Quality Improvement Initiatives 2012
Summary of the Juran Model of Performance Improvement (PI) and Performance Improvement Initiatives:

The Juran Model of Performance Improvement, introduced to the Brattleboro Retreat in 2007 by President & Chief Executive Officer Dr. Robert E. Simpson, Jr., is now in its 6th year of implementation. This model offers the tools to evaluate and assess services within the hospital to ensure the kind of excellent clinical care that incorporates best practices in the field while allowing flexibility for strategic planning throughout the organization.

The Juran process supports strong patient-satisfaction and quality outcomes while ensuring fiscal responsibility. The introduction and implementation of this model is a key component of the Brattleboro Retreat’s overall commitment to improving patient safety and quality outcomes.

In 2012, the Brattleboro Retreat implemented a variety of organization-wide performance projects. Each program or division listed below conducted, at a minimum, one performance improvement project for their respective areas.

- Co-Occurring Disorders Inpatient Program
- General Adult Inpatient Program
- Adult Intensive Inpatient Program
- Lesbian, Gay, Bisexual and Transgender (LGBT) Adult Inpatient Program
- Adolescent Inpatient Program
- Children’s Inpatient Program
- Abigail Rockwell Children’s Center
- Adolescent Residential Programs
- Meadows School and the BRIDGES Program
- Anna Marsh Behavioral Care Clinic
- Starting Now: Intensive Outpatient Program and Outpatient Program
- Birches Adult Partial Hospital Program
- Uniformed Service Program (USP)
- Patient Care Services
- Social Services Department
- Pharmacy
- Staff Education (clinical)
- Facilities
- Access and Evaluation / Medical Clinic.

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A sampling of clinical and other performance improvement projects, and the departments spearheading the initiatives, is listed below. This sampling illustrates the breadth of the Retreat’s performance improvement projects.

<table>
<thead>
<tr>
<th>Department/ Team Leader</th>
<th>Project Name</th>
<th>State Problem /Goal/Outcomes</th>
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<tbody>
<tr>
<td>Starting Now / Kurt White</td>
<td>MAT Gold Book</td>
<td>A unique concept that was developed by Rob Simpson and actualized by the unit leadership teams with the support of the Quality Department. This book will assist patients in knowing who their treatment team is; what their diagnoses means; what their treatment entails; and will include their recovery and relapse plan. Additionally it provides journaling pages, group therapy descriptions, community resources, and information that patients can take with them to their next provider of care.</td>
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<tr>
<td>Uniformed Service Program / Frank Gallo</td>
<td>Standardization of Diagnostic Process</td>
<td>Ensure standardization of various aspects of the diagnostic process to improve clinical assessment, interviewing techniques, and provide documentation of the diagnostic process.</td>
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<tr>
<td>LGBT Adult Inpatient Program / Eileen Glover</td>
<td>Cultural Competency</td>
<td>Create an educational module to help ensure that staff who work with patients on the hospital’s Adult LGBT Unit demonstrate the cultural competency required to be effective in their work</td>
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<tr>
<td>Children’s Inpatient Unit / Rachel Bergstrom</td>
<td>Kardex project</td>
<td>Create a Kardex that will improve shift-to-shift communication and make vital patient information easily accessible to direct care staff to enhance patient safety and patient care.</td>
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<tr>
<td>Adolescent Inpatient Program / Jackie Chapel</td>
<td>Medication Education</td>
<td>Ensure the safe use of medical products by improving medication education of adolescent inpatients and staff on the Tyler 3 Adolescent Inpatient Program</td>
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<tr>
<td>Access &amp; Evaluation / John Murphy, D.O</td>
<td>Assessment &amp; Treatment of Medically Vulnerable Patients</td>
<td>Assess and/or correct any gaps or inconsistencies in medical assessment and treatment through the evaluation and upgrade of education, training, equipment, policies and procedures.</td>
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Two of the performance improvement projects listed in the preceding chart are outlined in more detail below.

- The first is a clinical quality improvement project conducted by the Department of Access and Evaluation that involved upgrading and standardizing the hospital’s care of patients with medical needs.
- The second is a patient safety project implemented to ensure that patients understand and properly use medical products.

1. Clinical Quality Improvement Project

Overview: Medical Assessment and Treatment of Medically Vulnerable Patients

As the number of admissions to the Brattleboro Retreat has grown over the past several years, so has the number of patients presenting with significant co-morbid medical problems. This fact prompted the hospital to review its capabilities and clinical procedures for evaluating and treating patients who are medically vulnerable (i.e., patients who may present with chronic and or acute medical conditions including heart disease, respiratory impairment, high blood pressure, seizure disorders, blood clots, etc.).

A performance improvement project was launched to improve the delivery of medical evaluation and care and to eliminate any gaps in the process of assessing and following up with the medical needs of patients that may or may not be associated with their psychiatric or addiction issues. The project brought about a number of improvements that have resulted in 90 percent compliance with nursing care plans for medical treatment.

The team, led by John Murphy, DO, director of medical services, John Todd, APRN, Geoffrey Sinner, MD, Fritz Engstrom, MD, Sherry Providence, RN, Dawn Kenney, RN, and Sheri Moran, RN, used the Juran process for performance improvement and identified the following areas to target for improvement:

- Clinical Protocols
- Staffing models
- Staff Education & Training
- Communication, Clinical Documentation & Information Sharing

The assembled team included members of the Retreat’s Medical Staff, Nursing staff, Clinical Education Department, and Performance Improvement Department.

Focus on Oxygen (O₂) Saturation Protocols

- A review of this protocol led to revisions that that increased the frequency with which patients’ blood oxygen levels are monitored and providing oxygen to patients whose O₂ saturation levels fell below 88 percent.
- Nursing intervention were added to the protocol that include both deep breathing and positional changes

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• The new protocol asks clinicians to consider whether oxygen saturation issues are related to chronic medical conditions vs. short term respiratory problems associated with detoxification (especially on a patient’s first night in the hospital)
• Clinical staff now routinely takes blood oxygen readings using different fingers and arms of patients to account for local skin factors that could affect the accuracy of readings.
• High risk patients are identified and checked more frequently with an eye toward intervention if and when blood oxygen levels fall to 88 percent or lower.
• Special attention is given to patients who have used drugs within the past 24 hours.

Staffing Models

• Added 24/7 clinical coverage by a Licensed Independent Practitioner (LIP) as approved by senior leadership.
• An RN Night Supervisor position was approved by senior leadership and added to the staffing schedule.

Education and Staff Training

• By instituting 24/7 L.I.P. coverage on inpatient units the Retreat can offer clinical staff “just in time” training and provide case consultations in a more timely manner.
• During Nurses Week 2012 the Retreat hosted instructors from the local nursing school (Vermont Technical College) who ran a simulation lab designed to provide Retreat nurses with education regarding physical assessment skills.
• All clinical were been provided with a link on their desktop computers to www.uptodate.com, an online clinical decision support resource.

Communication, Clinical Documentation & Information Sharing

• In 2012 the Retreat invested in an Electronic Health Record (EHR) to, among other things, consistently track patients who leave the Brattleboro Retreat to receive medical treatment elsewhere.
• A triage telephone line has been established to allow unit nursing staff to immediately contact a physician or LIP in the Admissions Department.
• At least one LIP carries a Code Blue pager on every shift.
• Clinical staff uses the SBAR technique (situation, background, assessment and recommendation) in all communications including, but not limited to, nurse-to-nurse, nurse-to-physician, and hospital-to-hospital communications.

Conclusion:
The patient population served by the Brattleboro Retreat often has a variety of acute medical conditions in addition to psychiatric and addiction challenges. Hiring John Murphy, D.O, in 2012 to serve as Director of Medical Services and instituting 24/7 L.I.P. coverage has enhanced the Retreat’s ability to provide high-quality, timely medical care and has also led to a decrease in the number of referrals for medical issues to the local emergency department at Brattleboro Memorial Hospital

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2. Patient Safety Project

Overview:

With inpatient stays becoming increasingly short it is imperative that young people on the Retreat’s Adolescent Inpatient Program receive education about the medications and medication products they are prescribed that is thorough, easy-to-understand, and that is delivered in an age-appropriate manner. In addition, a goal of Healthy People 2020, a government program designed to improve the health of all Americans, is to ensure the safe use of medical products (www.healthypeople.gov). A team of four (4) Retreat RNs undertook a performance improvement project with the goal of improving the medication education of adolescent inpatients and unit staff on the hospital’s Tyler 3 floor.

The team led by Jackie Chappell, RN, clinical manager of the Adolescent Inpatient Program, and Sue Hanke, RN, Jodi Kramer, RN, and Heidi Meyer, RN, used the Juran process for performance improvement and identified the following areas to target for improvement:

- Inconsistency in the delivery of medication education
- Lack of age-appropriate written material to provide adolescent inpatients
- Lack of a system to organize printed materials and handouts
- The need to create a quick reference tool for staff use.

The assembled team included a representative from nursing management and members of the direct care nursing staff. Together they took the following steps:

Assessment of Existing Medication Education Materials

The team conducted a review of currently published age-appropriate literature for patient medication education and also assessed the medication education delivery systems on other inpatient units at the Brattleboro Retreat.

Development of New Medication Education Materials

- Current literature on medication education was adapted in the form of “Med Ed Sheets” to meet the specific needs of an adolescent audience. A key document used in this process was the book Helping Parents, Youth, and Teachers Understand Medication for Behavioral and Emotional Problems (Dulcan & Lizarralde, 2003). Each Med Ed Sheet provides a description of the drug, a list of possible common side effects and instructions to follow when taking a given medication (i.e., take once per day with food).

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A new organizational system was put into place on the Adolescent Inpatient Unit to streamline the delivery of printed educational materials and ensure that each patient received the same materials as early as possible during their stay in the hospital.

**Staff Education**

- To assist clinical staff in educating patients about their medications, the team developed a series of quick reference tools covering 21 commonly prescribed medications. Each sheet also contains a short description that explains the MD’s rationale for prescribing a particular medication.
- Nursing staff also received training designed to enhance consistency when providing patients with medication education.

**Conclusion:**

Patients and staff indicate greater satisfaction in understanding the medication education provided to adolescent inpatients at the Brattleboro Retreat in large part because the results of this performance improvement project have produced presentations that use age-appropriate language that make the material easier to both learn and to teach. Standardizing the materials and establishing a system for organizing printed educational materials has also contributed to the effectiveness of medication education on the Adolescent Inpatient Program at the Retreat.

For more information on quality improvement initiatives at the Brattleboro Retreat please contact:
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