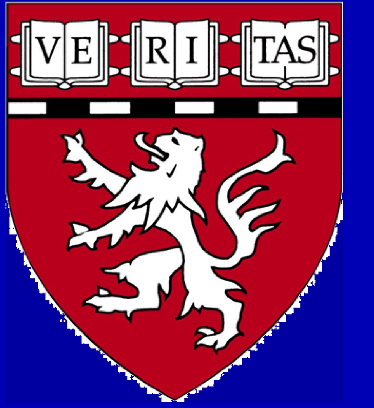
Uncovering and Addressing Issues Related to Medication Adherence among Patients with Rheumatic Diseases: A Patient Navigator Pilot Program



Anarosa Campos, Alyssa Wohlfahrt, Emily Lo, Maura Iversen, Elena Massarotti, Daniel H. Solomon, Candace H. Feldman

Brigham and Women's Hospital, Division of Rheumatology, Immunology and Allergy

BACKGROUND

- Medication adherence is particularly poor among patients with chronic rheumatic diseases and can result in negative outcomes
- Patient navigators – laypeople trained to provide education, advocacy, mental health support and care coordination services tailored to each patient's needs – have proven cost-effective and efficacious in improving outcomes in other chronic diseases

AIM

- To develop and pilot test a patient navigator intervention to improve adherence to oral disease-modifying antirheumatic drugs (DMARDs) among recent initiators with chronic rheumatic diseases

METHODS

Study Site & Patient Population

- BWH Arthritis Center
- Spanish and English speaking patients
- Enrollment from December 2013- April 2015

Patient Identification

- Adults >18 years with a systemic rheumatic disease who started a DMARD within 6 months
- Self-referral, rheumatologist referral, or identification by electronic medical record review

Patient Navigator Identification and Training

- Three college-educated research assistants, one bilingual in Spanish
- Training provided in basic rheumatic diseases, motivational interviewing and DMARD pharmacology
- Meetings with rheumatologists, social workers, psychiatry department leadership, financial counselor, clinic administrators and outpatient pharmacists to understand hospital resources and gaps

Patient Tracking & Qualitative Analysis

- Patients contacted by phone or in person 1-4 times/month depending on need
- Baseline surveys (e.g. Morisky Medication Adherence Scale), and needs assessments conducted by navigators in person or by phone
- All call encounters were thoroughly documented
- To analyze the call notes, 5 team members independently reviewed the documentation to categorize issues raised by participants and subsequent navigator actions
- Once key themes were agreed upon, members independently coded call notes and differences were adjudicated by the team

RESULTS

- 313 patients initially contacted
- 114 enrolled, 92 completed baseline surveys
- 88 patients actively participating
- 25 of 32 practicing BWH rheumatologists referred patients
- Using the Morisky Medication Adherence Scale (MMAS), baseline mean adherence was 6.6 (SD 1.4); 23.9% reported poor adherence (MMAS<6), 53.3% moderate (MMAS 6-<8) and 22.8% (MMAS=8) high

Figure 1. A magnet was developed based on a patient's suggestion and distributed to participants to improve adherence

Table 1. Demographics of enrolled patients

Age –mean years (SD)	56.1 (16)
Gender– (N=92) –N (%)	
Female	N=87 (95)
Ethnicity– (N=92) –N (%)	
Hispanic	N=16 (17.4)
Non-Hispanic	N=72 (78.2)
Not reported	N=4 (4.3)
Insurance Status (N=86) –N (%)	
Medicaid	N=11(12.8)
Medicare	N=28(32.6)
Private	N=46(53.5)
Self-pay	N=1(1.2)
Rheumatic disease (N=88) –N (%)	
RA/Inflammatory arthritis	N= 71(80.7)
Lupus or mixed connective tissue disease	N= 9(10.2)
Other rheumatic diseases+	N= 8(9.1)

+Other rheumatic diseases include: systemic sclerosis, vasculitis, sarcoidosis, polymyositis, polymyalgia rheumatica, immune-mediated necrotizing myopathy, Behcet's disease

Table 2. Categories of patient issues and subsequent navigator actions related to medication adherence

Categories of Patient Issues	Total N= 88 N (%)
Adverse events (e.g. alopecia, rash, gastrointestinal side effects)	40 (45%)
Challenges with medication acquisition (e.g. refills and prior authorizations)	27 (31%)
Concerns about medication effectiveness (e.g. onset of action)	26 (30%)
Lack of knowledge about medications or diagnosis	18 (20%)
Need for social support (e.g. expression of depressive symptoms)	12 (14%)
Financial/Insurance difficulties obtaining medications (e.g. high co-payments, billing errors)	10 (11%)
Interruptions in medication use (e.g. surgery, infections)	8 (9%)
Navigator Actions	**N (%)**
Facilitation of patient-doctor communication (e.g. notified rheumatologists of patients symptoms or concerns)	29 (33%)
Medication or diagnosis education (e.g. explained side effects, described expected timing of medication effects, helped manage side effects)	26 (30%)
Development of individualized strategies to improve adherence (e.g. pillboxes, text messages, set-up of automatic refills, magnet reminders)	16 (18%)
Assistance with financial and insurance issues (e.g. referral to financial counselor, interactions with insurance companies)	10 (11%)
Coordination of care (e.g. helped patients obtain referrals to other specialties)	8 (9%)
Provision of social and emotional support	7(8%)
Facilitation of expedited mental health referrals	6 (7%)

RESULTS

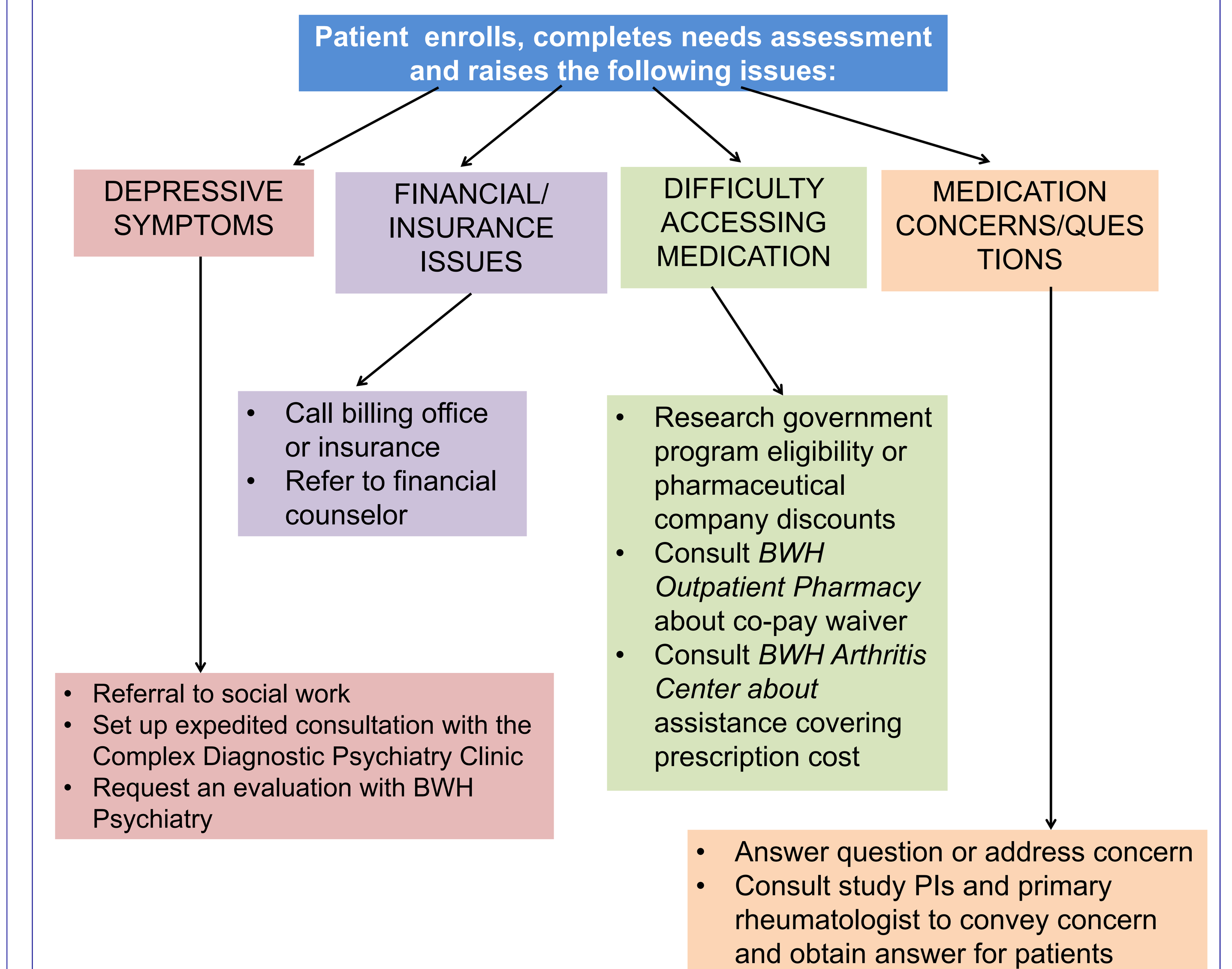


Figure 2. Navigator action plan flowchart

STRENGTHS

- Patient navigators successfully:
  - established a rapport with rheumatologists and patients
  - facilitated communication between patients and providers
  - identified medication errors
  - worked with pharmacies, insurance companies and the financial counselor to ensure that medications were obtained
  - recognized and addressed mental health issues
  - communicated adverse events
  - coordinated care across BWH divisions
  - uncovered issues affecting adherence not discussed during routine clinical appointments

NEXT STEPS/FUTURE DIRECTIONS

- Determine the impact of the patient navigator intervention on oral DMARD adherence, mental health and disease activity
- Assess patient and physician satisfaction
- Understand the cost-effectiveness, sustainability and scalability of a patient navigator intervention to improve medication adherence

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