaining why the percentages in Figure 5 total more than 100%.

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Considering the clinician responses, surgeons and therapists were considered to have a "pure hand practice" if they spent more than two thirds of their time caring for hand conditions. Respondents were most commonly hand surgeons with an orthopaedic background (Figure 6). The geographical distribution of clinicians reflected the distribution of specialist hand surgery units across the UK, with more respondents based in England (81%) than Wales (9%), Scotland (5%) or Northern Ireland (2%).



Figure 6: Background of clinicians

- Hand surgeon orthopaedic background
- Hand surgeon plastic surgery background
- Hand therapy occupational therapy background
- Hand therapy physiotherapy background
- Occupational therapist
- Physiotherapist
- Nurse
- Orthopaedic surgeon
- Plastic surgeon
- Other doctor operating on hand or wrist conditions
- Other doctor treating patients with hand problems
- Other

Prefer not to say

Following the taxonomy developed by the CEBHS for the HandSRev database, each submitted question was categorised. Overall, the most common conditions with submitted questions were Dupuytren's disease, osteoarthritis and inflammatory arthropathy (Figure 7). This likely reflected the high activity of Partner patient groups in these areas.

Importantly, there was a wide spectrum of submissions covering the many facets of common hand practice.

The Steering Group decided that the process of converting the raw submissions into research uncertainties should be performed by a single member. This would allow a full understanding of the range of submissions, as well as facilitate the aggregation of similar submissions under a single uncertainty. The process was lengthy, highly subjective and often involved interpretation of the submission in light of other factors concerning the individual.

For example, the first patient submission was "What exercises or massages might help?" When considered alongside the patients' diagnosis of Dupuytren's Disease, this converted into the uncertainty "What nonsurgical treatments have benefits over surgery in the treatment of Dupuytren's disease?"



Figure 7: Spread of topics covered by initial survey submissions (prior to removal of out-of-scope submissions)



Considerable care was taken to ensure that the interpreted original intention of the submitter was not missed or ignored when creating uncertainties.

The broad scope of this PSP presented its own difficulty in interpreting submissions and creating uncertainties. As this PSP was destined to include a number of distinct diagnoses and disease processes it was difficult to avoid presenting a list of "What is the best treatment for ....?" uncertainties, each considering a different diagnosis. Termed the "Hierarchy of Vagueness" this phenomenon is best highlighted by considering the following submission:

"Is the XYZ plate better than the ABC external fixator in the treatment of highly comminuted wrist fractures in young adults?"



Depending on the level of detail in the uncertainty, this question could be converted to any of the following:

- Is the XYZ plate better than the ABC external fixator in the treatment of highly comminuted wrist fractures in young adults?
- Is a plate better than an external fixator in the treatment of highly comminuted wrist fractures in young adults?
- What is the best operation for highly comminuted wrist fractures in young adults?
- What is the best operation for highly comminuted wrist fractures?
- What is the best operation for a broken wrist?
- What is the best treatment for a broken wrist?

Often a balance was sought to preserve the broad nature of the PSP, maintain the presumed original intention of the submitter and create a manageable and relevant list of uncertainties for checking.

The 889 submissions were converted into a total of 59 potential uncertainties. The full list of submissions, their categorisation and ultimate conversion is available at bit.ly/bssh\_jla and via the JLA website (www.jla.nihr.ac.uk)..

Each potential uncertainty was reviewed by the Steering Group to ensure the question was broadly representative. Following this, the non-clinical members of the Steering Group reviewed in detail every donor submission with each uncertainty to ensure that the uncertainty was appropriate for lay reading and that the meaning of the original submission had not been lost.

#### Additional Uncertainties

A total of 16 Guidelines, 44 Cochrane reviews and 17 Cochrane review protocols were assessed for potential additional uncertainties. Agreement was obtained between two clinical Steering Group members on the additional uncertainties to be extracted from these publications. A further 8 uncertainties were added to the long-list for checking. These are available in full at bit.ly/bssh\_jla and via the JLA website (www.jla.nihr.ac.uk).

#### **Checking Uncertainties**

The Steering Group collectively reviewed all of the potential uncertainties confirming each was within the scope of the PSP. Each potential uncertainty was checked against the last 5 years of published systematic reviews as identified through the HandSRev database.

All of the potential uncertainties were confirmed to be uncertain within the JLA definition – forming the long-list for interim prioritisation (Table 2). Each is listed alongside the reason for persisting uncertainty (Table 1). Where two reasons are given for the reason there were varying levels of evidence for differing facets of the uncertainty. For clarity both reasons are given.

Table 1: Reasons for persistent uncertainty

	Available evidence supporting uncertainty
А	No systematic review available
В	Systematic review available, but authors did not find any randomised controlled trials in the literature
С	Systematic review available, some randomised controlled trials found, but no formal meta-analysis performed
D	Systematic review with meta-analysis available, uncertainty persists



Table 2: Long-list of confirmed uncertainties presented for interim prioritisation, listed alphabetically

	Uncertainty	Reason
1	Can a more holistic approach (psychologically, socially, spiritually, culturally informed) hand therapy have additional benefits for patients with common hand conditions including traumatic injuries?	A
2	Can alternatives to plaster casts be used in the conservative treatment of wrist fractures?	C/D
3	Can hand therapy or hand surgery help in the management of cold intolerance following hand surgery or injury?	С
4	Can hand therapy or hand surgery help in the management of complex regional pain syndrome?	С
5	Can novel approaches to the delivery of hand surgery demonstrate clinical and cost benefits?	A
6	Can scar formation be manipulated to improve results following hand surgery/trauma?	D
7	Compared with removing the trapezium bone (a bone at the bottom of the thumb) in arthritis of the base of the thumb, are any other surgical or non-surgical techniques better in terms of patient outcome, power, movement and pain relief?	D
8	Which hand/finger/thumb injuries would benefit from surgical intervention over hand therapy or no formal treatment, considering both functional outcome and societal cost?	В
9	Do pre-existing systemic pain conditions (where patients have difficult to treat pain as well as a hand injury or problem) have a negative effect on the outcomes following hand injury or surgery?	В
10	Does prosthetic (artificial) replacement or hand transplantation have the greater clinical and cost benefits when used in the hand and wrist?	С
11	Does regional anaesthesia (where the arm is numbed completely) offer benefits directly to the hand and wrist, in the surgical treatment of common hand conditions?	A
12	Does surgery have a role in the treatment of the complications of Raynaud's disease/systemic sclerosis/scleroderma?	С
13	Do surgical or non-surgical methods give the best results in post-traumatic stiffness of the proximal interphalangeal joint (the middle knuckle of the finger)?	В
14	Does the pattern of arthritis in the wrist predict which treatment will give most benefit?	С



	Uncertainty	Reason
15	Does the type of metal used (for implants/replacements/plates/screws/wires) during surgery, affect the results?	А
16	Does the use of antibiotics affect the infection rate following hand trauma or elective hand surgery?	D
17	Following unsuccessful treatment for an acute tendon injury (snapping or cut), which techniques are most successful at restoring function?	D
18	How can patient participation in hand therapy be maximised?	A
19	How is failed joint replacement in the hand/wrist best managed?	A
20	How is tissue loss in the hand/wrist best treated?	A
21	In common hand conditions that require splinting to maintain function or prevent deformity, what are the best splint designs and regimens for their use?	C/A
22	In inflammatory arthropathy (for example rheumatoid arthritis), when should surgical interventions be considered over non-surgical treatments?	A
23	In patients with Dupuytren's disease, what invasive techniques give the best results in terms of function, recurrence and cost?	С
24	In patients with ulnar sided wrist pain (pain on the little finger side of the wrist), what interventions give a reliable improvement in function and pain?	В
25	In previously treated Dupuytren's disease, do any additional techniques (for example splinting, therapy, stretching, massage) help prevent recurrence?	D
26	In the treatment of common hand conditions, such as peripheral nerve compression syndromes (for example carpal tunnel syndrome), ganglia or arthritis of the fingers/thumb/wrist, do surgical interventions have a demonstrable benefit in patient reported outcome when compared with non-surgical methods or placebo (sham) surgery?	с
27	In the treatment of broken bones that are not healing in the wrist and hand, which techniques demonstrate the greatest clinical and cost benefits?	В
28	In the treatment of non-traumatic tendon problems (for example trigger fingers, tendinitis) in the hand and wrist, how does surgical intervention compare to non-surgical methods?	A



	Uncertainty	Reason
29	Is denervation (where the nerves that take pain from the joint to the brain are intentionally cut) of a painful joint a better option than alternative surgical treatment, and if so what are the best techniques for denervation and in which joints?	A
30	Is revision surgery useful in recurrent Dupuytren's disease?	A
31	Regarding patient and cost benefits, are movement preserving surgeries, such as joint replacement or cartilage replacement, preferential to fusion (permanent stiffening) in the treatment of painful joints in the hand/wrist?	С
32	What are the best methods of treating tendon injuries?	D
33	What are the most beneficial interventions in the short and longer term following a burn to the hand/wrist?	A/B
34	What are the most effective non-surgical methods for treating early arthritis in the hand and fingers?	D
35	What are the most effective non-surgical methods of treating peripheral nerve compression (for example carpal tunnel syndrome or cubital tunnel syndrome)?	A
36	What are the most reliable treatments for repetitive strain injury?	С
37	What factors predict the greatest benefit from hand therapy following injury?	A
38	What interventions/treatments will have the most positive effect following nerve injury?	B/C
39	What is the best rehabilitation following treatment for acute or chronic wrist instability?	A
40	What is the best treatment of wrist fractures regarding patient outcomes and cost?	D
41	What is the role of steroid injections in the treatment of arthritis of the hand and wrist?	D
42	What is the role of surgery in Kienbock's disease?	A
43	What methods are most accurate, user friendly and demonstrate the best clinical utility in measuring patient reported outcomes in common hand conditions?	В

	Uncertainty	Reason
44	What non-surgical treatments have benefits over surgery in the treatment of Dupuytren's disease?	B/C
45	What patient and injury factors predict outcome following wrist fracture and determine which patients may benefit from the various treatment options?	С
46	What patient or surgical factors may contribute to complications or ongoing symptoms following treatment for common hand conditions?	С
47	Which surgical procedures (such as finger/hand preserving surgery or amputation) give the best results for cancers of the hand and wrist?	С
48	What treatments are most effective for the treatment of ongoing symptoms following surgery for carpal or cubital tunnel syndrome (or other entrapped nerves in the arm)?	В
49	When and how should mucoid cysts/Heberden's nodes be treated?	A/B
50	When and in whom should treatment for Dupuytren's be commenced?	В
51	When is surgery of a greater benefit than non-surgical methods in the treatment of peripheral nerve compression (for example carpal or cubital tunnel syndrome)?	B/C
52	When is the best time to operate following hand injury (for example following fracture, tendon injury or simple skin cuts)?	В
53	When should patients with pain or deformity following joint damage or arthritis undergo surgery to correct/improve it?	В
54	Which arthroscopic (keyhole) procedures in the hand/wrist give additional benefits to other surgical techniques or to no intervention?	С
55	Which factors indicate who can be treated without an operation rather than with surgery following a wrist fracture?	С
56	Which hand therapy techniques enable the most efficient return to full function following surgery or injury?	C/A
57	Which patients with a recent scaphoid fracture would benefit from surgery rather than cast or splint treatment?	С
58	Which patients with acute ligament injuries to the wrist or chronic wrist/distal radio- ulnar joint (the joint on the little finger side of the wrist) instability benefit from surgical treatment rather than from non-surgical methods?	A/B

	Uncertainty	Reason
59	Which patients with paralysis, spasticity or functional loss in the upper limb following brain or nerve injury, benefit from surgery in addition to non-surgical treatments?	С
60	Does the surgical method (i.e. the exact technique used) influence the outcome following surgery for peripheral nerve compression (for example carpal tunnel syndrome or cubital tunnel syndrome)?	C/D
61	When should trigger digits be referred for specialist treatment?	A
62	What additions to routine surgical treatment of amputated fingers/hands/arms can help with the survival of the amputated part?	С
63	Is surgery better than alternative treatments in the management of gouty tophi in the hand and/or wrist?	A
64	Is local anaesthetic mixed with adrenaline a safe and effective alternative to plain local anaesthetic for use in the hand and digits?	A
65	What is the best method of detecting the occult or suspected scaphoid fracture?	A
66	In adults and children with pins inserted for either fixation or skeletal traction (percutaneous pin sites), what is the effectiveness of cleansing, massage and dressing techniques for the prevention of infections, in terms of the incidence of infection, complications, clinical outcomes, patient acceptability and resource use?	D
67	What are the clinical and cost benefits of non-surgical treatment of spasticity of the upper limb compared to more invasive treatments?	A

#### **Interim Prioritisation**

A total of 261 participants completed the interim prioritisation survey. The majority of respondents were clinicians (59%) rather than patients or carers (41%).

The survey was completed in 3 stages. Respondents were initially asked to short-list those questions important to them. They were then asked to select the Top 10 from their own shortlist, and finally rank this top 10.

Rankings were calculated separately for the patient/carer and clinicians' responses and

subsequently combined to give an overall ranking. This ranking was reviewed by the Steering Group to determine how many uncertainties should be taken forwards to the final workshop.

The Steering Group elected to shortlist 30 uncertainties – the maximum number recommended by the JLA methodology. By including the overall top 30 uncertainties, the respective top 10 as ranked by both the patients/carers and the clinicians were included.



#### **Final Workshop**

The final workshop was attended by 12 clinical members (four orthopaedic hand surgeons, four plastic hand surgeons, two occupational therapy and two physiotherapy hand therapists) and 8 patient participants.

In addition to the 20 participants, three facilitators and five observers also attended the final workshop. They did not participate in the group discussions or influence any of the decisions made. The workshop agenda is available in Appendix II.



More of a thank you really as I felt very intimidated prior to attending. However by mid-morning it was a pleasure to be discussing in detail, subjects that I had little medical knowledge. However, I felt my own personal experience was important to the process.

Enzo Meringolo Final Workshop Patient Representative



Through a carefully planned day of interactive small group discussions, some healthy arguing and valuable contributions from all the attendees, agreement was reached on the top 10 uncertainties. Due to the breadth of conditions represented in the short list and the final top 10, the participants at the final workshop elected to not prioritise the specific order of the top 10 in order to avoid one condition vying for position over another.





It was a most informative day. Having the opportunity to talk to patients, colleagues and other health care professionals meant robust discussions with all parties contributing equally. The final ranking fairly represented all participants. It provided useful insight into what others held important.

Major Kate Brown Final Workshop Clinical Representative

Common Conditions Affecting the Hand & Wrist PSP 2017



# Top 10 Uncertainties (in alphabetical order)

# Can scar/fibrosis formation be manipulated to improve results following hand surgery/trauma?

The formation of scar tissue, broadly termed fibrosis affects all injured tissues, whether that injury is from an accident or following surgery. Fibrosis plays a key role in the development of stiffness following injury or surgery as well as in many systemic diseases affecting the hand. Scar free healing has long been a goal in surgical research.

# In patients with Dupuytren's disease, what techniques give the best results in terms of function, recurrence and cost?

Dupuytren's disease causes variable problems in the hand but commonly leads to the fingers being permanently drawn into the palm. There is no cure and the causative factors remain poorly understood. Non-surgical methods such as splinting, stretching and injections and surgery to divide, remove or skin graft the diseased tissue have all been tried. The most successful treatment in terms of function is not known.

In the treatment of common hand conditions, such as peripheral nerve compression syndromes (for example carpal tunnel syndrome), ganglia or arthritis of the fingers/thumb/wrist, do surgical interventions have a demonstrable benefit in patient reported outcome when compared with non-surgical methods or placebo (sham) surgery?

Hand surgeons treat a wide variety of common conditions with established operations that have become standard and recognised treatment. Whilst these operations are widely accepted as being successful in the treatment of these conditions, superiority over non-surgical methods has not universally been established.

Regarding patient and cost benefits, which interventions (for example movement preserving surgeries such as joint or cartilage replacement, fusion operations permanently stiffening the joint and novel therapies) give the best results in the treatment of painful joints in the hand/wrist? Much development has occurred in recent years in the treatment of arthritic joints. Novel surgical techniques such as replacement of damaged cartilage or whole joints, are now possible in the hand and wrist. However, these techniques have minimal clinical research to support their use over more established surgical options such as fusing the joint.

# What are the most effective non-surgical methods for treating early arthritis in the hand and fingers?

Arthritis affecting the small joints in the hand and fingers is very common. In many patients with early arthritis, surgery is often not considered as there may only be mild pain and deformity. As the condition progresses it can become more symptomatic. Can intervention in the early stages of the



disease prevent progression to the later stages? Can the symptoms of early arthritis be successfully controlled with non-surgical techniques?

# What interventions/treatments will have the most positive effect following nerve injury?

Once injured, the potential for nerves to heal themselves is limited. Subsequent function, in terms of feeling or sensation, and muscle power, is impaired and long-term outcomes are uncertain. Numerous surgical techniques and hand therapy adjuncts are available or in development, in attempt to improve these poor outcomes. The role of these techniques is yet to be explored.

# What methods are most accurate, user friendly and demonstrate the best clinical utility in measuring patient reported outcomes in common hand conditions?

Our current ability to determine a "surgical success" is based upon how we measure the outcome following treatment. Patient reported outcome measures are a useful way to measure the overall status of the hand. Many such outcome measures exist but none is universally applicable and none has been developed to current standards. In order to determine whether our treatments work, we need an accepted proven method of measuring "success".

# Which hand therapy techniques enable the most efficient return to full

### function following surgery or injury?

Hand therapy (occupational therapy, physiotherapy and splinting) underpins the recovery following nearly all surgical treatments and injuries in the hand and wrist. Numerous specific techniques exist depending on the surgery/injury, with minimal evidence to show whether one method is superior to another or no treatment.

# Which hand/finger/thumb injuries would benefit from surgical intervention over hand therapy or no formal treatment, considering both functional outcome and societal cost?

There is considerable variability across the UK, in the treatment of hand/finger/thumb injuries, with many treatments giving adequate results in the majority. It is essential that we know within the huge range of possible injuries which are best treated surgically or non-surgically, and by what method.

Which patients with acute ligament injuries to the wrist or chronic wrist/distal radio-ulnar joint (the joint on the little finger side of the wrist) instability benefit from surgical treatment rather than from non-surgical methods?

The wrist is a complex and poorly understood joint. Injuries to the ligaments vary in long-term outcome from return to full activity and no pain to unavoidable arthritis. Multiple treatments exist but none have shown superiority. It seems likely that appropriate patient and procedure choice are the key to a successful outcome in these conditions, whether acute or chronic.

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## Conclusions

The Top 10 research uncertainties concerning Common Conditions Affecting the Hand and Wrist will be presented to the membership of the BSSH at their autumn Scientific Meeting.

This, the first PSP to be completed in the field of Hand Surgery, has demonstrated the willingness of patients, their carers and frontline clinicians to be involved from the ground up in setting future research agendas.

Whilst the success of this PSP regarding subsequent funding of relevant and important research may be indeterminate at this stage, the collected uncertainties demonstrate a significant need for high quality research in the field of adult hand surgery.

The Top 10 mirrors the specialty of hand surgery, demonstrating the extreme variety of disease and pathology encountered as well as the huge range of possible interventions. With such a broad scope it was never intended that this PSP be used to rank one disease against another, as all have profound effects on patients and present challenges for clinicians.

## **The Next Steps**

For the BSSH: The BSSH have financially and administratively supported this process from the start. The PSP will serve as a framework for future research. It is hoped that the whole BSSH membership will tackle the priorities together with the BSSH endorsing and supporting applications for funding, rather than isolated researchers applying individually – By the BSSH for the BSSH.

Additionally, this work will pave the way for a BSSH maintained database of patients (and their carers) who are interested in hand surgery research. With an ever increasing importance placed upon Patient and Public Involvement in the design of research studies, a central and experienced group of patients would greatly facilitate future BSSH driven research studies. This PSP also generated vast data concerning non-treatment (out-of-scope) uncertainties – such as the aetiology or genetics of common hand conditions and basic science developments of new treatments that may develop into novel therapies in the future. These uncertainties are just as valid and represent important opportunities for research, but fall outside of the recognised JLA methodology. It is planned that these uncertainties will be subject to a similarly rigorous method of checking and ranking to provide a parallel top 10 list for nontreatment uncertainties.

For the PSP: Numerous submissions were considered out-of-scope as they concerned treatments usually provided by a clinician not recognised as a hand specialist – such as pharmaceutical interventions for rheumatological conditions. These uncertainties will be distributed accordingly via the Partner organisations.

For Funders: The longlist of research uncertainties will assist funders of research to prioritise their attention on those common hand conditions that matter most to patients, their carers and frontline clinical staff. It is hoped that research funders will seek the assistance and input of the BSSH when planning funded calls for research.

For Researchers: This PSP has clearly defined a Top 10 research uncertainties as well as a broader long-list of uncertainties within the scope of hand surgery. These lists should be used as a blueprint to plan future research at all levels. Whilst many of the uncertainties would be suitable for large scale interventional research, many would be suitable for smaller scale research studies.

It is hoped that the results of this PSP will act as a framework, setting the research agenda for the next generation of hand surgeons and researchers alike.



# **Appendix I: Priority Setting Partners and Supporting Organisations**

ARUK Centre for Sports, Exercise and Osteoarthritis Association of Orthopaedic Practitioners **British Association of Dermatologists** British Association of Hand Therapists British Association of Plastic, Reconstructive and Aesthetic Surgeons British Dupuytren's Society British Orthopaedic Association British Orthopaedic Trainees' Association **British Pain Society** British Society for Clinical Neurophysiology British Society for Rheumatology British Society of Orthopaedic Anaesthetists Centre for Evidence Based Hand Surgery (CEBHS) **CRPS UK** London Society of Regional Anaesthetists National Rheumatoid Arthritis Society **Plastic Surgery Trainees Association Royal College of Emergency Medicine Regional Anaesthesia UK Royal College of General Practitioners** 

Royal College of Nursing Royal College of Surgeons England Reconstructive Surgical Trials Network Scleroderma and Raynaud's UK Society of Orthopaedics and Trauma Nursing South Wales Regional Anaesthetists

Further publicity was greatly aided by the following groups and individuals:

BMJ Patient Editor - @BMJPatientEd

Cochrane Consumer Network -@RMEngagement

Dr Mike Loosemore - @doctorloosemore

Hand Therapy Department, Musgrove Park Hospital

Hand Therapy Department, St. Georges Hospital

Mr Mike Hayton - @mike\_hayton

Musculoskeletal Elf @MSK\_Elf

Musgrove Park Hospital

Ros Cooke, The High Performance Centre, English Institute of Sport

www.patient.info - @Patient



# Appendix II: Final Workshop Agenda

## 23<sup>rd</sup> May 2017 – 9:30am – 4.00pm

#### The Royal College of Surgeons of England

35-43 Lincoln's Inn Fields

London, WC2A 3PE

09:30	Registration.
10.00	<ul> <li>Opening session</li> <li>Welcome and overview of the JLA and the workshop. Katherine Cowan, James Lind Alliance, workshop Chair.</li> <li>About the questions. Ryan Trickett, Consultant lead for the PSP.</li> <li>Questions from attendees.</li> </ul>
10.30	<b>Commence priority setting:</b> Small group work – participants reflect on and discuss their pre- workshop priorities.
11.25	Refreshment break.
11.40	First round of ranking: In the same small groups, participants rank the questions.
12.40	Lunch break.
13.30	<b>Review of progress so far:</b> Overview of the combination of all small groups' rankings.
13.45	<b>Second round of ranking:</b> Recommence small group discussions – with different group composition.
14.30	Refreshment break.
14.45	<b>Final priority setting session:</b> Aggregate ranking presented – whole group discussion. Final ranking and top priorities agreed.
15.30	Summing up of the day and next steps: Katherine Cowan and Ryan Trickett.
16.00	Workshop concludes.



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The British Society for Surgery of the Hand Support and guidance from:

