Barriers and Facilitators of Co-Management of PsA Among Dermatologists and Rheumatologists in the US

Submitting Organization: Psoriasis and Psoriatic Arthritis Clinics Multicenter Advancement Network, Inc. (PPACMAN) (Organization ID 10181871)

Request ID: 36007029

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Abstract

Psoriatic arthritis (PsA) is an inflammatory arthritis with potentially devastating outcomes and substantial impact on quality of life. The diagnosis of PsA is often delayed and many patients with PsA are undertreated. We hypothesize that improved partnerships between dermatologists and rheumatologists will expedite more accurate diagnosis of PsA and an earlier initiation of therapy. The overarching goals of this proposal are to improve early identification of psoriatic arthritis in dermatology practices and enhance co-management among rheumatologists and dermatologists. This proposal will employ qualitative methods (e.g., focus groups) to better understand early diagnosis of PsA and co-management from the perspectives of key stakeholders: patients, dermatologists and rheumatologists. An educational and networking intervention will be delivered as a part of the study to improve screening and foster collaborations and a derm-rheum collaborative care toolkit will be developed and provided as a part of this intervention. Follow up surveys will be conducted to evaluate the effectiveness of the intervention. The partnering organizations include the Psoriasis and Psoriatic Arthritis Clinics Multicenter Advancement Network (PPACMAN) and International Dermatology Outcome Measures (IDEOM). The mission of PPACMAN in North America is to nucleate PsC/PsA combined clinics and centers to advance a multi-level approach to psoriatic patients, increase disease awareness and accelerate management. Finally, IDEOM seeks to bring together physicians, researchers, government agencies, pharmaceutical companies, payers and patients from around the globe to develop and validate measures throughout the field of dermatology with an initial focus on psoriasis.

Reviewer Comments

“While all review panel members were interested by your program and look forward to reading your full proposal, there is a desire to see a more robust needs assessment in the full proposal. The panel liked that your project is collaborative and involves early career investigators that have the potential to be future leaders in the field.”

- We have addressed the need for a more robust needs assessment in the Section 2 below, “Current Assessment of Need in the Target Area.”

Overall Goals and Objectives

Psoriasis is a chronic, immune-mediated inflammatory skin condition affecting approximately 1-2% of the adult population in the United States. Among patients with psoriasis, nearly one third will develop psoriatic arthritis (PsA), a chronic and disabling inflammatory arthritis. PsA results in functional disability, reduced quality of life, and joint deformities, which can occur early in the disease. In fact, 27% of patients have notable joint erosions within 5 months and 47% within two years of symptom onset. Early identification and treatment of PsA has been shown to improve patient outcomes both in terms of improved response to therapy and less disease progression.(1-3) However, PsA is often under-diagnosed or the diagnosis is delayed.(4) Despite the development of several tools for PsA screening, the use of these instruments in clinical practice has not been widely adopted.(5, 6) *The critical barrier in improving early diagnosis is that we do not know how to get physicians to actually screen.* In fact, many dermatologists do not inquire about musculoskeletal symptoms and, after a traditional didactics intervention, did not change their behavior (unpublished data from American Academy of Dermatology meeting on PsA screening). Identification of innovative approaches to improve early detection of PsA are needed. We hypothesize that improved partnerships between dermatologists and rheumatologists will expedite more accurate diagnosis of PsA and an earlier initiation of therapy.

There are numerous benefits to dermatology and rheumatology partnerships. Dermatologists and rheumatologists each play a key role in the diagnosis and management of PsA. While existing therapies have substantially improved management of the disease, less than 20% of patients achieve remission and, typically, one or more disease domains (e.g., psoriasis, nail disease, peripheral arthritis, enthesitis, etc) remain active while on therapy.(7) PsA is also often undertreated.(8) It is in these scenarios that dual management becomes most critical. Furthermore, while practitioners often work within "silos" of their own specialty, expanding opportunities for collaborative care increase continuing education, professional development, and professional satisfaction while simultaneously improving care for patients and earlier recognition of musculoskeletal symptoms.(9) Despite the fact that collaborative care is recognized as valuable, little is known about the logistics, benefits and challenges of dual specialty clinics within academic medical centers.

Goals: The overarching goals of this proposal are to: a) improve early identification of psoriatic arthritis in dermatology practices, and b) enhance co-management among rheumatologists and dermatologists. We aim to accomplish these goals through development of regional partnerships between dermatologists and rheumatologists.

These goals are in full alignment with the objectives of this RFP, and coincide with those of Psoriasis and Psoriatic Arthritis Clinics Multicenter Advancement Network (PPACMAN), International Dermatology Outcome Measures (IDEOM) and the individual investigators. The purpose of the RFP as stated is to improve the collaborative approach between dermatologists and rheumatologists: "A collaborative approach to treatment by a combined team of rheumatology and dermatology clinicians allows for a unique blend of expertise and provides

the opportunity for comprehensive care for the PsA patient." The mission of PPACMAN in North America is to nucleate PsC/PsA combined clinics and centers to advance a multi-level approach to psoriatic patients, increase disease awareness and accelerate management. Finally, IDEOM seeks to bring together physicians, researchers, government agencies, pharmaceutical companies, payers and patients from around the globe to develop and validate measures throughout the field of dermatology with an initial focus on psoriasis. The PsA Symptoms Working Group within IDEOM is specifically working to improve identification and measurement of PsA in psoriasis clinical trials and ultimately in dermatology clinical practice. Furthermore, the goals of the proposal are aligned with the investigators, which include two dual-trained dermatologist-rheumatologists specializing in psoriatic disease and three well-recognized rheumatologists in the field of psoriatic arthritis. All of the investigators participate in dual dermatology-rheumatology clinics and are strong advocates for the combined approach to care for patients with PsA. (9)

Objectives

1. Identify current practices, barriers and facilitators for PsA *screening* among dermatologists in academic and community practices using qualitative methods
2. Determine current practices, barriers and facilitators for *co-management* among dermatologists and rheumatologists in academic and community practices using qualitative methods
3. Examine patient perspectives of co-management and early/accurate PsA identification

SMART (specific, measurable, attainable, relevant and time-bound) objectives: The objectives proposed are measurable (interactions between rheumatologists and dermatologists, physician reported methods for screening) and attainable. We will measure the two objectives (screening and partnerships) over 2 months and 6 months. These goals are highly relevant to improving outcomes in PsA.

Outcomes: The outcomes of this proposal include: a) identification of barriers and facilitators of screening for PsA among dermatologists and barriers/facilitators of co-management for both rheumatologists and dermatologists; b) strategies to mitigate barriers and improve screening and management; c) enhancement of educational activities for providers engaged in the program with an emphasis on the importance of co-management; and d) dissemination of strategies for improving screening and co-management.

Current Assessment of Needs in the Target Area

Currently in the United States (and across the world), the diagnosis of PsA is often delayed, and rheumatologists and dermatologists work together infrequently resulting in a communication gap and challenges in referring patients from dermatology to rheumatology and vice versa. However, we hope to shift these paradigms. In an ideal situation, dermatologists and rheumatologists are partners or collaborators. When there is collaboration between the specialists, dermatologists may be more likely to think about PsA when seeing patients with

psoriasis prompting earlier diagnosis and referral to rheumatology. Additionally, an improved working relationship between the physicians results in improved care; when physicians communicate about who prescribes the biologic, which medication should be selected, and how to optimize each part of the disease, patient outcomes should improve.

The gap analysis performed for the U.S. is self-evident from the RFP and will not be reiterated. Identification of barriers for PsA screening and co-management, and thus the identification of gaps for improvement, are a critical portion of the proposed work. Pure educational strategies have not transformed the practice of dermatologists in the U.S. in terms of screening. Thus, we will apply rigorous qualitative methods (e.g., focus groups and interviews by trained facilitators) to better understand how we can improve screening.

Our group has conducted preliminary work in understanding barriers to combined clinics. Psoriasis and Psoriatic Arthritis Clinics Multicenter Advancement Network (PPACMAN) in North America and the Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA) have advocated for dual specialty involvement in care. Combined centers may either be "in person," meaning that the dermatologist and rheumatologist (and sometimes other subspecialists) see patients in the same room at the same time, or "virtual" in nature, whereas an established relationship between practitioners exists formally, but each clinician sees the patient separately only to discuss management at a later time.
PPACMAN has recently conducted a survey of member centers (33 physicians and dermatologists among 26 combined centers) to examine the "anatomy" of dual-care clinics and challenges/opportunities that are typically encountered in setting up these combined facilities.(9) Among the 33 physicians, 32 completed the survey: 16 dermatologists, 14 rheumatologists, and two dual-trained physicians representing 25 combined clinics. One person surveyed was in private practice and the remainder were in academic practices. Of the 32 physician respondents, 5 reported using the "virtual" clinic model whereas the others had more traditional dual clinics. Most combined clinics educate a wide range of trainees, including rheumatology fellows, dermatology residents, internal medicine residents, and/or medical students. Importantly, most PPACMAN members felt that this was one of the primary advantages of combined clinics. Other benefits included *improved communication among health care teams (100% of respondents), prompt and accurate diagnosis of PsA (92% of respondents).* More than half of respondents felt that combined clinics enabled one of more of the following: more frequent monitoring (e.g., of skin and joint manifestations, medications, medication side effects, disease flares), improved recruitment for clinical trials and observational studies, satisfying and rewarding interactions with colleagues (i.e., learning from colleagues, becoming more "skin aware" or "joint aware" and establishing closer ties between colleagues). The most frequently reported challenges to combined clinics included scheduling the right mix of patients, difficulty in obtaining the right ratio of specialists to ensure that both specialists' schedules are filled, demonstrating value to their institution, and achieving institutional "buy in" from the institution.

In this survey, we identified barriers among those already participating in combined clinics, which is factual testimony of the applicability, successful implementation and resilience of this

dual care model in academic settings. However, there is still a pressing need to identify barriers and potential pathways for expansion of this approach into the community setting (and/or among other academic centers without currently established combined clinics).(9)

Target Audience

Target population: Academic and community dermatologists and rheumatologists from geographic regions who have a specific interest in psoriasis, medical dermatology, and/or inflammatory arthritis will be the primary target audience. Moreover, throughout the duration if this project, we may identify that patients are actually partners and facilitators of this process, and could therefore become a target in a subsequent intervention. Critically, patients will ultimately become the beneficiaries of earlier identification of PsA and improved care.

Participant commitment: The sites selected have all hosted patient focus group studies in the past and thus are able to obtain IRB approval and recruit patients for focus groups. Participation in the patient focus groups will only last approximately 1.5 hours. Physician participation in the educational sessions/focus groups will last approximately 4.5 hours plus travel time and then will include two follow up surveys at 2 months and 6 months.

Recruitment for Patient Focus Groups: After IRB approval, patients will be recruited from local rheumatology clinics (some in a combined clinic model and some not from the combined clinics). We will attempt to get a balance of patients with dermatologists inside the same system and outside the health system. Patients will be reimbursed for time and travel/parking.

Recruitment for Physicians Focus Groups/Educational Intervention: Dermatologists and rheumatologists will be recruited from the surrounding community (not specifically at the academic centers hosting the meetings). Lists are available for local rheumatology and dermatology societies. We will use mailings and then directed emails to physicians with a known interest in psoriasis or inflammatory arthritis. While granting CME is not initially planned, this may be reconsidered if we have challenges in recruiting physician participants. Our group frequently works with the NYU CME office.

Using a regional model: In order to start building more derm-rheum collaborations, we believe the 'low hanging fruit' is to build them in regions where they already exist. We have selected regions where there is at least combined derm-rheum program (e.g., New York, Boston, Utah, Philadelphia). The existing derm-rheum collaborations can serve as models for the development of similar clinical experiences in the same communities and can be resources for challenging cases or clinical questions. After completion of this award, we will have identified barriers and facilitators of screening and combined care and demonstrated a model for building collaborative care that can be extended to other regions that do not already have existing programs.

Benefits to participants and wider audience: Physicians taking part in the rheum-derm meetings and focus groups will develop a network of providers with an interest in psoriasis and inflammatory arthritis for referrals and improved collaborations. Additionally, these participants will benefit from educational activities and knowledge about screening and managing psoriasis and PsA. However, we expect that the results of the patient and provider focus groups will additionally move the field forward through identification of barriers to screening and co-management. We can then develop specific strategies directed toward alleviated barriers and augmenting facilitators. Furthermore, we will have tested a model for increasing collaboration among dermatologists and rheumatologists. Thus, while the initial number of participants is relatively small (~30 rheumatologists and ~30 dermatologists), we seek to impact many more physicians through the development of this platform. PPACMAN and IDEOM can then move these concepts forward, inline with the goals of the organizations.

Project Design and Methods

Overview: This proposal will employ qualitative methods (e.g., focus groups and interviews) to better understand early diagnosis of PsA and co-management from the perspectives of key stakeholders: patients, dermatologists and rheumatologists. An educational intervention will be delivered as a part of the study and a toolkit provided to attendees. Follow up surveys will be conducted to evaluate the effectiveness of the intervention. Results from the focus groups will be used to inform development of a survey for a wider group of rheumatologists and dermatologists to rate the importance of the defined barriers and facilitators and to seek input on potential strategies for barrier mitigation. All of the participating sites have participated in focus group studies in the past. Similar work has not been proposed or published to our knowledge. This work builds on our initial survey to examine challenges and benefits among sites that have already been engaged in co-management of PsA.

Part 1: Patient Focus Groups

The goals of these focus groups will be to: a) examine the period around diagnosis and patient experiences with diagnosis, b) identify benefits and challenges of co-management in their experience, and c) examine ways to optimize co-management for patients. A semi-structured script will be used. One focus group will be held at each institution (Penn, NYU, Brigham & Women's Hospital, and Utah). In the case we are unable to coordinate a single date for a particular site, individual telephone or in-person interviews will be performed instead. Focus groups and interviews will be conducted by Dr. Ogdie (trained in focus group facilitation) at the three non-Penn sites and by a second member of the Penn Outcome Measures Group at Penn. Focus group discussions will be audiotaped and transcribed verbatim. Content analysis will be performed by two coders using NVivo software.(10) Generally, approximately 4 focus groups or 15-20 interviews are anticipated to achieve saturation of the relevant themes. Dr. Ogdie has extensive experience in qualitative studies including focus groups, interviews, and surveys including barrier and facilitator assessment.(11-14)

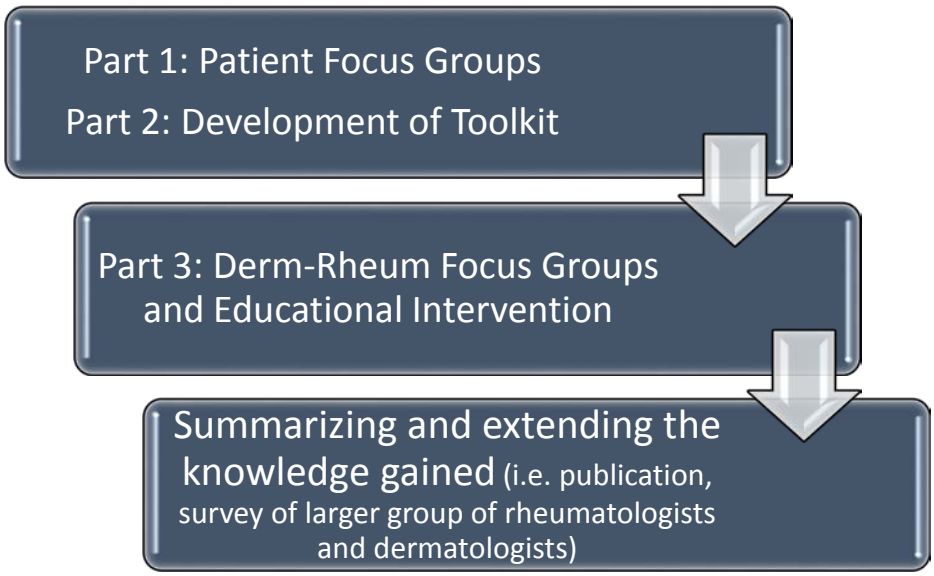

Figure 1. Study Schematic. Parts 1 and 2 will occur in tandem. Parts 1-3 will inform a survey to a larger audience of rheumatologists and dermatologists to prioritize among potential strategies for improving screening and co-management identified in this study.

Part 2: Development of Derm-Rheum Toolkit

In a previous survey (discussed in the "Current Assessment of Needs" section), we analyzed an initial list of barriers and facilitators to establishing combined clinics among PPACMAN members. Before holding provider focus groups, we will develop a toolkit for attendees of the workshops. An expert panel meeting will be held at the annual PPACMAN board and steering committee meeting (December 16, 2017) in order to develop the toolkit. The toolkit, once finalized, will be an integral part of the workshops in Part 3 (*and ultimately available by request at no cost after completion of the study and posted on the PPACMAN website once complete*). The toolkit will include barriers and facilitators encountered by established derm-rheum clinics and strategies for mitigating those barriers, methods of referral to local providers (including Epic smart phrases), methods for integrating tools including patient reported outcomes into Epic (or other electronic medical record databases), a handout about screening methods for PsA, and additional materials. Of note, Dr. Ogdie has been trained as a physician builder with Epic and all of the co-investigators work with many Epic features that enable data collection methods appropriate for derm-rheum collaborations. Some of these Epic tools are used as a part of the Psoriatic Arthritis Research Collaboration (PARC) a longitudinal cohort study among NYU, Penn, University of Utah, and Cleveland Clinic.

Part 3: Provider Focus Groups and Educational Intervention.

Three regional meetings with both dermatologists and rheumatologists from academic and community sites - as well as combined clinics- will be held (one in New York, NY, one in Salt Lake City, UT, and one in Boston, MA). If one of these sites is unavailable or not able to recruit sufficient numbers of providers, Philadelphia, PA will be the backup site. These sites were selected as there are multiple institutions within these regions that employ rheumatologists

and dermatologists, the community sites that are relatively known in these cities by the grant organizers, and these cities have at least one combined derm-rheum clinic.

Box 1. Provider Meeting Agenda

9:00-9:30	Welcome and Introduction
9:30-10:15	Didactics: PsO/PsA management and importance of early diagnosis of PsA
10:15-10:30	Coffee Break*
10:30-11:15	Facilitated Discussion I: Screening methods and perceived barriers and facilitators and facilitators of improved early referral/management
11:15-12:00	Didactics: PsO/PsA Gaps and role for co-management
12:00-12:45	Facilitated Discussion: Barriers and facilitators of co-management
12:45-1:30	Lunch* and panel discussion – Developing derm-rheum clinics and collaborations, conclusions/survey

*Food and beverages will be provided by PPACMAN and are *not* included in the budget for this grant.

The regional meetings will last approximately 4.5 hours and we expect approximately 10 dermatologists and 10 rheumatologists at each site. A combination of educational presentations and facilitated discussion will occur (audio-taped for content analysis). After providing consent, participants will complete a baseline survey. To start the meeting, participants will introduce themselves and the objectives of the meeting will be reviewed (30 min). The content portion of the meeting will begin with a presentation on methods screening for psoriatic arthritis and an introduction to the provider toolkit (45 min). Attendees will be broken into groups of approximately 10 participants and facilitators will lead a discussion about how dermatologists currently screen for PsA, rheumatologist opinions about available screening methods, and perceived barriers and facilitators for use of screening tools (45 min). In the second session, an introduction to management of psoriasis and psoriatic arthritis didactic talk will be delivered which will include a discussion of gaps in progress and the need for co-management including a discussion of current combined clinic models (45 min). A facilitated discussion on strategies for improving co-management will be conducted (45 min). From this discussion, we will ascertain barriers and facilitators of co-management and resources needed to improve co-management. This may include “in an ideal world” scenarios in which alterations in the health care system are considered and brainstorming ideas related to improving care of psoriatic arthritis more globally. We will also elicit what types of tools or information PPACMAN can provide on the website to support the needs of the group. The meeting will conclude with a panel discussion with the local derm-rheum clinical site lead dermatologist and rheumatologist (45 min). At the end of the meeting, participant names with preferred direct contact information and preferred referral information will be provided to facilitate interactions between the providers once people leave the meeting.

Participant level of engagement will be somewhat obvious from the structure of the meetings which is discussion based in general. However, a survey assessment of the quality of the meeting will be provided during the final session and participants will be asked to rate their engagement in the meeting.

Analysis/summarizing findings and extending to larger group of dermatologists and rheumatologists: At completion of the three provider meetings, the audiotapes will be transcribed and content analysis performed using NVivo. Themes of both patient and provider focus groups will be reported including intersections. Barriers will be classified as modifiable and non-modifiable. Strategies to address modifiable barriers will be developed. Additional interviews with participating providers may be used to inform survey development. A survey will then be sent to stakeholders within IDEOM and American College of Rheumatology (ACR) to determine the likelihood of success and sustainability of strategies to improve screening and co-management. Dr. Ogdie has conducted surveys through the ACR(14, 15) and Drs. Merola and Gottlieb have conducted surveys through IDEOM.

Evaluation Design

At baseline, two months and six months after the intervention, providers attending the meeting will be surveyed. The goals of the follow up surveys are to determine whether dermatologists are screening for PsA and whether they have used the toolkit in their practice; to characterize any additional barriers identified; and to examine whether dermatologists and rheumatologists have maintained connections with the other providers at the meeting; and whether co-management has improved (questions shown in **Box 2** below).(16) At both follow up time points, if the survey is not completed, our staff will follow up with the providers via phone to directly ask the questions of interest.

The two practice gaps addressed in this proposal are 1) screening for PsA, and 2) insufficient co-management of PsA. We will address these gaps through qualitative methods (i.e. focus groups and/or interviews) to better understand the underlying barriers to screening and co-management as well as facilitators for improving screening and co-management. Through a pre-formed toolkit and then later an updated toolkit we anticipate improvement in screening and co-management which we will evaluate via follow up surveys and/or phone calls and will quantify change in the measures targeted. We expect that most providers will not routinely screen for psoriatic arthritis using formal questionnaires at baseline. At two months and six months, we expect that half will at least ask about joint pain or swelling routinely among patients with psoriasis and approximately 10% will use a formal questionnaire. We expect that 80% will feel more comfortable referring a patient to rheumatology and 50% will use a specific provider identified during the meeting. We will specifically ask providers whether any change in behavior was related to the provider meeting. These outcomes will be published in a final manuscript summarizing the effectiveness of the intervention.

The milestones for this project include completion of the patient focus groups, development of the educational materials and workshop plan for the provider meetings, completion of the provider meetings, analysis of the focus groups (as described above), and follow up surveys. Ultimately, persistence of change at 2 and 6 months post-meeting will gauge how well the educational component worked. However, identification of barriers and strategies to improve

screening and co-management will also be considered successful outcomes. The expected products derived from these educational experiences will certainly include knowledge about screening and co-management. Perhaps even more importantly, the development of relationships between regional dermatologists and rheumatologists at the face-to-face meeting will represent a guaranteed outcome. We will also disseminate our work through publication of the results. Furthermore, we will engage the relevant societies (e.g. American College of Rheumatology) in surveying members about strategies for improving co-management. This may engage these bodies as stakeholders in the improvement of PsA management. Finally, meetings can be extended to other metropolitan areas once the materials have been developed.

Box 2. Survey Questions at Baseline, 2 months and 6 months

The questions to be addressed among dermatologists will include:

- Among approximately what proportion of patients with psoriasis are you screening for psoriatic arthritis?
- How are you screening?
- Do you use a screening tool? (if yes, which one?)
- Have you identified any additional barriers or facilitators for screening other than those discussed during the meeting?
- When you refer a patient to rheumatologist, do you refer to a specific rheumatologist?
- If yes, is the rheumatologist one you met at the meeting?
- Among your patients with PsA, how many times in the last 2 months have you discussed a patient's care either by phone or by email/EMR with the patient's rheumatologist? For approximately what proportion of your patients with PsA have you had contact with the rheumatologist?
- Have you considered combined clinic models of care or taken actions to start this process?
- Have you identified any additional barriers or facilitators to co-management other than those discussed during the meeting?

The questions to be addressed among rheumatologists will include:

- When you refer a patient to dermatologist, do you refer to a specific dermatologist?
- If yes, is the dermatologist one you met at the meeting?
- Among your patients with PsA, how many times in the last 2 months have you discussed a patient's care either by phone or by email/EMR with the patient's dermatologist? For approximately what proportion of your patients with PsA have you had contact with the dermatologist?
- Have you considered combined clinic models of care or taken actions to start this process?
- Have you identified any additional barriers or facilitators to co-management other than those discussed during the meeting?

Milestones and Deliverables Schedule

The detailed work plan for each of the three parts is outlined below assuming a funding date of January 1, 2018 and a 1.5 year timeline for completion of the outlined work. We have broken the timeline down by part of the project as outlined in the "Project Design and Methods" section.

Part 1: Patient focus groups

Milestone	Expected Completion
IRB Approval at Penn with reliance agreement at 3 other sites	February 1, 2018
Set dates for focus groups at each institution	February 15, 2018
Recruit for focus groups	February 28, 2018
Hold focus groups	March-April 2018
Transcribe audiotapes	April 15, 2018
Completion of content analysis	May 30, 2018
Additional interviews (if we find that themes are not saturated or were not able to recruit enough patients for a specific focus group date); additional transcription and content analysis	July 31, 2018
Manuscript submission	September 15, 2018

Part 2: Development of Toolkit

Milestone	Expected Completion
Develop list of potential tools to support development of combined clinics at annual PPACMAN Meeting	December 16, 2017
Steering committee call to divide tasks of toolkit development	January 15, 2018
Develop Epic smart phrases and "how to" kit	March 1, 2018
Develop "Challenges in the development of combined clinics and potential solutions" reference guide.	March 1, 2018
Develop "Methods for screening for PsA: a toolkit" reference guide	March 1, 2018

Part 3: Provider Meetings

Milestone	Expected Completion
IRB approval	February 1, 2018
Identify dates and locations for the three meetings	February 15, 2018
Develop lists of the dermatologists and rheumatologists in the area	April 1, 2018
Develop recruitment materials for meetings	April 15, 2018
Send mails and beginning contacting providers directly	April 30, 2018
Host meetings in 3 cities	September 2018

Transcribe audio taped focus groups	October 1, 2018
Completion of content analysis	November 30, 2018
2 month follow up with individual providers with reminders	December 1, 2018
Additional interviews (if we find that themes are not saturated or were not able to recruit enough patients for a specific focus group date); additional transcription and content analysis	January 31, 2019
Manuscript submission: Barriers and facilitators of screening for PsA and derm-rheum co-management: A qualitative study	March 15, 2019
6 month follow up with individual providers	March 2019
Manuscript submission: Effectiveness of Derm-Rheum Provider Meetings in Changing Provider Behavior	May 2019

Part 4: Survey to the Wider Community

Milestone	Expected Completion
Survey through American College of Rheumatology	June 30, 2019
Survey through IDEOM/American Academy of Dermatology	June 30, 2019

Summary

In this proposal, we seek a collaborative research project between PPACMAN, a non-profit organization focused on supporting combined clinics for psoriasis and PsA, International Dermatology Outcome Measures (IDEOM)(17, 18), a non-profit organization aiming to improve outcome measures in dermatology (including screening tools for PsA and instruments to measure PsA symptoms), and academic centers already engaged in combined clinics. This proposal builds on the expertise and ongoing work in these organizations. This unique collaborative effort among these productive groups is highly innovative and will allow for dissemination and action on the outcomes of this grant.

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