Developing a Clinical Pathway for Somatic Symptom and Related Disorders in Pediatric Hospital Settings

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ABSTRACT

Somatic symptom and related disorders (SSRDs) are commonly encountered in pediatric hospital settings. There is, however, a lack of standardization of care across institutions for youth with these disorders. These patients are diagnostically and psychosocially complex, posing significant challenges for medical and behavioral health care providers. SSRDs are associated with significant health care use, cost to families and hospitals, and risk for iatrogenic interventions and missed diagnoses. With sponsorship from the American Academy of Child and Adolescent Psychiatry and input from multidisciplinary stakeholders, we describe the first attempt to develop a clinical pathway and standardize the care of patients with SSRDs in pediatric hospital settings by a working group of pediatric consultation-liaison psychiatrists from multiple institutions across North America. The authors of the SSRD clinical pathway outline 5 key steps from admission to discharge and include practical, evidence-informed approaches to the assessment and management of children and adolescents who are medically hospitalized with SSRDs.

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SPECIAL ARTICLE
Somatization is the process of experiencing emotions as physical symptoms (e.g., headaches, stomachaches, nausea, and fatigue) and is a common experience of children and adolescents.1 When these symptoms are persistent and markedly interfere with functioning, the group of conditions known as somatic symptom and related disorders (SSRDs) should be considered. SSRDs are characterized by impaired physical symptoms that are influenced by psychological factors, although they may co-occur with a medical condition, especially when symptoms are severe enough to warrant hospitalization.2,3 SSRDs in youth are associated with disruptions to education, peer relationships, recreation, and family functioning and can negatively affect their developmental trajectory.4,5 Families affected by SSRDs tend to distrust emotional or psychological explanations for the symptoms, fear that a medical condition has been missed, and perceive stigma about a mental health diagnosis.5 Often this results in late or declined mental health treatment, medication overreliance, and family frustration.5,7

Primary and specialty pediatric care services, such as pediatric hospital medicine, neurology, and gastroenterology, are often extensively used by children with SSRDs.8,10 Children with SSRDs account for 10% to 15% of medical visits in primary care,10,13 and somatization is the second leading reason for consultation requests received by child and adolescent psychiatrists in pediatric hospitals.14 Health care professionals often feel unprepared to care for these patients because of insufficient training in the diagnostic and management processes,16 lack of common terminology for the illness phenomenon, absence of standard treatment guidelines, and time-consuming nature of their care.16 Literature reveals that the management of youth with SSRDs is associated with a high level of provider and family frustration and poor treatment outcomes despite the often extensive level of resources used.12,17,18 Other related challenges include a heightened risk of iatrogenic injury, prolonged medical hospitalization, diagnostic errors (involving both medical and mental health diagnoses), increased morbidity, high health care costs, and high levels of economic and emotional burden to families.

Given these challenges, and the lack of standardization of care in the pediatric SSRD population, there is a clear need to develop evidence-informed, integrated, SSRD care models through the use of a clinical pathway (CP). CPs bridge the gap between research findings and daily practice19 by bringing available evidence to health care professionals and outlining essential steps in patient care that can be adapted to the local context.19–24 With CPs, providers aim to reduce practice variations and improve the efficiency and effectiveness of health care.25 Multiple studies reveal that CPs improve clinical outcomes26–28 while decreasing length of stay and hospital costs.29 The use of CPs is increasing worldwide, and they are commonly used in North America for medical conditions such as asthma and diabetes.25–28 There is, however, a lack of published CPs for the management of psychiatric disorders in pediatric hospital settings. Waynik et al30 describe a model for developing and implementing CPs (Fig 1). Factors that are used to predict the successful development and implementation of CPs include high disease prevalence and high practice variability,29 which are both prominent features of pediatric SSRDs.14–16 Although there is some evidence about psychotherapeutic interventions when addressing SSRD in primary care,2 there are limited published data on best practices for SSRD management in pediatric hospitals. In the current article, we describe the process and content of a CP developed by an expert group of pediatric consultation-liaison psychiatrists in the United States and Canada to guide the care of patients with SSRDs in pediatric hospital settings.

METHODS

The SSRD working group used a standardized model for creating a CP.30 Each of the steps is described below:

1. Identifying the need for a CP: As described previously, SSRDs are prevalent in the pediatric population, have high medical and psychiatric comorbidities, and result in considerable health care use, with providers having little guidance in or coordination of the care of patients with SSRDs in pediatric hospitals. A CP was adopted to standardize fundamental elements of care and facilitate best practices.2

2. Assembling a team of experts: The SSRD working group consisted of 12 pediatric consultation-liaison psychiatrists who have an established expertise, clinical experience, and interest in SSRD evaluation and management in pediatric hospitals. These psychiatrists practice in a wide variety of settings and contexts from 8 US states and 3 Canadian provinces. A pediatrician with expertise in CP development provided guidance and feedback during the process.

3. Compiling and reviewing existing research: The literature on SSRD is evolving. The current evidence base was reviewed by working group members and informed the pathway development. Local SSRD pathways and protocols from 7 institutions of the participating working group members were reviewed to identify common and essential elements and themes as well as important lessons learned from developing and implementing local pathways, which also informed the current CP.

4. Developing the CP: a. Initial draft: The SSRD working group held monthly teleconference calls for 2 years starting in April 2016. After the first few months of review and discussion of literature as well as lessons learned from developing and implementing local pathways, key steps in the SSRD pathway were outlined. Achieving interdisciplinary consensus on SSRD evaluation, diagnosis, symptom management, and discharge planning were considered to be important aspects of the pathway. The vital role of communicating with families and ensuring linkages to outpatient care providers was highlighted.

b. American Academy of Child and Adolescent Psychiatry (AACAP)
Creating a Standardized Clinical Care Pathway

- Involves daily utilization of pathway
- Document variances/deviations
- Continuous improvement

![Diagram of the pathway process]

**FIGURE 1** Steps in creating a CP, reprinted with permission from Dr Ilana Waynik. AAP, American Academy of Pediatrics.

**RESULTS**

The CP development resulted in the creation of 4 components of an SSRD CP, which will be described in further detail below:

1. an introduction for the suite of CP documents;
2. a flowchart to serve as a graphic illustration of the steps in the approach to caring for youth who are hospitalized with SSRDs;
3. a detailed text guide including a narrative explanation of each step outlined in the CP with supporting literature; and
4. sample scripts and handouts to standardize and aid with communication within the steps of the CP.

**CP Introduction**

In the introductory document, the authors describe the need for a hospital-based SSRD CP; outline the potential clinical, financial, and administrative benefits of addressing the challenges faced when caring for this patient population; and provide an overview of the proposed CP (see SSRD Pathway: Introduction to the CP for SSRDs in the Supplemental Information). The information presented in the introductory document is relevant to both health care providers and hospital administrators when addressing the whole range of hospital stakeholders involved in facilitating SSRD CP adoption and implementation at the local level.

**CP Flowchart**

The flowchart serves as a visual reference in which the 5 critical steps of the SSRD CP from admission to discharge, including screening, evaluation, and management, are highlighted (Fig 2).

**CP Text Guide**

In the comprehensive companion text document for the SSRD CP, the authors provide specific, detailed information for each step of the pathway, serving as an explanatory guide for the graphic flowchart (see SSRDs CP Text: Care of Pediatric Patients With SSRDs in Inpatient...
Medical and Surgical Units in the Supplemental Information). The SSRD CP text guide includes pertinent background information on somatization and SSRD in youth; the authors describe how interdisciplinary inpatient pediatric care teams can implement each step and provide recommendations for screening, integrated medical and psychiatric evaluation, and management. The guide includes the existing literature that informed each step of the pathway.

**CP Scripts and Handouts**

The scripts and handouts developed as part of the SSRD CP are summarized in Table 2. These materials are used to guide the interdisciplinary providers on how to present the SSRD CP approach to patients and their families, including how to introduce psychiatry and other consultants as part of the interdisciplinary team, describe the evaluation process to the patient and family, and share input from interdisciplinary findings with families. In the handouts, the authors summarize patient- and/or family-centered facts about SSRDs and provide consistent language to anchor providers in the communication of aspects of SSRD care. Because these patients rarely present first to behavioral health providers, a goal in using these scripts is to help increase comfort and skill among health care providers from various disciplines in managing SSRDs and to mitigate the challenges experienced by families in receiving and accepting the SSRD diagnoses.

**DISCUSSION**

This is the first CP developed by a group of expert child psychiatrists, with pediatric stakeholder input, from multiple institutions in North America to standardize pediatric SSRD care in the inpatient hospital setting. The efforts of the working group resulted in a pathway for SSRDs that meets the operational definition of CPs on the basis of the following 4 criteria: (1) it is a structured multidisciplinary plan of care; (2) it is used to translate guidelines or evidence into local processes; (3) it includes details of the steps in a course of treatment or care in a plan, pathway, algorithm, guideline, or protocol; and (4) it is developed with the aim to standardize care for a specific population.6,31

For the third and fourth steps of the SSRD CP, it is recommended that an interdisciplinary provider meeting and an informing family meeting be held once the diagnostic assessment is completed. SSRD care is often characterized by disjointed evaluations and mixed message delivery to patients and families.7 Ensuring effective, interdisciplinary communication with the family has been found to be associated with improved treatment adherence, participation in outpatient follow-up, and improved patient outcomes.32 Team meetings have been shown to be associated with high patient and caregiver satisfaction in the pediatric inpatient medical setting, particularly for patients with comorbid medical and mental health diagnoses.34 A coordinated approach by

<table>
<thead>
<tr>
<th>TABLE 1 Stakeholder Feedback</th>
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<tr>
<td>Stakeholder disciplines</td>
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<tr>
<td>Pediatrics and/or pediatric hospital medicine</td>
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<tr>
<td>Adolescent medicine</td>
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<td>Psychology</td>
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<td>Child psychiatry</td>
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<td>Neurology</td>
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<td>Surgery</td>
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<td>Nurses</td>
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<td>Nurse educators</td>
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<tr>
<td>Overall feedback</td>
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<tr>
<td>“An important topic, for which a pathway and guide are needed.”</td>
</tr>
<tr>
<td>“I think this generally looks very good. I like the organized, multidisciplinary approach. I’ve shown it to a few other members of my team who agree.”</td>
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<tr>
<td>“I like the idea of making things consistent.”</td>
</tr>
<tr>
<td>“This will be a very helpful document. It is well laid out and very clear.”</td>
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</table>

Emergent themes

- Streamlining and formatting suggestions for the flowchart and documents
- Clarify timing of psychiatry involvement
- Clarify terminology and language
- Clarify roles and responsibilities of interdisciplinary providers
- Goal discordance: medical and psychiatry teams
- Clarify communication with patients and families
- Clarify communication processes with external health care providers
- Provide resources for physicians and other health care providers
- Customization of care versus standardization
- Anticipated process challenges
- Create a new model of care

The first and second steps of the SSRD CP emphasize the early identification of somatization with a process of simultaneous physical and mental health diagnostic evaluations. Studies reveal that early mental health consultation reduces the length of admissions for pediatric patients who are medically ill with comorbid mental health diagnoses, including patients with SSRDs.31 It is critical to ensure that patients and families understand the interdisciplinary nature of evaluation and the multifactorial nature of SSRDs to normalize the involvement of mental health professionals.6,11,32 Delayed mental health involvement results in patients and families perceiving that their care is being “handed off” to mental health and further stigmatizes the condition.10 The presence of inconsistent physical symptoms and/or psychosocial stressors, although raising the concern for possible somatization, is insufficient to make a diagnosis of SSRD. The importance of an interdisciplinary evaluation that includes a comprehensive and judicious medical workup is also emphasized to ensure that existing medical conditions are not overlooked in the context of the concerns for somatization and SSRD evaluation. With the use of the SSRD CP, patient and family expectations are set early in the course of the inpatient hospitalization to align them with the role of the interdisciplinary care team. These expectations include interdisciplinary evaluation and management in which symptom reduction (as feasible) is targeted through the use of behavioral interventions, rehabilitation therapies, and parent training and establishing an interdisciplinary outpatient treatment plan.6,33

For the third and fourth steps of the SSRD CP, it is recommended that an interdisciplinary provider meeting and an informing family meeting be held once the diagnostic assessment is completed. SSRD care is often characterized by disjointed evaluations and mixed message delivery to patients and families.7 Ensuring effective, interdisciplinary communication with the family has been found to be associated with improved treatment adherence, participation in outpatient follow-up, and improved patient outcomes.32 Team meetings have been shown to be associated with high patient and caregiver satisfaction in the pediatric inpatient medical setting, particularly for patients with comorbid medical and mental health diagnoses.34 A coordinated approach by
interdisciplinary providers reaffirms the multifactorial nature of SSRDs, facilitates a consistent communication strategy, and reduces the likelihood of misunderstandings or miscommunication about the diagnoses. In the informing meeting, families are provided with a shared conceptual framework for somatic symptom development. Providers are allotted an opportunity to educate families about SSRDs and review the diagnostic formulation by using language that is consistent with the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5). Involving primary care and other key outpatient providers in the informing meeting allows for a natural transition point in the SSRD care from completing the diagnostic evaluation to focusing on multidisciplinary management and disposition planning, including outpatient care. Using terminology that is consistent, understandable, and based on the DSM-5 and providing explanation regarding the biopsychosocial model is critical to effective symptom evaluation and management. Therefore, practical scripts are included in the CP to guide clinicians at all levels of training to effectively discuss the conceptual framework of symptom development, diagnosis, and treatment regarding pediatric SSRDs. The scripts foster the operationalization of the CP by including tools and resources for providers to enact the core steps of the pathway.

Early management and disposition planning are the focus in the fifth and final step of the pathway. The treatment of SSRDs can be initiated within the hospital setting with the goal of improving functionality and successfully transitioning to outpatient care. Children with more profound and pervasive functional impairment, with or without other comorbid conditions, may need more intensive treatments, including admission to medical-psychiatric programs or physical rehabilitation units. Disposition planning is multidisciplinary with a focus on promoting active engagement with the primary care provider (PCP), establishing follow-up care with outpatient mental health providers who are familiar with SSRDs, ongoing monitoring by subspecialty pediatric providers as indicated, using continued outpatient rehabilitative services if needed, and providing guidance to families and schools. Scheduled and frequent follow-up visits with a PCP are important to maintain the alliance and investment in treatment and provide ongoing medical education and reassurance.

Limitations and Future Directions

The SSRD CP working group primarily consisted of experts in child and adolescent consultation-liaison psychiatry. Providers in other disciplines, including psychology, were involved in the stakeholder feedback but were not part of the primary working group. Interdisciplinary and patient and/or family involvement in the operationalization of the SSRD CP and care expansion to outpatient settings will be helpful in capturing a broader perspective on SSRD care.
Your child currently has physical symptoms that are causing great worry and may leave you with questions and concerns. Your family is attempting to understand your child’s symptoms and get an explanation for why your child continues to have physical symptoms. These symptoms are impairing and getting in the way of your child’s health and success. We understand that your child’s illness has been difficult for your child and everyone in your family.

At this time, your child will be admitted to the hospital for a brief stay to conduct an evaluation with the goals of the following:

- understanding your child’s symptoms and their impact on functioning;
- providing a diagnosis or diagnoses;
- providing an explanation for your child’s symptoms;
- providing some symptomatic relief for your child; and
- developing a plan for continued care to improve your child’s functioning.

Your child’s evaluation will include the following:

- a careful review of previous medical records and information about your child;
- completion of previous medical records and information about your child;
- completion of any further evaluations as needed; and
- working together with a team that may include pediatricians, pediatric subspecialists, psychiatry, psychology, social work, physical therapy, occupational therapy, speech therapy, and child life.

At the end of your child’s stay, your child will have a completed evaluation, discussion of results, review of diagnoses, and explanations for symptoms as well as a plan for future symptom care. Your child’s symptoms may not be gone when your child is ready to leave the hospital. We will work to establish goals to improve your child’s health and help your child return to normal activities, including a plan to collaborate with your child’s school, primary care doctor, and other providers in the community to promote your child’s functioning and improvement on discharge.

We are going to review all the tests and treatments you’ve done so far to determine what has been helpful, what needs to be repeated, and what new tests and consultations are needed. We see many children with symptoms similar to what your child has and have a standard multidisciplinary approach to care that includes different consultants from medical specialties, surgical specialties, physical and/or occupational therapy, social work, psychiatry and/or psychology, etc. This comprehensive approach will help us better understand the nature of your child’s symptoms and the impact on all areas of his or her life and will also help us develop an effective management plan.”

If family is resistant to psychiatry consultation or asks for more information regarding this, clarify that psychiatry helps with the following:

- understanding the child’s symptoms;
- assessing the impact of the symptoms on the child and on the family, and
- helping the child and family cope with the symptoms and get their lives back.

Compared with other clinical diagnoses in child and adolescent psychiatry, such as depression and anxiety, as well as suicide, there is a relative dearth of literature on SSRD evaluation and management, particularly in inpatient pediatric settings. Available evidence supported the development of this pathway; however, randomized controlled trials for the evaluation and treatment of SSRDs are still lacking. The working group was faced with a diversity of practices, expectations, systems, and resources that currently exists in SSRD care throughout the represented geography. This was obviated by sharing current practices and resources, developing a consensus set of principles and fundamental practices, and accounting for the known limitations in mental health consultation and access that often exist in many parts of North America. Because the SSRD working group relied on expert consensus and experience to inform the CP and resource development, there is potential for the introduction of bias in the CP development by relying more on the members of the group with greater experience in SSRD care. For this initial effort in the standardization of care, the consensus was developed by using discussions and verbal communications among the working group members; no formal method of consensus gathering, such as the Delphi procedure, was used.

Specific recommendations for inpatient assessment and the management of SSRDs have been made in this CP. We recognize that the pathway implementation may be influenced by resource availability in local hospital settings, including a psychiatry consultation-liaison service. The diversity of the practice locations of the working group was intended to mitigate this limitation, and consideration of resource limitations was a guiding principle in this CP development. The SSRD CP is a flexible guide that allows for clinicians to adapt it to local resources and realities while preserving the core features, central themes, and principles of the CP.

With significant changes in the diagnostic language and criteria of SSRDs within the
If an SSRD is being considered or the diagnosis has been made, the attending physician leading the explanatory handouts can be used as needed, including the AACAP Facts for Families on SSRD.1

**TABLE 2 Continued**

<table>
<thead>
<tr>
<th>Introducing the use of measures</th>
<th>Description</th>
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<tr>
<td>As part of our evaluation, we have some measures for you and your child to complete that will help us in our assessment. These measures take approximately [insert number] minutes to complete and help us standardize our evaluation process while being as thorough as possible. The measures assess [insert examples based on measures being administered]. Please be assured that completing these measures is voluntary, and if you do not wish to do so, this would not change the care that you receive while in the hospital.</td>
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<table>
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<tr>
<th>Informed family meeting</th>
<th>Description</th>
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<tr>
<td>As we said at the beginning of your child’s hospital stay, after completing your child’s evaluation, we come together as a multidisciplinary team to discuss what we think is contributing to your child’s symptoms and what we think the treatment should be. We want to give you a chance to ask questions and to be sure that you feel comfortable about our assessment and treatment plan. We understand how debilitating these symptoms have been and want to take our time to be sure we address your questions or concerns.</td>
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“We want to share with you a summary of your child’s symptoms, why we consulted with the specialists we did, what diagnoses we were considering, and what our findings did or did not support. Please tell us along the way if we have any part of the history wrong or if there is anything you do not understand. And please let us know if there is any particular medical condition or diagnosis that you feel we have not adequately addressed.”

- [Patient name] first presented with:
- Previous workup included:
- Our team performed the following tests and/or evaluations:
- We found the following:
- Given these findings and with the input from our specialists, we think your child’s symptoms are best understood as:
- In our experience, symptoms due to [insert here] respond best to the following treatment approach:

**DISCUSSING THE MIND-BODY CONNECTION**

“The brain and body are connected and communicate through nerves, hormones, and chemicals. We call this the mind-body connection. Sometimes it’s hard to understand how the mind-body connection contributes to symptoms, so we want to explain that. The body automatically sends information to the brain, and at the same time, the brain automatically sends information to the body to communicate feelings, such as fear and pain.”

“You may have heard of the ‘fight-flight-freeze’ response. When we sense danger, the brain tells the body to stay on alert using electrical and chemical signals. The body starts doing things to help us survive; for example, lungs breathe faster and shallower, and [the] heart beats faster and harder to get more oxygen to the brain and muscles. Muscles tense up, getting ready to fight or run. All of these reactions happen quickly and automatically, without us even thinking about it. Later; when the danger is gone, the brain tells the body to calm down, but the experience can leave a physical toll on the body. This is our body’s response to stress, also known as the physiology of stress.”

“Stress can be positive or negative, and although we may not consider something ‘dangerous’ or stressful, our bodies can experience the effects of stress through physical symptoms. In this way, we can view the physical symptoms as the body telling us it is feeling distressed or that we are feeling the emotion or stress in our bodies.”

5 If an SSRD is being considered or the diagnosis has been made, the attending physician leading the meeting should use the actual diagnosis rather than a symptom or general language (eg, conversion rather than “stress”). Ask psychiatry colleagues present to give their assessment of potential contributors that have been determined from the psychiatric evaluation performed. Additional explanatory handouts can be used as needed, including the AACAP Facts for Families on SSRD.1

**DSM-5, as well as the overlap of a variety of other clinical and nonclinical terms commonly used when describing symptoms and presentations of SSRDs, the working group spent a considerable amount of time clarifying, reviewing, and discussing the use of language and terms. Ultimately, the decision was made to focus on DSM-5 language for consistency and clarity given the audience using the SSRD CP. Local practices and language that is familiar and well accepted by patients, families, and providers can be accommodated within the CP so long as they generally adhere to the principles and current evidence and the DSM-5. Although the scope of the SSRD CP was to be focused on the inpatient pediatric setting, the CP and its associated resources contain significant language prompts to engage and communicate with providers within the outpatient setting so as to allow for a smooth transition of care and cross-talk between the 2 systems. Because these patients often present to emergency departments, future efforts to address SSRD care in this setting will also be important.”

Finally, the implementation and efficacy of this SSRD CP has not yet been established empirically. Future directions for the CP implementation point toward developing partnerships with pediatric hospitalists and subspecialists, hospital administrators, nurses, consultation-liaison psychiatrists, psychologists, and support staff. It is important to identify local champions to lead implementation by providing education and support for the clinical application of the pathway. Research studies on the feasibility and outcomes of the SSRD CP are needed to investigate if the SSRD CP has the potential to be used to standardize pediatric SSRD care in hospital settings across medical institutions in North America. The members of the North American PaCC SSRD working group plan to implement the SSRD CP in individual institutions and empirically study the implementation process and anticipated outcomes, including improvements in clinical care, cost savings, and the impact of early interdisciplinary collaboration.”
CONCLUSIONS

This CP is the first attempt to develop a standardized approach to SSRD care across multiple pediatric institutions in North America. Given the existing gap in guidelines for the care of these patients in many hospitals, this CP will be a helpful resource for health care providers of various disciplines in the assessment and management of youth who are medically hospitalized with SSRD.

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REFERENCES

23. Kitson A. Knowledge translation and guidelines: a transfer, translation or
30. Waynik I, Sekaran A. A path to successful pathway development. Presented at Pediatric Hospital Medicine Annual Conference; July 29, 2016, Chicago, IL
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