



Brattleboro Retreat

Quality Improvement Initiatives 2010

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 Chief Executive Officer Dr. Robert E. Simpson, Jr. is now in its fourth year of implementation. This model has the vision to evaluate and assess services within the hospital to ensure clinically excellent care that incorporates best practices in the field and also adapts itself well for strategic planning throughout the organization. This process supports strong customer focused (patient) satisfaction and outcomes while ensuring fiscal responsibility. The introduction and implementation of this model is a key component of the Brattleboro Retreat's commitment to improving patient safety and quality outcomes.

In 2010, the Brattleboro Retreat had a wide variety of organization wide performance projects. Each program or division listed below conducted at a minimum, one performance improvement project for their respective areas.

- Adolescent Inpatient Program
- Children's Inpatient Program
- General Adult Inpatient Program
- Co-Occurring Disorders Inpatient program
- Lesbian, Gay, Bisexual and Transgender (LGBT) 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
- United Service Worker's Program (USP)
- Patient Care Services
- Social Services Department.
- Pharmacy
- Staff Education
- Human Resources

- Facilities
- Access and Evaluation / Medical Clinic

A sampling of clinical and other performance improvement projects and the departments who spearheaded the initiatives are listed below. This sampling illustrates the breadth of the Retreat's performance improvement projects. Three of these projects (in bold) are outlined in the remainder of the report. The first is a clinical quality improvement project designed to decrease restraint and seclusion on the child inpatient unit through the use of sensory modulation techniques. The second is a patient safety project implemented to ensure that patients are provided with the safest environment possible. The third project outlined in this report is the Retreat's ongoing implementation of the Six Core Strategies to reduce the use of seclusion and restraint in all programs in the hospital.

- Implementing and measuring Hospital Based Psychiatric Inpatient Core Measures (HBIP's): *Quality Department*
- Reducing Workplace Violence: *Quality Department, Patient Care Services, Facilities*
- **Statewide Standard of Practice Initiative:** *Dr. Fritz Engstrom, Sharon Chaput RN, CSHA, Tommie Murray and Dr. Jay Batra VSH*
- Sensory Modulation Techniques: Phase 2 : *Child Inpatient Program*
- **Implementing Sensory Modulation Techniques Inpatient Adolescent Psychiatric Program**
- Protocols for Elopements, Property Destruction and Self-Harming Incidents: *Inpatient Adolescent Psychiatric Program*
- Improving Patient Safety: *Inpatient Adult Psychiatric Programs*
- Improving Hand Hygiene: *Infection Control Coordinator*
- Improving Medication Safety, Preparation and Delivery: *Pharmacy Services*
- Performance Management: *Human Resources Department*
- Reducing the Risk of Self Harm in the Environment of Care: *Facilities and Quality Department*
- Improving Clinical Outcomes: *Uniformed Service Program*
- **Decreasing Seclusion and Restraint through use of the Six Core Strategies** *Patient Care Services*

1. Clinical Quality Improvement Project:

Implementing Sensory Modulation Techniques: Adolescent Inpatient Program

Overview: In 2009, the Retreat implemented a sensory modulation program for the Child Inpatient Psychiatric Unit. In 2010, the Retreat focused intensively on implementing this program on our Adolescent Inpatient Psychiatric Unit. The goal of this program is to teach adolescents to use sensory modulation techniques to self-soothe when they experience feelings that are not tolerable and often lead to self-harming incidents and also incidents of restraint and

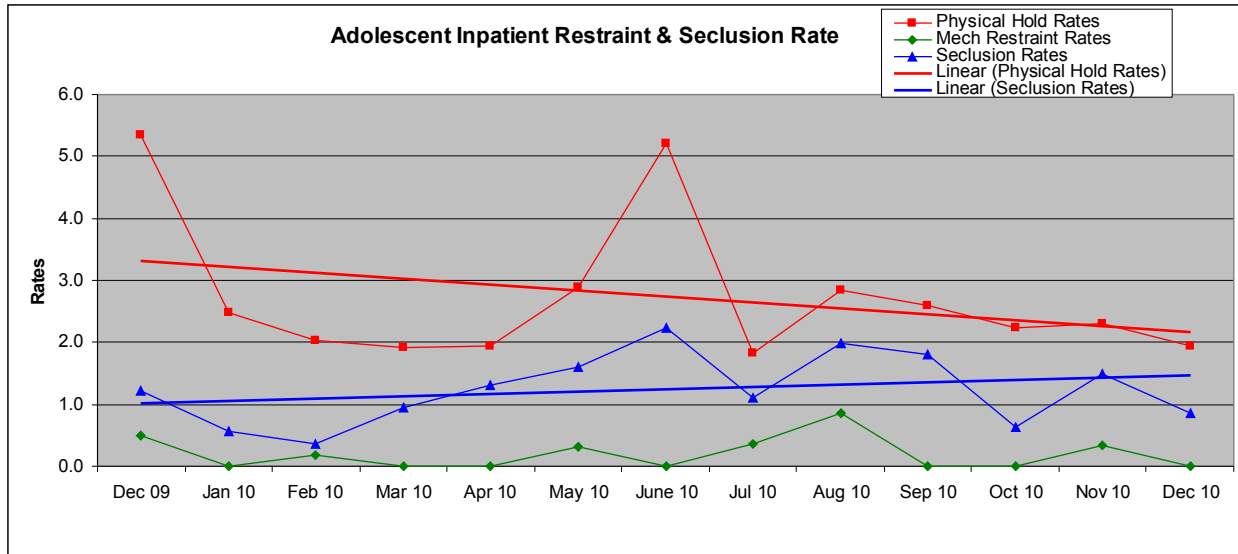
seclusion. One of the exciting aspects of sensory modulation is that children and parents can be taught to continue this form of treatment when discharged to home or a residential level of care.

Sensory experiences include touch, movement, body awareness, sight, sound and the pull of gravity. The process of the brain organizing and interpreting this information is often called sensory integration or sensory modulation. Sensory modulation provides a crucial foundation for later, more complex learning and behavior. For most children, sensory modulation develops in the course of ordinary childhood activities. Motor planning ability is a natural outcome of the process, as is the ability to adapt to incoming sensations. But for some children, sensory modulation does not develop as efficiently as it should. When the process is disordered, a number of problems in learning, development or behavior may become evident. The child may easily become scared in their home environment and frustrated with people around them leading to disruptive behaviors at home and school which are very difficult for parents and teachers to understand and manage.

In this situation, children need to be taught techniques to help them organize and interpret sensory information, which they often experience as overwhelming. The sensory modulation program incorporates many elements and is highly individualized. For the adolescent population of patients our staff psychologist developed a self assessment that each child completes on admission. This assessment provides guidance for staff in what sensory intervention to use with each child. Staff attended all day sensory modulation training workshops with a well regarded occupational therapist that specializes in sensory modulation and consults to many New England hospitals. Additional trainings were conducted using the “Train the Trainer” model for Charge RN’s and the Program Coordinator who can now provide trainings for new staff and refresher trainings for current staff on an ongoing basis. The train the trainer model is useful in developing our own internal experts in sensory modulation.

Construction in 2010 converted an outdoor porch into a bright, beautiful sensory room with large windows that let in lots of light. This new sensory room has a music system, wide screen television, comfortable bean bag chairs and other furniture. It is stocked with sensory modulation materials such as weighted blankets, sensory balls, and textured materials. Other activities planned for the near future include aromatherapy. The children are helped to understand what kinds of modulation activities and materials work for them and to use them as a way to calm themselves at times when they feel upset or overwhelmed.

As a result of this initiative, the adolescent inpatient unit has experienced a decrease in the use of restraint and seclusion in 2010. This decrease comes even as the number of children served has increased, Please see the graph below illustrating the numbers and rate of restraint per month:



In this graph, a physical restraint is defined as the physical holding of a patient or physical escorting of a patient. A mechanical restraint is any mechanical device used for restraining a patient. This differs from a physical restraint which involves staff using their hands and not a mechanical device. Seclusion is confining a patient to a room and/or preventing a patient from leaving an area. Both actual restraints and the trend line for each measure are shown.

2. Patient Safety Project:

Statewide Initiative Standard of Practice for Self Harm

In June 2010, the Brattleboro Retreat and the Vermont State Hospital (VSH) began a project together to develop a guideline for self harming behaviors based on evidenced based or best practice guidelines. The project evolved to include all Vermont inpatient psychiatric programs. The project began with a core group (Dr. Fritz Engstrom and Sharon Chaput RN, C, CSHA from the Brattleboro Retreat and Dr. Jay Batra and Tommie Murray, RN from VSH) researching literature from a variety of sources including nursing and psychiatry journals. This core group analyzed the material and chose a variety of articles to inform the development of the guideline.

The core group decided to expand the process to include all Vermont inpatient psychiatric programs and extended an invitation to our colleagues in Vermont as well as representatives from the Department of Mental Health and the outpatient community. We were pleased to have full representation at an all day working conference in which we shared best practice literature and collaborated together on developing a statewide Guideline for Self Harm Reduction. This guideline is in the final stages of preparation and includes clinical guidelines, recommended forms and policies, and reference sources from literature review for each of the following categories:

1. Assessment
2. Treatment

3. Physical Environment of Care
4. Discharge Planning
5. Community Collaboration

This collaborative effort has resulted in the agreement among all these facilities to continue quarterly meetings and develop other patient safety guidelines for the state of Vermont.

The development of a clinical practice guideline for reducing self harm on the adolescent inpatient program is one example of how this initiative is being implemented at the Retreat. The guideline incorporates best practice in assessment, treatment, including pharmacological intervention, milieu management and sensory modulation. This guideline is being implemented in 2010.

3. Seclusion and Restraint Reduction (Six Core Strategies) Performance Improvement Project

Overview: Anna Marsh founded the Brattleboro Retreat based on the philosophy of humane treatment, and principles of respect for each individual. While the Retreat has embraced these principals for 175 years, in 2005 we adopted the most progressive step forward in our history by applying a trauma-informed recovery and resiliency model of treatment (TIRRM). This approach seeks to partner with the people in our care throughout their recovery process, engaging them more fully in directing that process. This involves recognition of the role that a history of trauma plays in the lives of many of the people we serve, and doing everything possible to help them heal from and not to re-enact that experience.

The TIRRM initiative that began in 2005 continues today as the **Six Core Strategies Project**. **This Project** uses the trauma informed recovery and resiliency model as a foundation for all six project workgroups (listed below).

Leadership Core Team: Leadership towards Organizational Change

The goal of this team is to reduce the use of seclusion and restraint by defining and articulating a mission, philosophy of care, guiding values, and assuring for the development of a strategic plan to guide implementation of the project by the other teams.

Workforce Development Core Team

This team addresses the workforce development agenda and leads organizational changes in safe seclusion / restraint application training, and inclusion of technical and attitudinal competencies in job descriptions and performance evaluations.

Debriefing Core Team

This team, co-led by a mental health advocate, develops an immediate-post event debriefing that is done onsite after each event and is led by the senior on-site supervisor who immediately responds to the unit or area to support patients and staff. The team also develops a Formal

Debriefing Review that occurs within 48 hours of the event or next business day and includes a rigorous analysis and problem solving procedure.

Consumer Core Team

The goal of this team is full and formal inclusion of consumers, family members and advocates in a variety of roles in the organization. It is co-led by a Mental Health Consumer and the Retreat's Director of Social Service.

Data Use Core team

This team uses data in an empirical, non-punitive manner by identifying facility baseline, setting improvement goals, and comparatively monitoring use over time.

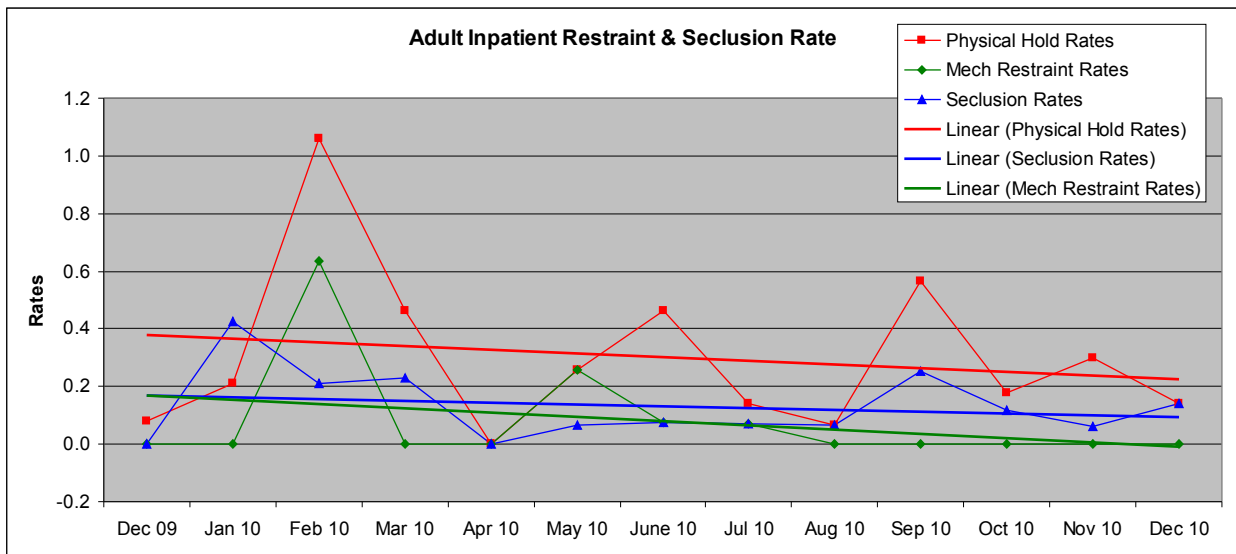
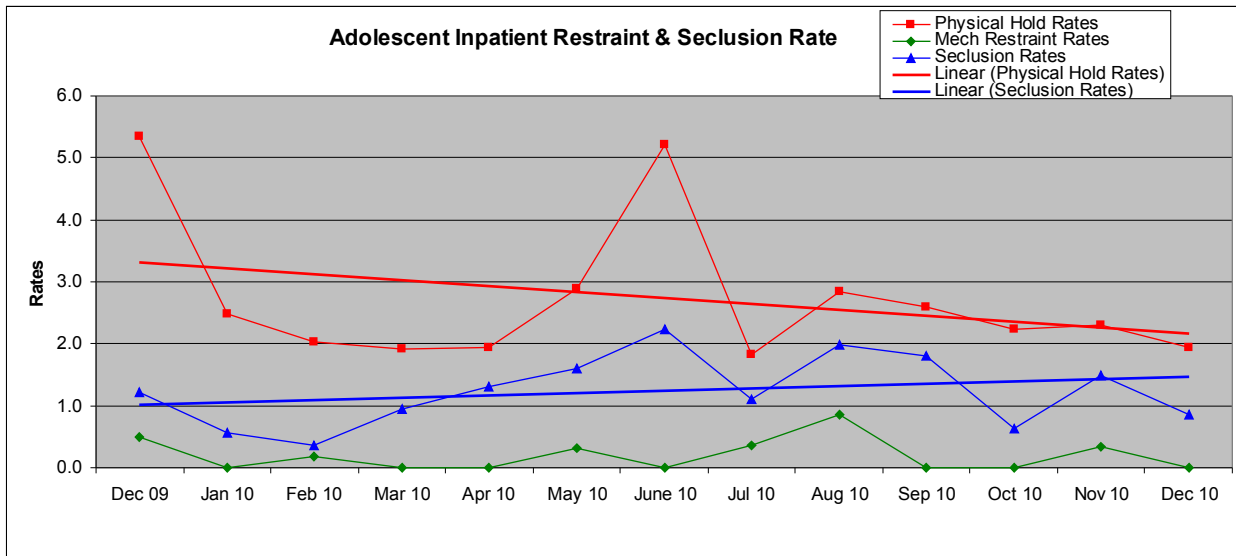
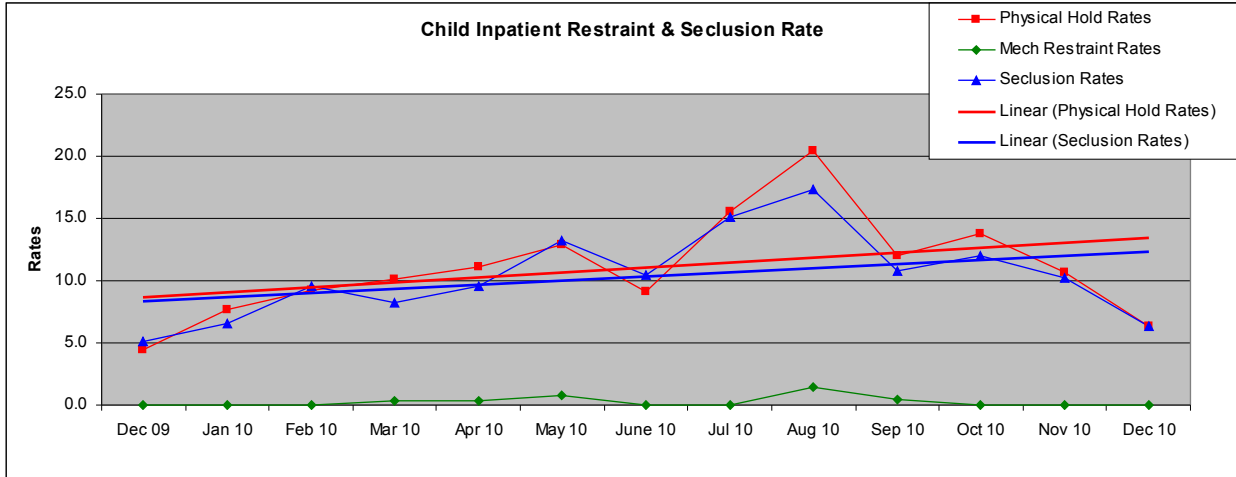
Tools for Reduction of Restraint and Seclusion Core Team

This team includes a family representative and is developing the following policies and procedures as well as tools for the reduction of restraint and seclusion: 1) Assessment of risk factors for aggression/violence; 2) Assessment of medical/physical risks for death or injury; 3) De-escalation/safety plans/crisis plans; and 4) Behavioral scales that assist in determining appropriate staff interventions that match level of behavior observed. This team is also focused on developing sensory modulation programs.

In 2008 the Brattleboro Retreat and the Vermont State Hospital began a 3 year project funded by a Substance Abuse and Mental Health Services Administration (SAMHSA) grant to reduce restraint and seclusion through the implementation of sensory modulation techniques. The Retreat has now completed its second year of this major project. In 2009 the Brattleboro Retreat instituted an Advisory Council for the Six Core Strategies Project. The Advisory Council includes consumers, a Vermont Psychiatric Survivors representative, Disability Rights Vermont representatives, family member(s), the Department of Mental Health, and Brattleboro Retreat administrative and clinical staff. The consumers, advocates and family Advisory Council members have provided a wealth of knowledge and experiences that have guided the Council in our efforts to reduce restraint and seclusion. In 2010 the Brattleboro Retreat attained impressive scores on an overall benchmarking report comparing the Retreat to all other participants in the grant across the country. The Brattleboro Retreat consistently scored in the 90th percentile and above in all the core strategies listed above.

Restraint rates:

The Retreat experienced decreased rates of seclusion and restraint on its adult inpatient units, adolescent and child units over the three year period of the grant. Rates are the number of incidents per 1000 patient days. Graphs for 2010 are below.



For the graphs above, a physical restraint is defined as the physical holding of a patient or physical escorting of a patient. A mechanical restraint is any mechanical device used for restraining a patient. This differs from a physical restraint which involves staff using their hands and not a mechanical device. Seclusion is confining a patient to a room and/or preventing a patient from leaving an area. Both actual restraints and the trend line for each measure are shown.

The adult and adolescent declines are a continuation of a three year downward trend. While the 2010 child rates may appear to be increasing, this is misleading as the 2010 rates, even with a slight increase in the third quarter, are substantially lower than prior years and also continue a three year downward trend. See rates below for a comparison.

	2008	2009	2010
Rate of physical restraint	18.7	17.5	11.0
Rate of seclusion	18.7	11.4	10.3

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

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