

AB1077 DOES PRECONSULT ELECTRONIC EXCHANGE AFFECT POSTCONSULT DIAGNOSIS?

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Background: Harbor UCLA is an urban safety-net hospital in Los Angeles for underserved patients. In 2014, LA County Department of Health Services adopted an electronic consultation (E-consult) referral and dialogue system to improve access to subspecialists in the ambulatory care setting. The E-Consult system provides a platform for primary care providers to ask questions or engage in dialogue with specialists, request consultation, and track submitted requests. Back and forth messaging prior to acceptance for face-to-face consultation is termed a "preconsult exchange".

Prior studies of E-Consult systems have suggested benefits which include a reduction in wait times compared to paper referrals¹ and a perceived improvement in patient care². We sought to further clarify the effect of a preconsult exchange versus immediate booking on a patient's diagnosis and wait time in an effort to provide some guidance on whether E-Consult should be used as a screening tool to reduce unnecessary visits or as a communication method to clarify details before a face-to-face visit.

Objectives: To determine whether preconsult exchange:

1. Influences the odds of arriving at a different diagnosis after face-to-face consultation compared to the requesting provider's original diagnosis
2. Influences the odds of arriving at a diagnosis of a different autoimmune condition versus a non-autoimmune condition (fibromyalgia, primary osteoarthritis, chronic pain, or other non-rheumatologic condition)
3. Results in a significant delay in face-to-face evaluation

Methods: We performed a retrospective chart review of all 238 new patient referrals between 11/2014 and 5/2016 to the Harbor UCLA Rheumatology clinic generated through the E-Consult system, reviewed by BC or GM, deemed appropriate, and seen for face-to-face evaluation. These patients were grouped by exposure (Preconsult exchange or not). Odds of change in diagnosis and confidence intervals were calculated using 2x2 contingency tables and Chi-Square tests. A student's T test was used to compare mean number of days between E-Consult initiation and face-to-face appointment.

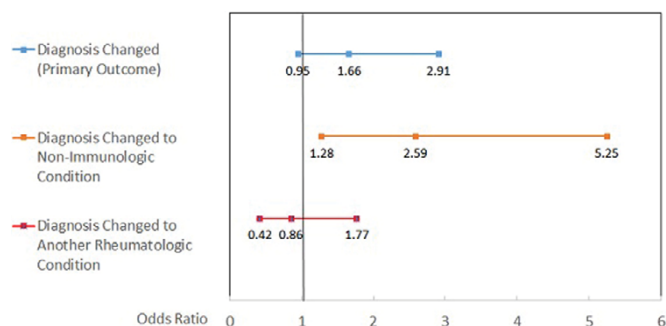


Figure 1. Odds of Change in Diagnosis Following a Preconsult Exchange

Conclusions: There was a trend towards a change in diagnosis overall among patients for whom there was a preconsult exchange, but a statistically significant increase in odds for change to non-immunologic diagnoses. This suggests that preconsult exchange highlights those patients for whom there is a higher likelihood of a non-immunologic diagnosis.

However, preconsult exchange was associated with a significant time cost - an additional 26 day delay for a face-to-face visit (due to the time needed for both submitter and reviewer to complete their dialogue) in comparison to an immediately booked patient.

References:

- [1] Chen A et al. A Safety-Net System Gains Efficiencies Through 'eReferrals' To Specialists. *Health Affairs* 29, no.5 (2010):969-971.
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AB1078 IMPACT OF PRE-SCREENING ON RHEUMATOLOGY OUTPATIENT CLINIC PRACTICE

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Background: Chronic rheumatological diseases are predominantly managed in an outpatient setting, and these out patient clinics constitute a significant workload for rheumatology clinicians. When unnecessary outpatient visits occur, service provision to those most in need of rheumatology review, both new referrals and those with established diagnoses in need of urgent review, is compromised. There

is an evidence base for such screening in secondary care centres from other internal medicine disciplines (1).

Objectives: To determine the impact of introducing pre-clinic screening, and exploring the potential for follow up using telephone, by a physician extender (PE), on attendances at a rheumatology outpatient department.

Methods: A retrospective chart review of all patients attending a rheumatology outpatient clinic was performed over a 4-week period, 15/08/2016- 09/09/2016. Patients were categorized into new or follow-up attendees and the follow-up patients were further subcategorized into 1 of 4 groups:

- A) Attending to receive results of investigations requiring no further treatment;
- B) Attending with a chronic rheumatological disease requiring no active change in management;
- C) Attending to receive results of investigations requiring further treatment;
- D) Attending with a chronic rheumatological disease requiring active change in management.

Patients in categories A and B, may be safely managed by a phone call from a physician, or PE. Those in C and D would need to be reviewed in clinic, following triage by phone using a PE.

Results: 232 subjects were included (5 category A, 118 category B, 4 category C, 105 category D). 123 (53.0%) could be managed by phone utilizing a PE, thus obviating the need for review in clinic. The remaining patients could be triaged by telephone by a PE, and the schedule for review adjusted to prioritise those most in need of review. It is likely that such a strategy for reviewing patients would be more clinically efficient, have a greater impact on patient well-being, and be cost-saving.

Conclusions: Routine pre-screening for patients attending rheumatology clinics should be considered to improve effectiveness of the commodity rheumatology expertise.

References:

- [1] Donnellan, F., Harewood, G.C., Cagney, D., Basri, F., Patchett, S.E. and Murray, F.E., 2010. Economic impact of prescreening on gastroenterology outpatient clinic practice. *Journal of clinical gastroenterology*, 44(4), pp.e76-e79.

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AB1079 FOLLOW UP OF PATIENTS WITH RHEUMATIC DISEASES BY MEANS OF A SMARTPHONE APPLICATION: SATISFACTION INDEX BASED ON A SURVEY AMONG USERS AND CARE PROVIDERS

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Background: Therapeutic adherence is the main variable in order to assess success or failure of any treatment. It is matter of interest to any clinician to get information enough about treatment response along time to reach a better understanding of any factor that conditions adherence failure or treatment interruptions. However, this kind of information is quite difficult to obtain in real scenarios due to lack of time or memory issues.

Objectives: The aim of present study is to assess the opinion of users of a smartphone application developed to improve the follow up of patients with different rheumatic diseases.

Methods: We conducted a survey to the users of REUMapp, an electronic form based on Google Form® software. REUMapp is an electronic interactive form developed for four different clinical scenarios: REUMapp-Esp (spondyloarthritis), REUMapp-Cristal (gout and other microcrystalline arthropathies), REUMapp-AR (Rheumatoid arthritis) and REUMapp-MSK (soft tissues). All forms were developed over the basis of paper forms previously used for the same purposes and to be checked on follow up consultation. Forms were designed to gather information about daily treatment adherence (binomial), daily modifications (categorical), adverse effects (categorical) and therapeutic response in terms of visual analogical scale. REUMapp-ESP and REUMapp-AR include also specific joint recounts and indexes. All the forms could be completed in less than 3 minutes by the patient or his/her care provider. Every form contents became part of a database easily accessible during the follow up visit in a summarized way. Between 2014-2016, 419 apps were installed in patients or care provider's smartphones from two non public rheumatology clinics of Madrid with fully consentient of them. A survey was send to every user at the third to twelfth month after installation who have had one follow up consultation at least and who previously used the paper forms. Survey was developed using a multiple answer scheme using visual 7-level horizontal Likert scales. Topics of the survey were as follows: simplicity, time consumption and usefulness. Surveyed patients also were asked for the usefulness of the paper-based form.

Results: 205 Patients or care providers answered the survey. From them, 36 patients had diagnosed by rheumatoid arthritis, 23 by spondyloarthritis, 68 by gout or other microcrystalline arthritis and the rest by any other soft tissue rheumatisms. Following table shows the results of the survey. In the non parametric analysis of usefulness, the app was considered more useful than the paper format with a wilcoxon coefficient of contrast for paired data of -6.6589 (p<0.0001).

Conclusions: The smartphone applications described in this study have a good acceptance among patients of care providers in terms of usefulness, time consumption and simplicity and they are considered more useful than the printed models.