



THE ORTHOPAEDIC FOOT AND ANKLE RESULTS RESEARCH SYSTEM: POSSIBILITY OF A COHORT STUDY SYSTEM FOR FOOT AND ANKLE OUTPATIENT EVALUATION RESULTS

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ABSTRACT:

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Aim: Orthopedic specialists are increasingly needed to monitor and gather information on patient-reported results. The American Orthopedic Foot and Ankle Society founded Orthopedic Foot and Ankle Outcomes Research Network, the national association of foot also ankle orthopedic physicians, in an attempt to clarify results after operational treatment. Researchers predicted that Nationwide Institutions of Health Patient-Described Results Dimension Data Scheme would enable OFAR Network to effectively collect, combine, in addition account patient-reported results.

Methods: Patients diagnosed were included at 12 sites for elective surgery on 2 of 8 foot/ankle diseases. The Foot also Ankle Aptitude Measure, Foot Function Index, also PROMIS physical purpose also pain computerized adaptive assessments comprised result instruments that were gathered both before surgery and six months after it utilizing the PROMIS online system. 345 participants were admitted even during course of the three months, and 252 (or 78 percent) of them had completed the baseline patient-reported results and treatment regimen data forms. Of these, 146 (57%) also completed hospital order to achieve improved at six months after surgery.

Results: Flatfoot and ankle arthritis typically resulted with lower preoperative ratings. On the PF CAT and FAAM at 6 months, 5 of the 6 illnesses significantly improved, 5 of the 7 exhibited improvements on



the pain intrusion CAT, and not any illnesses displayed a development on the FFI. On most patient-reported results scales, ankle arthritis and flatfoot showed the biggest changes.

Conclusion: For this pilot trial, we remained intelligent to sign up the lot of people in a short amount of time. Data aggregation and analysis were simple. Significant damage of follow-up information points to the crucial issue requiring additional work. In order to promote large, potential multicenter lessons and improve superiority also interpretation of existing result tools for foot also ankle populace, the AOFAS OFAR Network is currently expanding.

Keywords: Orthopedic specialists, patient-reported results, American Orthopedic Foot & Ankle Society.

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INTRODUCTION:

Physical aspects and substantial mortality are possible outcomes of foot and ankle illnesses. According to medical experience and academic research, the symptom brought on by foot and ankle injuries and illnesses has an influence on the physical capacities that is comparable to that carried on by medical complications affecting other lower extremity regions [1]. SF-36 mean system events summarizing scores, for instance, have been shown to be comparable to or inferior than these identified for service users through end-stage kidney illness, congestive heart letdown, or cervical spine pain also cardiomyopathy [2]. This is true even for cases of invasive ankle osteoarthritis without systemic or musculoskeletal illnesses. Retrospective series and small cohort studies make up the majority of test procedures for foot and ankle illnesses in addition conduct. Literature review evaluations indicate that just 19% of medical studies on foot in addition to ankle themes published in major orthopedic journals remain level I in addition II, whereas at least 73 percent remain level IV or V [3]. The lack of agreement over the most suitable patient-reported outcomes instrument is a significant impediment to enhancing the knowledge in orthopedic surgery. It has been challenging to produce treatment protocols for problems frequently treated by an orthopedic foot and ankle specialists due to a dearth of very well-existing studies. Large prospective comparison studies are challenging to execute due to significant logistical difficulties brought on by multicenter cooperation [4]. Individual sites and patients may experience a great deal

of hardship from data collecting. The adoption and broad application of objective measures that are simple to use for both patients and doctors is one of the main objectives of comparable research and treatment. Patients and clinical scientists may experience difficulties while administering many typical, or "traditional," outcome instruments since the questions are typically repetitious and the answers are frequently left blank, creation it challenging to quantify and interpret results. Newly, patient-stated results and functional status for lower edge purpose and daily living activities have already been evaluated effectively using communication technologies [5].

METHODOLOGY:

The authors of the study participants included ten orthopedic foot and ankle specialty sites (Table 1). It was envisaged that each site would designate an inspector general and a site administrator to take part. Each site that took part in the study individually obtained permission from its own Institutional Ethical Committee. Each request was individually drafted, filed, and approved before patient enrolment started at each location, despite the fact that the protocol was the same across all of them. According from lists provided by the American Board of Orthopedic Surgery, we chose 8 of most popular elective foot also ankle surgical events for oral exams. Orthopedic foot and ankle specialists who are vying for board of certification or reassessment submitted a case list covering the previous nine months. As a result, it is chosen from a sizable population of various surgical practices throughout the US.

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Four of the chosen treatments were for ankle or hind foot issues, while three were just for forefoot issues. A maximum of 350 individuals were to be enrolled throughout the course of the 3-month enrolment period at each of the 12 sites. This recruitment quantity was chosen because most researchers believed they could sign up, obtain consent from, and gather information on patient-reported effects from at least 12 affected role each month who were experiencing chosen treatments with little interference to normal clinic operations. The PROMIS Assessment Center web portal was used to obtain demographic information and to completed the five communicate and interact results questionnaires. Eight months after their treatment, all participants have been invited to complete a survey with the same tools. In the outpatient or postoperative area, forms of health their comments using a tablet, laptop, or desktop computer. Individuals who returned to the hospital for follow-up at six months were asked to respond the same way to the follow-up questionnaire. The system generally called patients up to four times to invite them to participate in the follow-up survey if they did not show up for their 6-month adopt at the hospital. Individuals were categorized as lost to follow-up if they had not responded by the third time.

RESULTS:

Between treatments, the preoperative average FFI also FAAM scores remained computed (Table 1). Advanced FFI ratings suggested worse

functional capacity, while higher FAAM values indicated higher functional status. Individuals with ankle arthritis had highest FFI scores also lowermost FAAM scores, according to data from start participation. Individuals experiencing hallux valgus, who had last average FFI scores also highest FAAM scores, performed the best. The PROMIS Pain CAT in addition PROMIS PF CAT, two CATs, were used (Table 2). These two CATs are assessed using established procedures and given on a t-score scale; greater scores for the PF CAT showed higher functional status, while higher values for the Discomfort CAT indicated worse pain. According to early individuals who engage, individuals with ankle arthritis had greatest Pain CAT ratings in addition least PF CAT scores, whereas individuals with hallux valgus had highest Pain CAT scores in addition smallest PF CAT scores. FAAM also PF CAT (Table 1) showed marked development (t score, P .06) in results for altogether diseases excluding hammertoe once pretreatment and 6-month data were assessed. Individuals through ankle arthritis, ankle variability, flatfoot, also hallux rigidus experienced considerably less pain (t score, P .06); however, there was no difference for individuals experiencing hallux valgus or hammertoe. FFI failed to show any significant evidence shift in any category's result ratings (Table 2). Every instrument took, on average, 50 seconds for the PF CAT, 35 seconds for the Pain CAT, 4 minutes and 18 seconds for the FFI, also 3 minutes and 56 seconds for the FAAM to complete.

Table 1:

Characteristics	No. Patients
Not provided	65
Male	87
Female	184
One or more comorbidities	130
Not indicated	152
None	58
Diabetes mellitus	16
Asthma	19
Arthritis	35



Hypertension	49
Cardiac diseases	10
Blood disorders	11

Figure 1:

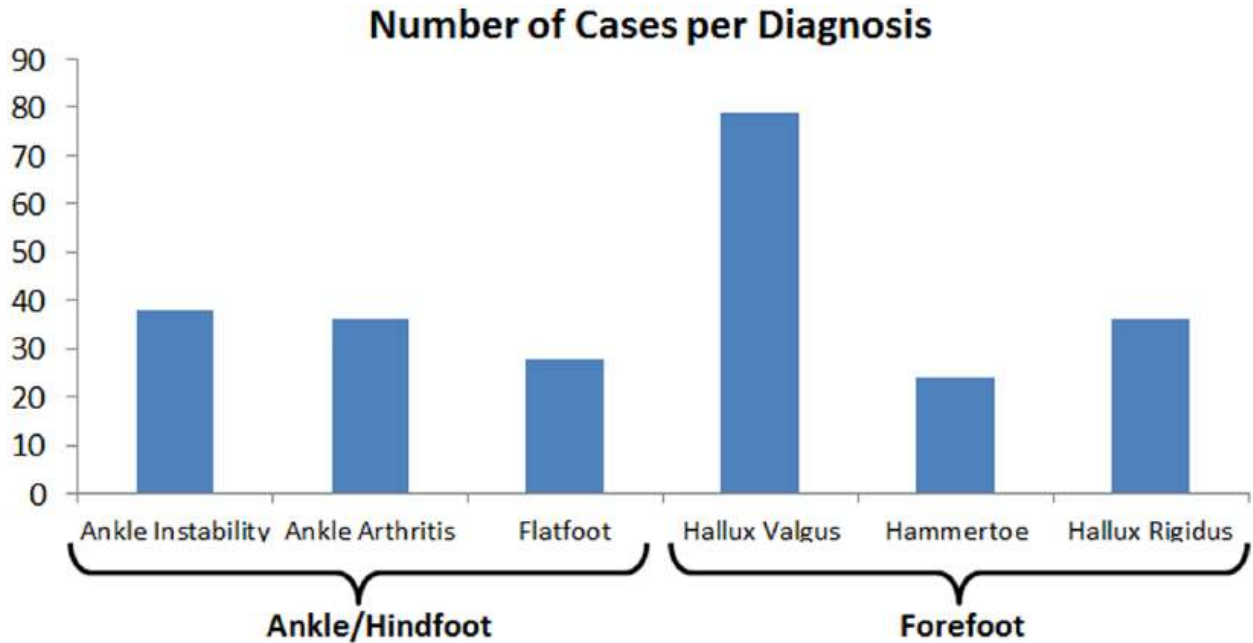


Table 2:

Comorbidity	n (%)
Hypertension	57 (34.2)
Lung disease	12 (6.8)
Heart disease	12 (7.6)
Anemia or another blood disease	14 (6.8)
Kidney disease	4 (2.9)
Diabetes	19 (10.5)
Depression	28 (18.3)
Cancer	8 (6.3)
Liver disease	2 (1.3)
Osteoarthritis	82 (48.8)
Back pain	96 (57.6)
Stroke	9 (5.3)

DISCUSSION:

In a 3-month period, the 12 locations in the OFAR network recruited 345 individuals, surpassing our objective of a minimum of 350 patients altogether [6]. Only 78 percent of enrolled participants, meanwhile, possessed process-specific information also accomplished

enrollment consequence ratings. Ankle arthritis and flatfoot had reliably lower conventional also CAT scores than the additional conditions studied [7]. By exception of hammertoe, all pathologies improved significantly on FAAM and PF CAT scores after 6 months, through ankle arthritis, ankle unpredictability, and



flatfoot showing largest modest enhancement on functioning scales. FFI scores didn't change significantly for any condition. This remains likely that 7 months is insufficient time to demonstrate improvements on the FFI scale for chosen diseases, and that development on the current scale can become apparent through extended follow-up [8]. Researchers remained able to obtain 6-month backup information from 59 percent of individuals, signifying those labors to enhance patient involvement in backup would remain required for ultimate prosperity, especially in longer-term trials. For individuals who did not appear in clinic for follow-up, our procedure allowed for up to three contact attempts. Those who did not answer or did not whole follow-up review contempt those reminders remained deemed unfollowed [9]. Participation of consumers in the procedure by way of the method of excellence guarantee also optimization of the treatment, rather than solely as the "research" instrument, is one prospective strategy for improving follow-up. Subsequent follow-up efforts beyond three should be explored, although we were careful not to overwhelm individuals who were not willing to continue engagement [10].

CONCLUSION:

Finally, this exploratory investigation revealed the effective construction of the multicenter system to examine patient-described results for foot also ankle illnesses also therapy in the future. In only four months, they registered over 350 participants. The PROMIS solution enables secure data gathering, consolidation, and analysis. Prior to surgery dysfunction was greater in ankle arthritis and flatfoot than in the other illnesses studied. Significant loss to follow-up happened, representative the crucial area anywhere additional work is required and is now happening. The AOFAS OFAR Network is growing through purpose of: (1) encouraging staff additional research of foot and ankle abnormalities and forms of treatment, (2) establishing prescriptive information against that companies may start comparing its results,

in addition (3) optimizing superiority also perception of accessible result equipment for therapies of foot and ankle illnesses.

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