AIMS: A Care Coordination Model to Improve Patient Health Outcomes

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A growing body of research suggests that non-medical issues, such as psychological and social factors, are intricately linked to health (World Health Organization, 2012). Many patients find themselves unable to comply with their medical care plans as a result of social and economic barriers, which can result in new or exacerbated medical conditions (Robert Wood Johnson Foundation, 2011). Unaddressed nonmedical issues often result in poorer health at an avoidable high cost (Centers for Disease Control and Prevention, 2011).

A review of nonmedical interventions, designed to address patients' nonmedical needs and increase care compliance, indicated that care coordination is a beneficial intervention. The review, conducted by Shier, Ginsburg, Howell, Volland, and Golden (2013), identified seven care coordination models currently used in health care practice. The models share many core elements, including assessment and case management, and referral to social services. However, few offer mental health services or specialized support, such as individual counseling and motivational interviewing. The absence of these important elements may be related to the fact that few models are delivered by social workers or include social workers as members of the interdisciplinary team. Because of their training in mental health, systems navigation, and care coordination, social workers are particularly well poised to assess the complexity of patients' nonmedical issues and link patients with appropriate resources (Rowe & Rizzo, 2014).

The purpose of this Practice Forum is to provide social work practitioners with information about the ambulatory integration of the medical and social (AIMS) model. AIMS is an innovative care coordination model designed to link patients in primary health care settings with nonmedical supports and services and improve patient self-management and health care utilization. The model was developed at Rush University Medical Center (RUMC) in consultation

with a panel of experts in primary care models (Shier et al., 2013).

SOCIAL WORK INTERVENTION: THE AIMS MODEL

AIMS is a four-step protocolized care coordination model designed to assist adult patients with complex medical and nonmedical needs. The goal of AIMS is to integrate medical and nonmedical needs, such as psychosocial and environmental needs, to address health care outcomes, reduce the use of unnecessary health services, improve patient satisfaction with the health care delivery system, and help primary health care providers support their patients.

The AIMS model is delivered by master's-level social workers and is rooted in core social work competencies that align with the Educational Policy and Accreditation Standards articulated by the Council on Social Work Education (2015). The model is delivered telephonically, in person, or both and is typically completed in six weeks. Patients with nonmedical needs are identified by primary health care physicians or nurses and referred to the AIMS team. Referred patients are served by social workers who deliver AIMS in four steps: (1) patient engagement, (2) assessment and care plan development, (3) case management, and (4) ongoing care as needed.

Patient Engagement

The social worker develops rapport and trust, explains the care coordination process, and ensures that the patient understands the need for care coordination. Using a semistructured protocol script, the social worker encourages the patient to share health care concerns and identifies immediate nonmedical needs. During the engagement process, the social worker may probe: "Is there anything that is very important to you or that I should be aware of at this time?" When the patient responds, the social worker (a) validates the

concerns; (b) reinforces the role of social workers as helpers; (c) if applicable, gives information to address immediate concerns; and, (d) if necessary, schedules a date to conduct a full assessment that may identify additional nonimmediate concerns. For example, if an older female patient reveals that she is unable to adhere to her diabetes treatment plan because she does not have food in her home, the social worker validates the difficulty of adhering to the plan and provides information about programs that provide food assistance (such as food stamps and food banks).

Assessment and Care Plan Development

To effectively work with the patient, it is necessary to have a thorough understanding of the patient's physical, social, and emotional status ([National Association of Social Workers \[NASW\], 2005](#)). In the second phase, the social worker conducts a comprehensive biopsychosocial assessment using a multidimensional assessment tool and semistructured protocol script. Consistent with social work, the assessment evaluates strengths and identifies social and environmental factors ([NASW, 2005](#)) that may affect medical plan adherence, health care services utilization, and health care outcomes. The tool, which includes six domains, collects information about physical health, functional ability, cognitive status, mental health, social history, and patient's self-reported general health. The assessment process is designed to elicit objective and subjective information. Probes, such as "tell me more," "explain," and "give me an example" provide additional information, such as the severity of a situation, that is helpful for interpreting the assessment and developing the care plan.

After completing the assessment, the social worker interprets the information to identify strengths and weaknesses, and mutually discusses the outcomes of the assessment with the patient. Using motivational interviewing techniques, the social worker emphasizes patient strengths, such as existing supports and resources, positive coping strategies, and level of motivation. Patient challenges, such as lack of supports or resources and environmental or patient factors are also explored. The identification of strengths is used to reinforce effective areas in the patient's life and support a subsequent discussion about development of a care plan.

To ensure that care plans are tailored to meet the individual needs and motivation of patients, social workers identify patient values. The social worker may ask, "Are there traditions or values that play a

role in your decisions? What is most important to you in your life right now? In what way does your health relate to these things that are important to you?" The responses to the value questions are helpful for goal setting, enhancing patient motivation, and guiding goal selection to those that may most improve health outcomes. The social worker may ask several follow-up questions related to goal setting, including "How important is it to you to do something about [each challenge] on a scale of 0 through 10, with 10 being extremely important? Would you like to address [each challenge]?" Building on the previous example of the patient with diabetes, if the patient responds that she needs healthy food to manage her diabetes, the social worker validates and moves toward goal setting. The social worker suggests the goal and garners patient agreement: "It sounds like the lack of healthy food is keeping you from controlling your diabetes. What do you think about making this one of your goals?"

When the patient and social worker establish a mutually agreed-on goal, the social worker assesses patient motivation toward the goal and discusses goal attainment. Statements and questions to assess motivation and goal achievement are based on motivational interviewing. For example, "This sounds like a great goal. How motivated are you to work on the goal? How able are you to work on achieving this goal? How ready are you now to work on the goal? What will it take for you to achieve this goal? How can I help you achieve this goal?" The goals, objectives, and tasks to be performed and by whom are recorded in a care plan. To increase self-efficacy, patients are encouraged to perform the majority of goal attainment work after any needed education and coaching from the social worker. The social worker and patient will typically agree on no more than three immediate goals to facilitate successful goal achievement, encourage prioritization, and prevent overwhelming the patient.

Case Management

In the third step the social worker assists the patient with implementing the care plan and provides ongoing case management support, which includes monitoring goal progress; offering support to achieve goal attainment; and, when necessary, modifying the care plan to align with changing patient needs. A main component of the case management phase involves problem-solving issues and linking clients with needed services and supports. These

core social work skills help reduce barriers that restrict goal achievement for patients (Rowe & Rizzo, 2014). For example, the client with diabetes reports she does not have access to healthy food. The patient states, “I don’t have any money for healthy food, and if I did, I couldn’t get it anyway because I do not have a car.” Using problem-solving skills, the social worker will identify food voucher resources and transportation providers: “You may be eligible for food and transportation assistance. Both types of assistance would provide access to healthy food, and may ultimately help you with your diabetes. Would you like to explore these possibilities so that you can start working on your goal of eating healthier food?” With patient agreement, the social worker confirms eligibility and links the patient with needed resources to obtain the food. The act of linking the patient with needed resources and addressing barriers to the use of services is critical to patient achievement of goals.

An additional activity in the case management phase involves monitoring the care plan (Rowe & Rizzo, 2014). This activity ensures that the care plan stays relevant and achievable for the patient. To assess goal achievement, the social worker checks in with the patient on a weekly basis. The task of weekly check-in provides additional opportunities to assess potential problems, ensure that the care plan remains relevant and achievable, and verify that services were implemented as intended. Care plan monitoring may involve the social worker calling the patient and asking, “I am calling to see how you are doing on your goal of eating healthier food. I placed the referral for the grocery vouchers. Have you received a confirmation call from the agency? Were you able to enroll in the transportation service you were interested in and agreed to call?” These questions validate the feasibility of the care plan as well as when the patient needs additional problem-solving, advocacy, or motivational support. When the social worker identifies that the goal is achieved, he or she updates the care plan. If, in consultation with the patient, the goal is no longer relevant or desired, the care plan is modified. Step 3 is repeated until all goals affecting medical care plan compliance or mental health needs have been addressed.

Ongoing Care as Needed

Successful achievement of patient care plan goals marks the transition to step 4, which involves ensuring that community-based resources are in place to

support the patient long term, encouraging the patient to contact the social worker should new challenges arise, and closing the case. This fourth phase involves talking with the patient to summarize achieved goals or negotiate continued work, if applicable. A goal achievement discussion may involve summarizing progress and assessing need for additional work in the following fashion: “It sounds like you have met your desired goal. Would you agree? Is there something more you would like to work on as it relates to maintaining your health and well-being?” When the patient confirms that all present goals have been met, the social worker will inquire about the need for ongoing support. A dialogue about confirmation of goals and need for ongoing support may include something like this: “Now that you have reached your goal of eating healthier foods by using grocery vouchers and the transportation service, I want to be sure you can maintain these supports to your healthy eating. How confident are you in managing the vouchers and transportation on your own?” The response may yield the need for ongoing assistance with navigating the services. In this instance, the social worker would continue to engage the patient in psychoeducation, coaching, and other relevant interventions to increase independence and motivation for a mutually agreed-on period.

Agreement with the patient that care plan goals are met will result in moving the case toward closure. Case closure that encourages patient follow-up involves a conversation in which the social worker may state, “While today ends our work together, I understand that in the future things may change and we may need to talk again about steps you can take to manage your health and well-being. If this happens, please do not hesitate to call me. We can talk about what is going on; sort out problems; and, if necessary, work together again. I want you to be successful in your health care journey and meeting all your health goals. Again, congratulations on your hard work. I wish you the best of luck and look forward to hearing from you if you need me.”

FUNDING FOR AIMS

At present, insurance reimbursement for outpatient social work care coordination models is not available (Rizzo & Rowe, 2014). To financially support the development and administration of the AIMS model at RUMC, departmental resources from grants and local and national foundations are used. In addition, some RUMC clinics support the salaries and fringe

benefits of AIMS social workers. Until insurance reimbursements are available, similar strategies will be used to cover the costs of the AIMS intervention.

With the rapidly changing landscape of health care due to the [Patient Protection and Affordable Care Act \(2010\)](#) (P.L. 111-148), there are potential future reimbursement streams that may support AIMS, either directly or indirectly. Managed care and bundled payment models may increase the ease of funding AIMS. A 2015 chronic care management Current Procedural Terminology code (CPT 99490), billed by the physician, may defray upfront investment in AIMS as regulations allow other professionals, such as AIMS social workers, to support the physician in billing this code. Advocacy efforts are also underway on a national level to clarify social workers' ability to directly bill for health and behavior assessment and intervention codes (CPT 96150–96154) ([Krajci, 2015](#)). These codes would reimburse face-to-face assessments and behavior change interventions related to a patient's difficulty in adjusting to, or managing, a chronic medical condition. It is likely that financial sustainability for AIMS will require a braided approach, relying on a variety of funding sources that are supported with arguments related to the intervention's cost savings.

AIMS PRELIMINARY EVIDENCE

The AIMS model was integrated in five primary care clinics at RUMC in January 2012. Since that time, AIMS has been used to serve over 1,000 adult patients. In March 2014, the AIMS model was recognized by the [Agency for Healthcare Research and Quality's \(2014\)](#) Health Care Innovations Exchange as an intervention with suggestive evidence. An internal unpublished evaluation found that AIMS patients were satisfied with health care services delivery and reported a better ability to understand and manage their chronic illnesses. A retrospective evaluation revealed that AIMS patients had fewer hospital admissions, emergency department visits, and 30-day readmissions compared with the larger RUMC population ([Rowe et al., 2015](#)).

CONCLUSION

In summary, the AIMS model can assist social work practitioners with helping adults address nonmedical needs. Core to the model are social work competencies and motivational interviewing strategies, which are essential to positively affecting individual-level patient outcomes ([Rowe & Rizzo, 2014](#)). The AIMS model, which integrates social work skills,

can enhance patients' outcomes including care plan compliance. When patients comply with care plans, they are more likely to experience positive health outcomes. These positive health outcomes may translate into reduced health care costs, including reduced hospitalizations, emergency department usage, and readmission rates ([Rowe & Rizzo, 2014](#)). **HSW**

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