Addressing Issues Related to Medication Adherence among Patients with Rheumatic Diseases: A Patient Navigator Pilot Program (Med Assist)

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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

AIMS

- 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
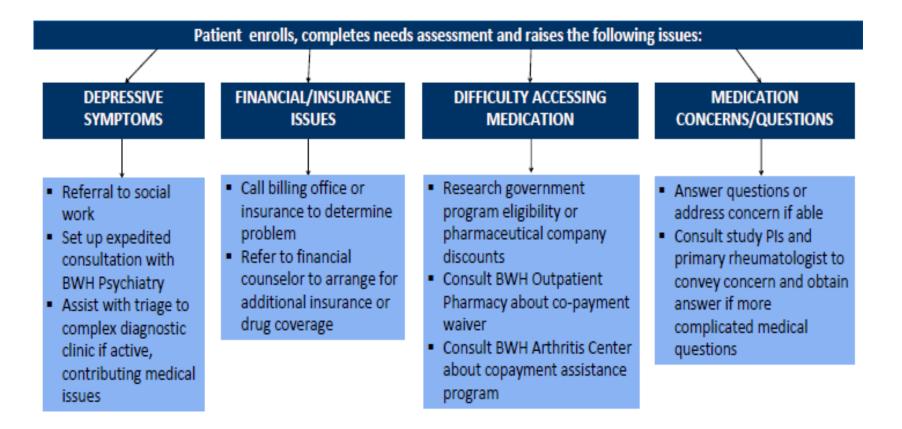
Patient Tracking & Qualitative Analysis

- 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

Table 1. Baseline participant demographics and characteristics (n=107)

	n (%), unless otherwise noted
Female	100 (93.5)
Mean age, years (±SD)	54.7 (±16.7)
Race	
White	75 (70.1)
Asian	2 (1.9)
Black/ African American	6 (5.6)
Not reported*	24 (22.4)
Ethnicity	
Non-Hispanic	83 (77.6)
Hispanic	19 (17.8)
Not reported	5 (4.7)
Primary Language	
English	92 (86.0)
Spanish	13 (12.2)
Bilingual	2 (1.9)
Insurance Status	
Medicaid	14 (13.1)
Medicare	35 (32.7)
Private	57 (53.3)
Other	1 (0.9)
Education	
Graduated College or graduate school	50 (46.7)
Some College	24 (22.4)
High School/GED	18 (16.8)
Some High School	3 (2.8)
8th Grade or Less	3 (2.8)
Decline/Unknown/Not reported	9 (8.4)
Rheumatic Disease	
Rheumatoid Arthritis	87 (81.3)

Patient Flow and Navigator Strategies

Patient enrolls, completes needs assessment and raises the following issues:

DEPRESSIVE SYMPTOMS	FINANCIAL/INSURANCE ISSUES	DIFFICULTY ACCESSING MEDICATION	MEDICATION CONCERNS/QUESTIONS
▪ Referral to social work ▪ Set up expedited consultation with BWH Psychiatry ▪ Assist with triage to complex diagnostic clinic if active, contributing medical issues	▪ Call billing office or insurance to determine problem ▪ Refer to financial counselor to arrange for additional insurance or drug coverage	▪ Research government program eligibility or pharmaceutical company discounts ▪ Consult BWH Outpatient Pharmacy about co-payment waiver ▪ Consult BWH Arthritis Center about copayment assistance program	▪ Answer questions or address concern if able ▪ Consult study PIs and primary rheumatologist to convey concern and obtain answer if more complicated medical questions

Table 2. Patient concerns related to medication adherence, n=107

Patient Issue/Concern	% Patients that expressed the concern 1 or more times
Medication-related adverse events	54.2
Difficulty obtaining/physically taking medication	31.8
Concern with medication effectiveness	43.0
Lack of knowledge about medication or diagnosis	21.5
Need for support and/or mental health services	17.7
Financial/Insurance related assistance	15.9
Interruptions in medication adherence	13.1
No issues reported	14.0

Table 3. Actions taken in response to patient concerns, n=107

Navigator Action	% Actions executed 1 or more times
Facilitation of patient-doctor communication	38.3
Medication and diagnosis education	27.1
Development of individualized strategies to improve adherence	15.9
Assistance with financial/insurance issues	15.0
Care coordination	15.0
Social and emotional support	12.1
Social work and psychiatry referrals	8.4
No action needed	14.0

Table 3: Baseline to six-month results

Survey Instrument*	N	Baseline (Pre-Intervention)	6-month (Post-Intervention)	p-value**
Morisky Medication Adherence Scale (MMAS-8)	69	6.7 ± 1.3	6.4 ± 1.6	0.09
Mental Health Inventory (MHI-5)	48	60.8 ± 9.1	60.5 ± 8.9	0.83
Beliefs about Medicines, Concerns Scale	48	11.8 ± 4.7	11.6 ± 4.9	**0.03**
Brief Illness Perception Questionnaire	47	45.7 ± 9.8	47.1 ± 8.0	**0.01**
RA Disease Activity Index (RADAI)	46	13.5 ± 9.3	12.3 ± 7.9	0.21
SLE Activity Questionnaire (SLAQ)	4	38 ± 6	39.5 ± 5.8	0.26
*MMAS-8 range 0-8, MHI-5 range 0-100, Beliefs about Medicines range 5-25, Brief Illness Perception range 0-80, RADAI range 0-48, SLAQ range 0-47 **p-values determined using paired t-tests				

Conclusions

- A DMARD Navigator is a feasible and well appreciated member of the rheumatology care team. We trained college educated research assistants to effectively plan this role.

- Patients reported many barriers to adherence and many of them were addressable by the DMAD Navigatorsbut not all.

- Medication adherence was stable among the participants in Med Assist. This is encouraging based on what we know about typical declines in medication adherence.

- A formal RCT trial is being considered.