



Advancing High Performance Health

AMGA Foundation

Best Practices in Managing Patients with Rheumatoid Arthritis

Virginia Mason Medical Center

*Evaluating the
Effectiveness of
Interventions and
Standardizing Treatment*





Organizational Profile

Virginia Mason Medical Center (VMMC) is a nonprofit hospital with an ambulatory clinic comprised of primary care and 16 sub-specialties and was established in 1920. This multispecialty group practice is located in Seattle, Washington, and has seven regional medical centers under its umbrella. There are approximately 460 physicians at Virginia Mason and five rheumatologists. VMMC has six rheumatology providers (five MDs and one DNP) practicing in four locations in and around Seattle. There are approximately 6,000 patients served by its Rheumatology department. The Rheumatology division completed 12,842 clinic visits in 2014. This department is supported by 3.1 FTEs. Cerner is VMMC's EHR, and all patient health information—including information on DMARDs, disease activity, and functional status scores—is housed in this EHR.

Project Summary

VMMC joined the RA Collaborative in the early fall of 2014 with the goal of meeting and sharing information with other experts treating patients with RA in hopes that quality metrics could be determined on a national scale and be measured ongoing. A hope for the entire group was to gather patient reported outcomes data and prescription data to learn what treatment interventions were effective and make treatment efficacy visual for the first time. Once treatment efficacy could be made visual, rheumatology providers would then be able to modify treatments to improve RA outcomes.

Program Goals and Measures of Success

VMMC's overarching goal is to improve the health and well-being of the people it treats. Involvement in the RA Collaborative allowed the rheumatology team to pull data,

monitor data, and determine whether or not the interventions individual providers were selecting for their patients were effective in returning patients to function. VMMC's goals were to create transparency amongst the VMMC provider group and discuss treatment patterns and then decide upon standardized treatment protocols so that all patients who visit Rheumatology at VMMC would have high quality outcomes regardless of which provider they see. The two measures of success would be the ability to adjust treatments based on data and to share success stories and then standardize protocols to ensure benefits for all rheumatology patients at VMMC.

Population Identification

The population we identified was all patients, any age with the diagnosis of rheumatoid arthritis. To begin, VMMC gathered and reported four to six quarters of metrics to the RA Collaborative and benchmarked itself against other practitioners treating RA. The three metrics that were gathered were (1) the percentage of RA patients on disease modifying anti-rheumatic drugs (DMARD) therapy; (2) the percentage of RA patients with documented disease activity assessment; and (3) the percentage of RA patients with documented functional status assessment. The data specifications that were provided by the RA Collaborative were followed by information systems from July 1, 2013, to September 30, 2015. VMMC was able to report four to six quarters of data for the 2nd and 3rd metric. However, the team was not able to generate accurate data to reflect the 1st metric and therefore did not submit it.

Intervention

Virginia Mason Medical Center's Rheumatology division had had patient-reported measures on its radar since 2011 after the American College of Rheumatology conference let leaders know that outcomes metrics were going to be important for reimbursement purposes and in proving treatment efficacy.

VMMC had therefore figured out a way to gather and enter the functional assessment scores into the health record and had been gathering it since February 2012. This positioned the Rheumatology division nicely to begin reporting to the Collaborative. Its intervention was aimed at capturing 100% of our patients, regardless of diagnosis, who were given the multidimensional healthcare assessment questionnaire (MDHAQ) at every visit, and the information would then be entered into the medical record. The DMARD data was much more difficult to extract from Cerner, which caused us to be unable to report it.

Overall, VMMC's outcomes were very good. Data revealed that 98%-100% of the time patients were being asked about their disease activity and functional status and those scores were being documented in the record at every visit. However, as mentioned before, the information analyst was not able to leverage data in its EHR's medication list with sufficient accuracy to meet the specifications of the RA Collaborative, so it is unsure of the compliance rate with DMARD therapy recommendations.

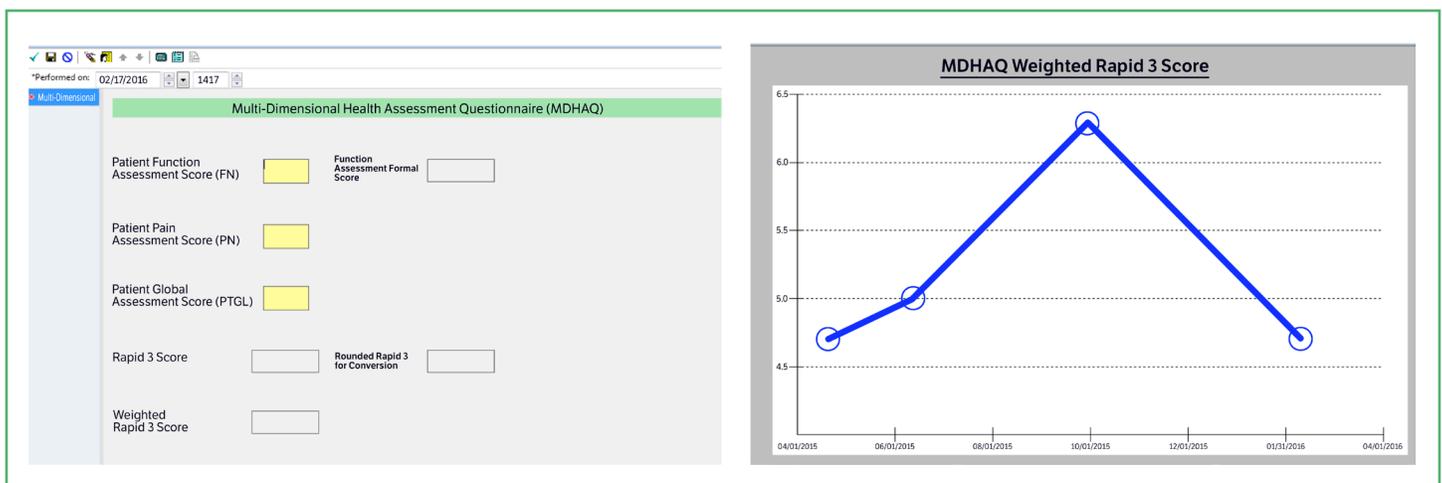
VMMC's information system team is still working on extracting this data. Although they reported favorable outcomes for measures two and three, they also felt that the disease activity and functional status assessments, since they are patient-reported, are too subjective to determine true clinical improvement, which would be better reported by a CDAI score. VMMC is currently deciding how to gather the CDAI score and make treatment efficacy more visual.

VMMC was able to achieve high percentages because it created a PowerForm in Cerner back in February 2012 which housed its RAPID 3 scores which are comprised of the disease activity and functional status scores. When VMMC first started discussing this with its team, they emphasized the importance of capturing these scores for every patient at every visit and created a tool to make that happen in less than 15 seconds. Here is an example of how VMMC gathered and input this data from the patient perspective: the patient is given the standard MDHAQ at the check-in desk, they complete the form in the lobby, and then the medical assistant scores the form and enters the score in Cerner. After multiple entries, if the provider would like, they can create a graph which will illustrate the patient's physical decline or improvement over time. VMMC felt successful overall, but it was challenging and time-consuming for information technology teams to remove and quantify data using Cerner, and it became a barrier to report DMARD data timely when there are competing organizational priorities. VMMC's team is still working on extracting the DMARD data.

VMMC encountered other barriers during the Collaborative as well. Sharing the graphics with the patients themselves is still an opportunity it has. VMMC has a graphic (Figure 1) to illustrate patient-reported outcomes. These screen shots illustrate the tool the medical assistant used to enter the rapid 3 scores and the graph that is produced.

Unfortunately, the graphic is rarely utilized to educate the patients on treatment efficacy. One of the risks of not using this data is that it sends a message to the team that it is not as important to gather this information as they may have

Figure 1: Graphic for Patient-Reported Outcomes



thought. Additionally, not sharing it with patients is a missed opportunity to engage them.

VMMC also realized that the disease activity and functional status assessments, since they are patient-reported, are too subjective to determine true clinical improvement, which would be better reported by a CDAI score. It is currently deciding how to gather the CDAI score and make treatment efficacy more visual for this new measure and are in discussions with Discus Analytics and T3 JointMan to help facilitate better data extraction methodologies.

In the future, VMMC aims to use its MyVM Patient Portal to push the MDHAQ questionnaire to its patients to shorten the lead time for questionnaire completion at the visit and to eliminate data entry by the medical assistant.

VMMC is also in the process of sharing its data with ACR's RISE registry and they are excited to be able to submit baseline data to them in hopes to understand the gaps in practice patterns and their EHR itself, and then see how their patients compare to others on a national scale.

Leadership Involvement & Support

VMMC received a great deal of leadership support on this endeavor from the beginning and appreciate their backing as it moves forward. The team aspires to become an Institute of Rheumatology Center of Excellence and wants to be recognized for its clinical excellence regionally and eventually worldwide. VMMC is recruiting the best providers and will continue to strive for quality improvement wherever possible. Due to competing priorities, information systems teams were not able to devote the time required to submit all of the

measures the Collaborative group needed, but VMMC feels a sense of achievement and has goals to work on moving forward which allow them to gather DMARD data using different technology.

Lessons Learned and Ongoing Activities

One lesson the team learned was that the challenges rheumatology practices face are similar and the way they approach those challenges determines whether or not VMMC will be able to surpass them. Another lesson is that some of the most well-designed EHRs are able to extract discrete data points that inform quality improvement efforts in an intuitive way and it is ideal to use a system like that so that data gathering is simple. The other lesson learned was that gathering face-to-face and sharing stories is motivating and truly encouraged the team to continue its pursuit of improved patient care for people with RA. VMMC wanted to sincerely thank the sponsor, as well as AMGA and the Foundation for their generous support and superior coordination, inviting this health system to participate in such a well-organized Collaborative.

Acronym Legend

CDAI: Clinical Disease Activity Index

DMARD: Disease-Modifying Anti-Rheumatic Drug

HAQ: Health Assessment Questionnaire

MDHAQ: Multi-Dimensional Health Assessment Questionnaire

PQRS: Physician Quality Reporting System

RAPID 3: Routine Assessment of Patient Index Data 3

SDAI: Simple Disease Activity Index

RA Team

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